Aquidneck Island Gas Reliability Project

Old Mill Lane

Portsmouth, RI

PREPARED FOR

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This document has been reviewed and does not contain Critical Energy Infrastructure Information (CEII). 3/29/2022

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Table of Contents

Appendix

List of Tables

List of Figures

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1

Introduction

The Narragansett Electric Company (the "Company" or "TNEC")[1] submits this Siting Report in support of its request for a license from the Rhode Island Energy Facility Siting Board ("EFSB") for the use of portable equipment for the conversion and storage of liquified natural gas ("LNG") at Old Mill Lane, Portsmouth (the "Project"). The Company is responsible for distributing natural gas to residents and businesses on Aquidneck Island which includes approximately 12,500 residential customers and 1,800 business customers located in Middletown, Newport, and Portsmouth. The natural gas distribution infrastructure on Aquidneck Island ("Distribution System") is fed by the Algonquin Gas Transmission, LLC ("AGT") Northeastern interstate natural gas transmission pipeline that extends east from New Jersey to Massachusetts. The Project will be used to backup the supply of natural gas to the Distribution System.

The Project is needed to address capacity vulnerability and capacity constraints to the Distribution System. Capacity vulnerability has two aspects. First, the Company faces seasonal vulnerability from unexpected upstream disruptions that could limit the flow of natural gas from the interstate pipeline below levels needed to meet demand. Second, capacity vulnerability occurs when AGT disrupts capacity in order to inspect and maintain the upstream transmission pipeline. The Project would protect the Distribution System against these vulnerabilities. Finally, the Project also addresses the capacity shortfall that may occur during each winter season when there exists a gap between the natural gas demand and the available natural gas capacity to Aquidneck Island on extremely cold days.

1 TNEC, a subsidiary of National Grid USA, is an electricity distribution and transmission company serving approximately 465,000 customers in 38 Rhode Island communities. TNEC is also a natural gas distribution company with approximately 270,000 customers in Rhode Island. National Grid USA is a public utility holding company. Other subsidiaries of National Grid USA include operating companies such as New England Power Company, Massachusetts Electric Company, Nantucket Electric Company, and Niagara Mohawk Power Corporation (collectively with TNEC, "National Grid Companies"), as well as National Grid USA Service Company, Inc. ("National Grid") which provides services such as engineering, facilities construction and accounting for National Grid Companies.

Addressing these needs requires that the Project be operated on a recurring seasonal (winter) basis and as needed during AGT's scheduled transmission pipeline service and outages. The Project will be needed as long as the Distribution System is in operation on Aquidneck Island. The size of the operation, however, including the daily and seasonal requirement of LNG at the Project Site, may vary depending upon the forecasted customer demand. In this application the Company is seeking approval to site an operation comprising vaporization of up to 750 Dth/hr (dekatherms per hour) and storage up to 70,000 gallons of liquefied natural gas (LNG)

This Siting Report has been prepared under the direction of Faye Brown, National Grid Project Manager for the Project and Jeffrey A. Montigny, Manager Gas Engineering Design. Numerous employees of National Grid, including planners, engineers, and legal personnel contributed to the Siting Report. The description of the affected natural and social environments, and impact analyses were prepared by Vanasse Hangen Brustlin, Inc. ("VHB"), noise consulting and civil engineering were provided by HDR Inc., and additional services were provided by other consultants.

This Siting Report has been prepared in support of an application to the EFSB and for submission with applications to other state and local agencies required for the Project. This Siting Report has been prepared in accordance with the Rule 1.6 of the EFSB Rules of Practice and Procedure ("EFSB Rules") to provide information on the potential impacts of the Project. This Siting Report details the Project, discusses the alternatives to the Project which were considered and evaluated, describes the specific natural and social features within the Study Area (as defined in Section 5.1), discusses potential impacts, presents a mitigation plan for potential impacts associated with the Project, and describes permit requirements.

The purpose and need for the Project are further detailed in Section 2 of this Siting Report. Section 3 provides a detailed description of the site and each component of the Project, and also discusses the mobilization of the equipment, safety and public health considerations, community outreach, estimated Project costs, and Project schedule. An evaluation of alternatives to the Project, together with reasons for the rejection of each alternative, is presented in Section 4. A detailed description of environmental and social characteristics within and immediately surrounding the proposed Project is included as Sections 5 and 6, respectively. Section 7 of this Siting Report identifies the impacts of the Project on the natural and social environments within the Study Area. Section 8 summarizes proposed mitigation measures which when implemented will effectively offset impacts associated with the Project. Finally, Section 9 lists the federal, state, and local government agencies which may exercise licensing authority and from which the Company may be required to obtain approvals prior to constructing the Project.

2

Purpose and Need

2.1 Introduction

Roughly 270,000 residents and businesses across the state rely on the Company to provide them with safe, reliable, and affordable energy, especially to meet their heating needs during the coldest months of winter. In order to fulfill its obligation to provide reliable service to its gas customers across Rhode Island, the Company must meet customers' gas demand during the coldest year (referred to as the "design year") and on the coldest day and hour (respectively referred to as the "design day" and "design hour") that the Company forecasts to occur with a given probability.

The Company forecasts peak gas demand during these design conditions to ensure that it can reliably meet customers' needs and does so by having sufficient natural gas capacity and supply. In Rhode Island, the Company's gas capacity portfolio consists entirely of interstate pipeline, LNG inventory and underground storage.[2] Capacity refers to the Company's ability to transport its natural gas supply to Rhode Island via the interstate pipeline to meet customers' peak demand—i.e., to have the throughput needed to meet peak demand. Gas supply refers to the actual natural

2 The Company has capacity entitlements on multiple upstream pipelines that allow for the delivery of gas to its city gates in Rhode Island. The Company has four city gate interconnects with Tennessee Gas Pipeline (TGP), also known as take stations: Pawtucket/Cumberland, Lincoln, Smithfield, and Cranston. TGP is a pipeline system that transports natural gas from Louisiana, the Gulf of Mexico and South Texas to the Northeast United States, including New York City and Boston. Additionally, the Company has ten city gate interconnects with AGT: Dey Street, Westerly, East Providence, Portsmouth, Tiverton, Burrillville, Barrington, Bristol/Warren, Cumberland, and Crary Street. The Company's transportation contracts provide access to domestic production fields, as well as liquid trading points that afford the Company a level of operational flexibility to ensure the least-cost dispatch and reliable delivery of gas supplies.

The Company's underground storage assets provide the Company with the ability to meet winter-season loads, while avoiding the expense of adding 365-day long-haul transportation capacity. By using long-haul capacity to fill storage, the Company is able to use those resources at a higher load factor. Underground storage supplies also allow the Company to serve peak-period requirements with off-peak priced gas supplies.

gas volumes needed to meet customer demand, which the Company accesses via the natural gas capacity.

As summarized below, the Company performs demand forecast and planning analyses to identify the need for supplemental gas supply to Aquidneck Island during the winter months.

2.2 Planning Process

The Company's gas-resource planning process is designed to demonstrate that it has a reliable resource portfolio to meet the combined forecasted needs of the Company's customers at the least cost. The planning process includes the Gas Demand Forecast, the Gas Resource Portfolio planning, and Synergi Gas® Planning Studies. The Gas Demand Forecast is the customer load requirements for a design year and design day. The Gas Resource Portfolio planning is designed to meet those requirements in the most reliable and least-cost manner possible. The Synergi Gas® Planning Studies simulate the gas distribution system to ensure that it meets the design day requirements, converted to the 5% design peak hour.

2.2.1 Gas Demand Forecast

The Company employs a comprehensive methodology for forecasting customer gas demand using a series of econometric models to determine the annual growth expected for Residential Heating, Residential Non-Heating, Commercial, and Industrial markets. To determine the projected energy demand growth over the forecast period, the econometric models use economic, demographic, and historical and forecasted energy price data along with weather data. The Company uses this forecast of total energy demand to decide whether changes are needed to any incremental demand reduction policies and programs. For the purposes of addressing the gas capacity needs on Aquidneck Island, the Company downscaled the Rhode Island system-wide long-term gas demand forecast to develop a forecast specific to Aquidneck Island.[3]

As described in Section III of its Gas Long-Range Resource and Requirements Plan for the Forecast Period 2021/22 to 2031/32 (**Appendix A**; as filed in Docket 5043 on June 30, 2021), the Company develops models to forecast meter counts and use-per-customer for five different rate groups (Residential Heating, Residential Non-Heating, Commercial, Industrial, and Other) that best determine which economic or price variable(s) define the changes seen over the 2010-present historical period and, hence, can be the best predictors of future retail (burner-tip) monthly gas demand under normal weather conditions. The Company's economic data (historical and forecast) were provided by the independent economics firm Moody's Inc. and

3 The Company downscaled its Rhode Island system-level long-term gas demand forecast to create a forecast specific to Aquidneck Island. See the Company's Gas Long-Range Resource and Requirements Plan for the Forecast Period 2020/21 to 2024/25 (filed 6/30/20), available in Docket No. 5043 before the Rhode Island Public Utilities Commission at http://www.ripuc.ri.gov/eventsactions/docket/5043page.html.

its price data and forecasts were from the U.S. D.O.E. Energy Information Administration as well as its own pricing data in March 2021. Using its daily wholesale gas delivery data (city gate and LNG), the Company can model its historical daily wholesale requirements versus daily heating degree days under normal and design weather conditions. By aligning its most recent year of retail and wholesale data, this daily wholesale model is used to allocate its retail forecasted volumes to the daily level, under both normal and design weather conditions. Included in its daily design weather wholesale forecast is the Company's design day forecast. Additionally, the Company runs scenarios based on Moody's high and low economic scenarios to provide a sense of the range of possible future customer additions and gas demand requirements. While the Company plans to its base case forecast, the high and low case forecasts can provide guidance as to the possible rate of growth of its design day requirements.

Because the Company's forecast is based on historical correlations to economic and price data, it cannot predict the impact of new policies, particularly responses to climate change. Thus, the Company designed post-forecasting adjustments to reflect known future changes in energy efficiency or electrification of its customer base. These post-forecasting adjustments were then applied to derive the Company's base case forecast. **Appendix B** (Attachments to the Testimony of Theodore Poe, Jr. and Shira Horowitz, Docket 5180, as filed September 1, 2021) show the Company's base case retail volume and meter count forecasts as well as its economic forecast.

The Company's forecast for Aquidneck Island was then based on the wholesale historical data specific to the Island itself and, as mentioned above, future growth was determined using the growth rates from the wholesale forecast of the entire Rhode Island service territory. Aquidneck Island design hour requirements are discussed in Section 2.3.2. **Appendix C** is a two-tab spreadsheet with the Company's 2021Q2 base case design weather wholesale forecast for Rhode Island in tab 'Design-RI-NovOct_EcoSoRI-DR-S05' and the 2021Q2 base case design weather wholesale forecast for Aquidneck Island in tab 'Design_AI_S05.' The daily requirements for Aquidneck Island are in rows 377 to 741. Sales plus Customer Choice transportation volumes (in Dth) are in columns G to Q. Total Throughput (in Dth) are in columns DK to DU.

When looking at natural gas demand, supply, capacity, and different alternatives, it is important to compare them on an "apples-to-apples" basis. Natural gas demand and capacity are expressed in terms of units of energy, measured in dekatherms (Dth), that are available during the coldest periods for which the Company plans, when it expects customers' gas demand to be highest, measured in Dth/day or Dth/hour.

The Company plans its gas supply resource portfolio and its gas distribution network to the "design year;" the "design day;" and the "design hour."[4] Natural gas utilities define these design standards in terms of heating degree days (HDD).[5] In Rhode Island, the Company defines the design year as 6,250 HDD with a probability of occurrence of 1 in 37.47 years, and its design day is defined as 68 HDD (-3 degrees Fahrenheit) with a probability of occurrence of 1 in 58.92 years. The design hour planning standard represents a 5% peak-hour factor (i.e., the peak hour requirement represents 1/20th of the peak day requirement). This is consistent with industry practice to ensure that adequate supply is available to customers when it is needed most; the coldest hours of the coldest potential conditions in the applicable service territory.

Within the design day, the Company must ensure that there is enough capacity during peak hours when maximum demand for natural gas occurs, as customers are heating their homes and businesses, cooking, and using gas for hot water heating. If customers used the same volume of gas each hour, it would be sufficient to look at the daily demand and divide by 24 (hours) to ensure the system could provide that amount of gas each hour. The reality is that customers tend to use more gas in the early morning hours, typically 6 – 10 a.m., and again in the evening from 4 – 8 p.m. To ensure that the Company can provide the gas needed by customers during those time periods, the Company looks at its gas capacity needs during the design hour (i.e., the hour on the design day with the highest demand). Based on the intraday variation in customers' demand for natural gas, the Company uses a design hour planning standard equal to 5% (i.e., 1/20th) of the design day natural gas demand.

2.2.2 Gas Resource Portfolio Planning

The Company maintains a natural gas resource portfolio that is delivered via pipeline transportation and it also utilizes peaking resources (e.g., LNG) to meet customer requirements on the forecasted design hour, design day, design year, and normal year including a mid-winter cold snap. Pipeline transportation is available year-round, but on a design day the Company expects that approximately 70% of customer requirements will be met with supplies delivered via these interstate transmission pipelines while the remaining 30% will be met with supplies vaporized from the Company's LNG supply resources.

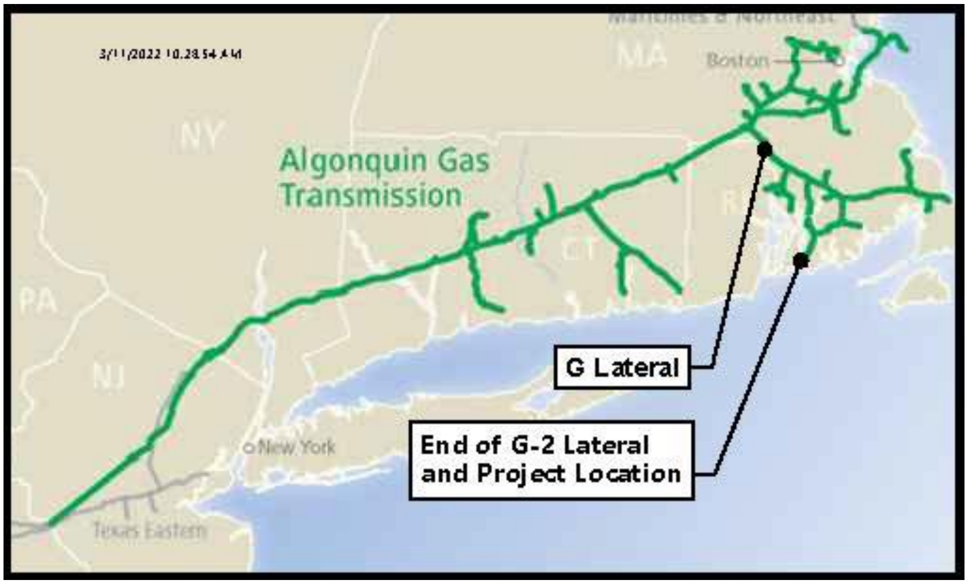
AGT owns and operates a Northeastern interstate natural gas transmission pipeline that extends from New Jersey up into Massachusetts. The AGT G-system is a lateral

4 The Company also evaluates its supply/capacity portfolio under a cold snap weather scenario. For the cold snap weather scenario, the Company uses a 14-day cold snap occurring in the coldest 14-day period of the Company's normal year by evaluating weather data over a long-term horizon (for the Company's Long-Range Resource and Requirements Plan submitted in June 2020, this period was 1977/78 to 2016/17). The Company uses the results of the cold snap scenario to test the adequacy of natural gas storage inventories and refill requirements.

5 A heating degree day compares the mean outdoor temperature recorded for a location over a 24-hour period to a standard temperature, 65° Fahrenheit in the United States. The lower the outside temperature, the higher the number of heating degree days. For example, a day with a mean temperature of 40°F has 25 HDD. Two such cold days in a row have a total of 50 HDD for the two-day period. See "Units and Calculators Explained: Degree Days," U.S. Energy Information Administration, available at https://www.eia.gov/energyexplained/units-and-calculators/degree-days.php.

that branches off the AGT mainline in southern Massachusetts. Aquidneck Island is served by the G-2 lateral off the AGT G-system via AGT's single 6-inch main crossing the Sakonnet River.

Graphic 1 Algonquin Gas Transmission Line



The Company's transportation contracts with AGT provide for deliveries of up to 22,089 Dth per day and up to 1,045 Dth per hour to Aquidneck Island via the single Portsmouth take station on the Island. To the extent that customer requirements exceed these limits, the Company presently relies upon portable LNG supply injected into the distribution system at the Old Mill Lane location. The Old Mill Lane equipment is described in more detail in Section 3 of this Siting Report.

2.2.3 Hydraulic Modelling Planning Studies

The Company uses Synergi Gas® modeling software, which is a network analysis hydraulic modelling software, to simulate natural gas transmission and distribution systems. Along with the extensive core steady-state modelling functionality of Synergi Gas®, the Company utilizes the Model Builder module and the Customer Management module to enable the development of new models on an annual basis. The Model Builder module integrates data extracted annually from the Company's Geographic Information System (GIS), which ensures the new models have the latest available gas pipeline and facility information. The Customer Management Module provides a link to the gas customers and billing data from Customer Information Systems to create temperature-dependent usage data for each customer. This hydraulic modeling software identifies, predicts, and helps the Company address its operational challenges, enabling day-to-day efficiency of gas distribution and transmission networks. Synergi Gas® software provides the results needed to make design, planning, and operating decisions using robust equations.

Once the annual forecasted design day send-out requirement is established, the Company converts this send-out to a peak hour based on a 5% peak-hour factor (i.e., the peak hour requirement represents 1/20th of the peak day requirement). The Company then applies the peak-hour requirement to its Synergi Gas® network analysis modeling software by means of growth factors generated from the spatial (i.e., zip code) forecast. The resulting peak-hour Synergi Gas® models are used to perform various analyses necessary for distribution system operations (e.g., regulator pressure settings, LNG requirements) and capital planning.

The Company also performs an annual review of the network analysis modeling software to ensure the accuracy. The Company selects a winter gas day[6] based on a number of factors that include the daily and peak hour temperature, the daily and peak hour sendout, and the day of week. Once the winter gas day is selected, data collected on actual system behavior experienced, such as recorded system pressures and system sendout flows, is compared to hydraulic analysis results. The model calibration results provide conclusions and recommendations aimed at improving performance of the network models and the gas distribution system.

In addition to design day peak hour model, the Company performs a peak hour temperature Synergi Gas® network analysis that models 5°F increments starting from 65°F down to the design day temperature (-3°F). The peak hour temperature Synergi Gas® network analysis models are used to analyze system operations during days that are warmer than design day temperatures. For Aquidneck Island, the peak hour temperature Synergi Gas® network analysis models are used to calculate the temperature at which demand exceeds available capacity during the winter season and to analyze supply vulnerability for the design day.

2.3 Need

Based on the analyses described above, the Company identified the immediate need to address capacity vulnerability and capacity constraints by seasonally mobilizing a portable LNG operation on the Island. This analysis was influenced by the 2019 outage and the proposed Project is consistent with the recommendations of the Rhode Island Division of Public Utilities and Carriers (Division) to meet areas of need, as stated in its *Investigation Report Into the Aquidneck Island Service Interruption on January 21, 2019*, dated October 30, 2019.[7] While the Division recognized the Company's significant effort to mobilize portable LNG in response to the gas outage, it is not feasible to mobilize portable LNG for capacity constraints and that approach is not effective for vulnerability needs. To support capacity and vulnerability constraints the Company has determined that seasonal mobilization is the only viable option to reliably address these scenarios. This approach and

6 Gas Day constitutes each 24-hour period 10:00 a.m. to 10:00 a.m. Eastern Standard Time.

7 http://www.ripuc.ri.gov/eventsactions/AI_Report.pdf - Link to report for footnote. Section 8.2 Recommendations starts on page 67.

proposed Project are in direct response to the Division's recommendation to "Establishing a Process for Emergency Mobilization of LNG" for Aquidneck Island.[8]

2.3.1 Capacity Vulnerability

While the Company's service area in Rhode Island is fed by multiple transmission pipelines and LNG facilities, Aquidneck Island is fed solely by one pipeline at one delivery location in Portsmouth. Although interstate pipelines are a highly reliable means of transporting natural gas, disruptions to the natural gas system do occur as a result of compressor failures, capacity reductions, and unplanned outages. The Company has exposure to such issues, but Aquidneck Island is particularly vulnerable given its location at the end of the AGT G-system. See Graphic 1. The Portsmouth take station that serves Aquidneck Island is at the end of the AGT G-2 lateral, which is itself supplied by the G lateral on AGT. Local distribution systems limit exposure to supply vulnerability by creating integrated networks of pipes, so there will be redundant means of continuing service if one pipe is out of service. In stark contrast, the Portsmouth take station is connected to the AGT pipeline system via a single, four-mile 6-inch pipe crossing the Sakonnet River. This creates the risk of a single point of failure. A long-term pipeline solution could mitigate this single-point-of-failure risk and provide an ancillary benefit in addition to addressing the vulnerability to upstream capacity disruptions. Pipeline projects, however, can take several years to scope, gain regulatory and community support for, permit, and construct, and until that can all be accomplished, the Company has a responsibility to provide the highest reliability of service possible within its means. The Old Mill Lane portable LNG Project addresses the vulnerability of pipeline supply unique to Aquidneck Island and it could support the majority of customers on Aquidneck Island.

The following analysis shows the estimated number of customer service interruptions and is not a definitive analysis.[9]

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8 Id. at page 69.

9 This analysis looks at distribution systems on the Island that could be shut down relatively quickly; it did not look at targeted prioritization of large customers for load-shedding in a contingency event. For the purposes of this study, Company updated an initial customer service interruption analysis done in 2019 for upstream issues that reduce pipeline gas deliveries into Portsmouth as well as for the loss of the Old Mill Lane portable LNG operations. The original analysis evaluated interrupting service to a combination of large-use customers, individual distribution systems, or areas/zones of the low-pressure system in Newport. Regarding the Newport low-pressure system, three zones of approximately 4,000, 1,500, and 1,100 customers were identified based on 16 existing distribution valves that have been confirmed for availability/operability.

Table 2-1 Estimated Customer Service Interruptions in a Contingency Event (AGT Disruption) under Design Day Conditions with Old Mill Lane Portable LNG in Service

% Reduction in Capacity Available from AGT during Design Day (68 HDD) Conditions	Estimated % of Customers with Service Interrupted with Loss of AGT Capacity Old Mill Lane Portable LNG 2020/21
0%	0%
25%	0%
50%	1%
75%	24%
100%	44%

Portable LNG operations can vary in size and scope. The major components for consideration are vaporization flow rate (Dth/hr) and storage capacity (gallons of LNG). Notably, the equipment that the Company used to respond to the 2019 incident on Aquidneck Island at Old Mill Lane could not provide the same level of reliability as the proposed Project scope as it was smaller in scale in both vaporization flow rate as well as storage capacity. The proposed Project balances the potential need of the customers on Aquidneck Island under the spectrum of demand conditions, while working within the available footprint of the Old Mill Lane site. The Project also provides a proactive, planned, and well-established operation to supply customer demand rather than a reactive response to unexpected pipeline conditions.

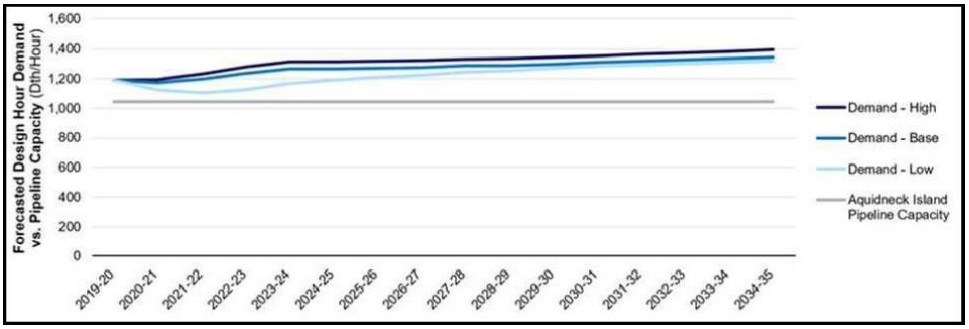
2.3.2 Capacity Constraint

The AGT G System is fully subscribed, and there is no additional available capacity to secure to deliver to Portsmouth without expansion of the lateral. The Company currently has under contract a maximum capacity of natural gas from AGT at the Portsmouth take station on Aquidneck Island (up to 22,089 Dth/day and up to 1,045 Dth/hour), and this maximum capacity alone cannot currently meet Aquidneck Island's design day or design hour demand. The projected natural gas demand growth for Aquidneck Island described below will only exacerbate this gap between the projected peak gas demand on the Island and the AGT pipeline capacity on which the Company can rely:

- For winter 2022-2023, the design day gap between projected Aquidneck Island gas demand and the available capacity on the AGT pipeline at the Portsmouth take station is 2,420 Dth/day (11% of the available pipeline capacity at the Portsmouth take station). The Company's long-term gas demand forecast projects that the design day gap will grow to 5,018 Dth/day (24% of current pipeline capacity available at the Portsmouth take station) by winter 2034-2035.
- For winter 2022-2023, the design hour gap is 181 Dth/hour (15% of the available pipeline capacity at the Portsmouth take station). The Company's long-term gas demand forecast projects that the design hour gap will grow to 310 Dth/hour

(20% of the available pipeline capacity at the Portsmouth take station) by winter 2034-2035 (see Graphic 2).[10]

Graphic 2 Forecasted Gap Between Design Hour Demand and Available Pipeline Gas Capacity for Aquidneck Island



Under the Company's contracts with AGT, the calculated hourly flow limits are either 1/24th or 6% of the Maximum Daily Quantity (MDQ) – i.e., the maximum quantity of gas that can be delivered to the Company from the pipeline in a 24-hour period. Historically, AGT had not required customers, including the Company, to manage hourly takes to fall within the calculated hourly flow limits so long as the Company did not exceed the MDQ. That meant that the Company had the operational flexibility to balance its natural gas deliveries across its multiple take stations on the AGT system, so long as the total remained within the MDQ limits. This flexibility allowed the Company to meet the peak demand needs on Aquidneck Island. However, on January 29, 2019, after AGT experienced a period of high hourly demand on its G system, AGT notified the Company (and all AGT customers served by AGT's G Lateral) that during peak periods it would exercise its tariff authority to require local distribution companies, including the Company, to limit their hourly takes to calculated hourly flow limits at each take station. For Aquidneck Island, the limits are 22,089 Dth/day and 1,045 Dth/hour, which are less than the Company historically has planned to have gas capacity for use on Aquidneck Island.[11] As such, the Company now makes its planning decisions to prepare for the potential limitation of operational flexibility by AGT.

This gas capacity/demand gap materialized with the change in AGT practice and created a new need to plan for reduced gas capacity available at the Portsmouth take station.

10 The differences in percentages between design day and design hour gaps relative to available AGT capacity are because design hour demand is 5% of design day demand, but the maximum hourly capacity on which the Company can count from AGT at Portsmouth is only 4.7% of the maximum daily capacity.

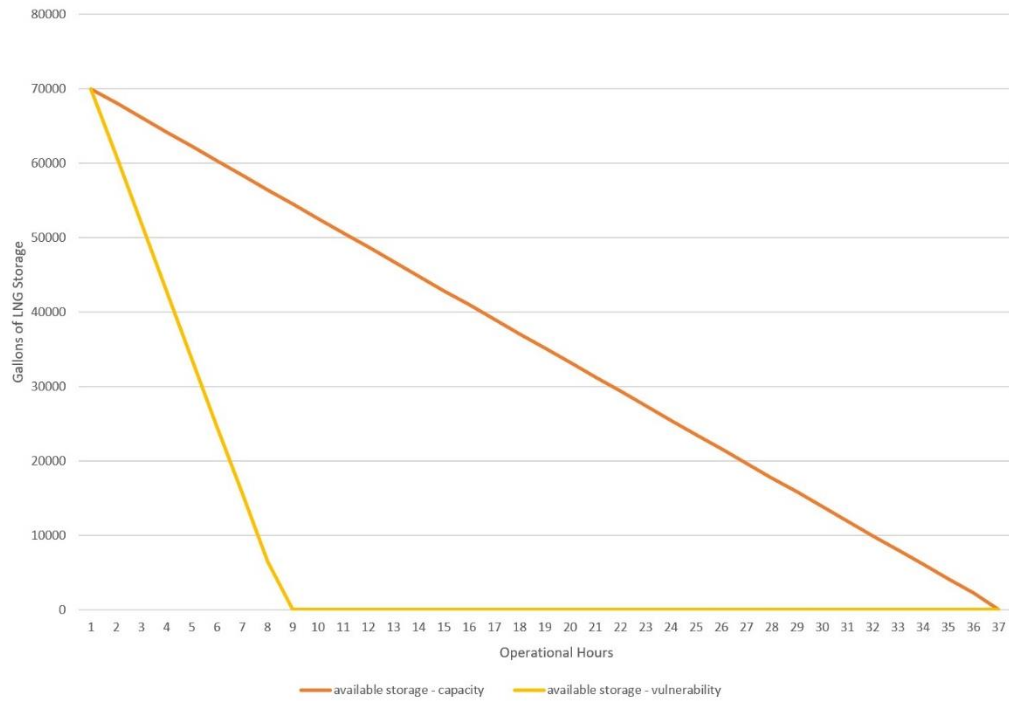
11 AGT's ability to impose the limits is provided for in AGT's tariff approved by the Federal Energy Regulatory Commission (FERC). The January 29, 2019 notice expired on April 1, 2019, and due to the overall mild winter of 2019/20 AGT did not reissue it. The Company, however, is not aware of any material improvements to AGT's system that would ameliorate the conditions that prompted the warning in 2019. Thus, the Company reasonably expects that AGT may issue a similar notice in the future. AGT may even issue such orders without first issuing another warning should extreme cold temperatures or system issues arise.

In Spring 2019, TNEC issued a Request for Proposals ("RFP") seeking non-pipeline alternatives in the form of compressed natural gas or LNG storage and vaporization capability in the amount of ~300 Dth/hr at the Company's Old Mill Lane location, as well as an additional ~100-200/hr at a third-party site to be identified by bidders. Although the RFP only contemplated offers and awarding between 300-500 Dth/hr (allocated between the two potential sites), the selected offer accepted in response to the RFP came from a single vendor able to deliver 500 Dth/hr at a single site. The equipment proposed as part of the temporary solution has the physical capability of vaporizing 650 Dth/hr without any incremental cost for the additional capacity. This proposal resulted in the current agreement TNEC has in place today with a third party for equipment rental and support services at Old Mill Lane that can be available to TNEC through Winter 22/23. The successful implementation of this temporary solution is the foundation for the Project.

2.3.3 Ability of the Project to Address Capacity Vulnerability and Capacity Constraint

The proposed project scale is for storage of LNG up to 70,000 gallons, and vaporization rate of up to 750 Dth/hr. This is driven by the existing capacity constraint on the Portsmouth take station serving Aquidneck Island, and the storage capacity enables the Company to offset the supply shortfall for up to 37 hours of continuous vaporization at 181 Dth/hr. Since the capacity constraint is limited to the peak hours of the day, approximately 6 hours per day, the site could run for three days for up to six hours per day without replenishment. The vaporization rate is driven by the base need of approximately 181 Dth/hr for the known supply shortfall based on the winter 2022/23 forecast, but also accommodates for a greater magnitude injection rate for the unforeseeable capacity vulnerability. If the Company encountered a need to vaporize at the full 750 Dth/hr rate continuously, the on-site storage would only allow for approximately 8 hours of operation without replenishment; but that would provide time to understand the cause and potential duration of the pipeline limitation, plan for supplemental deliveries to the site if needed, or plan for necessary customer curtailments in extreme cases. See Graphic 3. Similar to the 2019 RFP, where the requested vaporization rate was 500 Dth/hr but the successful vendor provided equipment with a higher maximum vaporization rate of 650 Dth/hr, equipment with vaporization rate up to 750 Dth/hr is available on the market with the same footprint and no incremental cost. It does, however, provide incremental operational flexibility that could prevent customer outages in the event of a capacity vulnerability. The proposed operational parameters for vaporization rate 750 Dth/hr and 70,000 gallons of LNG storage were scoped for supply shortfall and capacity vulnerability for Winter 21/22, and is not intended as a means for future growth on Aquidneck Island. Customer demand will vary over time; increases in demand will require a higher vaporization rate from the equipment and a reduced run time, whereas reduced demand will require lower vaporization rates from the equipment and increased run time.

Graphic 3 Hours of Operation Scenarios for Capacity Constraint or Capacity Vulnerability



2.4 Conclusion

The capacity vulnerability and capacity constraint on the Company's system create the existing and ongoing need for the Company to mobilize portable LNG operations on Aquidneck Island on a seasonal basis and in response to supply interruptions. The pipeline that supplies the Island is currently fully subscribed and there is no available capacity to secure for Aquidneck Island. The Project will address the projected peak-hour capacity/demand gap between existing and forecasted customer demand and the Company's current contracted capacity. The Project will also serve as a contingency in the event of upstream disruptions affecting pipeline deliveries into Portsmouth. The Project also responds to the recommendation of the Division.

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3

Project Description and Proposed Action

3.1 Description of Project

The Project is the long-term operation of portable LNG equipment to support the natural gas Distribution System on Aquidneck Island. The Old Mill Lane parcel is situated adjacent to the take station which makes it an optimal location to supplement natural gas supply to the Distribution System. The Project will vaporize the LNG and inject it into the Distribution System using portable equipment comprised of vaporizers, storage tanks, pumps, and an odorizer. As noted in greater detail below, the Company has used the property for similar operations since it was originally acquired in 1963 for a propane peak shaving facility. The Company started the effort of engineering the property to support a long-term operation by addressing the noise and visual concerns raised by the recent seasonal operations following the 2019 loss of pipeline pressure. The Company proposes a redevelopment that moves the equipment to the rear of the parcel and provides additional space for an improved layout and space for noise mitigation. This approach is similar to how the propane peak shaving facility was installed on the property.

3.1.1 Properties of LNG

LNG is a colorless, odorless, and non-toxic cryogenic liquid comprised of mostly methane gas. LNG is created by cooling methane gas to -258° F. Upon reaching this temperature the gas undergoes a phase change into liquid form resulting in a 600:1 volumetric reduction, shrinking a gaseous volume of a beach ball to a liquid volume the size of a ping pong ball, making it economical to transport. If spilled, LNG will begin pooling on the ground. Being approximately half the density of water, LNG will float above any water, or water table, and begin to vaporize back into a gas due to the relatively warmer ground. Due to the initial temperature difference, the moisture in the ground will freeze, and be cold to the touch. As the liquid absorbs surrounding heat from the environment it will begin to vaporize. The vapor will hover around the ground until it warms to approximately -170° F, at this temperature the vapor will become less dense than the surrounding air and dissipate into the atmosphere.

LNG is a refrigerated liquid that boils at -258° F, giving off gas vapor much like water vapor is created when boiling water at 212° F. Boil-off gas, or vapor, is generated inside the storage vessels and is relieved into the distribution system via the vapor recovery manifold. This boil-off gas is minimal as compared to the vaporization process. When there is a need for additional gas for capacity constraint or vulnerability, LNG is heated through vaporizers to return LNG back into a gaseous state. Before vaporized LNG is injected into the distribution system it is odorized with mercaptan to state requirements.

3.2 Property

The Project is located on a 5-acre (217,800 square feet) parcel located on Old Mill Lane in Portsmouth, Rhode Island, (the "Property"). See Figure 3-1. The recent winter and summer LNG mobilizations have occupied approximately 0.7 acre of the Property. The proposed "Project Site" or "Site" would utilize approximately the same footprint but located away from Old Mill Lane. An additional approximately 0.9-acre portion of the Property would be developed to provide access to and additional mitigation for the revised layout.

The Property is owned in fee by the Company and is located adjacent to where the distribution system connects to the transmission line that supplies Aquidneck Island. The Property is also the former propane tank site that provided peaking capability for the Aquidneck Island natural gas distribution system until Providence Gas expanded its pipeline supply capability on the Algonquin pipeline in the late 1980's. The propane tanks were removed in 2014 and the Property remained vacant until the Spring of 2018 when it was mobilized to support pigging operations. The history of LNG at the Property began in 2001 when it was used for seasonal peak-shaving during the winter of 2001-2002. This site was needed while the permitting process was being completed for the Navy Yard LNG site. The Property was used again in the summers of 2018 and 2021 to backup up the natural gas supply during the inspection of the transmission pipeline supplying the Island. Equipment was mobilized in January of 2019 following a loss of pressure on the interstate supply line to Aquidneck Island. For the last two winters, the Property has supported the winter LNG operations secured through the RFP which serve the dual function of providing peak shaving and as a backup to the natural gas supply in event of a supply disruption.

The current winter operation has largely remained unchanged since it was first mobilized in the winter of 2019 with only minimal changes to enhance site appearance, reduce noise, increase efficiency, and lower light intensity. Process equipment including vaporizers and static LNG storage is located around the gas riser along the northern edge of the property along Old Mill Lane. Ancillary equipment such as a portable office trailer, lavatory, and backup generator are positioned along the southeastern edge of the usable area. Utility poles provide line power to equipment and overhead lighting illuminates the operation as required and are placed on the perimeter of the Project Site. Although improvements and efficiencies have been made by the Company, existing site constraints do not allow for expansion of the footprint, which is needed for further enhancements that are appropriate for a longer duration operation. The following proposed arrangement of the Project addresses neighborhood concerns and environmental considerations while also improving overall site safety and reducing neighborhood disturbances.

The Project will relocate the LNG equipment approximately 150 feet back from Old Mill Lane. The intent of the proposed modification is to move the vaporizers (the most noise emitting equipment) away from the public roadway and to provide additional space to allow for the installation of a noise mitigating barrier around the vaporizers. The equipment area and northern driveway will be a permeable surface appropriate for the equipment and vehicles. An impervious surface will comprise the southern portion of the driveway to support the turning forces of vehicles and equipment. To meet Rhode Island Department of Environmental Management (RIDEM) Rhode Island Stormwater Design and Installation Standards Manual (RISDISM) requirements, two Best Management Practices (BMPs) have been proposed which include a wet basin and a bioretention area. Other changes include a new gas riser to connect the operation to the distribution system(s), and additional lighting closer to the new equipment location. The Project will be secured by a new solid panel fence along Old Mill Lane and a permanent 8-foot-tall chain link fence.

The existing site enhancements that will be incorporated into the proposed arrangement include: dark sky compliant light shades, utility provided power to reduce generator noise, and vapor recovery manifold. Dark sky compliant light shades reduce light pollution from the Project in consideration for the neighborhood and wildlife. Utility power reduces the continuous use of a portable diesel generator to reduce noise and emissions. The vapor recovery manifold was commissioned in the winter of 2021 and effectively captures boil-off gas from stored LNG and injects into the distribution system. This not only reduces noisy vessel blow downs, but also reduces Site greenhouse emissions and increases the Site's efficiency. There may be limited instances where venting to atmosphere may occur such as during initial tank cooldown, LNG deliveries, or as required to maintain necessary pressures. The venting to atmosphere during the winter of 2021/2022 was limited to initial tank cooldown and LNG deliveries.

New enhancements will include the aforementioned new solid panel fence along Old Mill Lane and sound walls around the equipment to further reduce vaporizer noise. A solid molded composite fence with architectural stone design will be installed along the north edge of the Property. This approximately eight-foot-high fence will provide a physical and visual barrier between Old Mill Lane and the Property. Two large composite vehicle gates will operate parallel to the new fence, replacing the two swinging gates. This new fence and gate arrangement is planned to be permanently installed in the Summer of 2022.[12]

The operation will mobilize temporary noise mitigating walls, to the height of approximately 20 feet from grade, around the vaporizer and pump trailers until a more permanent solution can be evaluated. Noise modeling of the equipment in operation for Winter 2021/22 showed that the installation of walls would reduce estimated noise impacts to abutters to the north to 55 dBA, which is compliant with the local noise ordinance. A wall with a reduced height of 15 feet was evaluated, but only achieved a noise level of 57 dBA, which does not meet the noise ordinance. To achieve the most effective noise mitigation, the walls will be installed within 10 feet of the portable trailers, with the operating pump trailer and vaporizer positioned between the non-operating, redundant pieces of equipment. As specific components may change from based on capacity constraint or vulnerability needs, sound walls will be utilized as required to meet the 55 dBA noise level requirement.

3.2.1 Construction Sequence

The construction sequence for the Project is summarized in the subsections below.

3.2.1.1 Site Preparation and Vegetation Clearing

The limit of disturbance (LOD) will be surveyed and staked in the field, and the wetland flagging will be refreshed. To facilitate construction equipment access into the Site, vegetation will be mown and trees/stumps will be removed within the Facility footprint. Stabilized construction entrance/exit(s) will be installed from Old Mill Lane into the Site.

3.2.1.2 Soil Erosion and Sedimentation Controls

Once the vegetation removal is complete, soil erosion and sediment controls, such as compost filter socks (CFS) and silt fencing, will be installed along the proposed limit of disturbance using the procedures identified in the Rhode Island Soil Erosion and Sediment Control Handbook, and in accordance with approved plans and permit requirements. Soil erosion control and other engineered stabilization measures will be provided along the down-gradient side of the Project Site as well as around any stockpiles created during grading operations to prevent sediment migration. The installation of these erosion control devices will be supervised by an environmental monitor. The devices will function to mitigate construction-related soil erosion and sedimentation, and will also serve as a physical boundary to separate construction activities from resource areas.

12 The Company planned to install the fence in advance of the recent winter mobilization but RIDEM permitting and supply issues delayed the install to the Summer of 2022.

3.2.1.3 Facility Construction

The Project Site has been designed with a combined use of permeable pavement, stormwater features, retaining walls, and asphalt to meet the needs of seasonal operation, but also to minimize wetland impacts and provide an opportunity for stormwater management to the maximum extent practicable.

First, grading across the Project Site will take place from Old Mill Lane to the south of the parcel and will include a detention (wet) basin in the northern portion of the Project Site to treat water quality. Next, permeable paver surfaces including an entrance and exit road to accommodate vehicle and equipment access will be installed. Retaining walls will be provided on the south, east and west sides of the LOD to minimize impacts to adjacent wetlands. Various stormwater features will be installed to collect stormwater for treatment and outlet to surrounding wetland features adjacent to the Project Site. The roadway around the permanent equipment laydown area will consist of asphalt cover. This is required to facilitate vehicular movement and the placement of the seasonal process equipment. However, the process equipment laydown area itself will consist of permeable paver cover. A bio-retention area will be installed to the South of the yard. Any exposed soils will be seeded and stabilized with a blown straw mulch following completion of construction. Any loose stone fill will be swept back into place within the permeable pavement. Facility lighting will be installed to be dark sky compliant.

The facility will be enclosed by an eight-foot chain link fence on the south, east, and west sides. Along Old Mill Lane the fence will be an approximate 8-foot solid composite fence. Two vehicle gates, with solid composite panels matching the fence, will provide access/egress to the Project.

3.2.2 Equipment and Operation

Portable LNG operations utilize the following winter seasonal equipment: portable vaporizers, portable booster pumps, portable storage tanks, portable odorizer trailer, portable backup diesel generator, mobile office trailers, and portable lavatory, (the “Equipment”). The Equipment is positioned around the gas riser with approximately 70,000 gallons of total on-site LNG storage. See Figures 3-3a and b (Drone Photos of current Site).

The proposed Project will utilize similar equipment but will increase vaporization capacity to 750 Dth/hr. The equipment will be positioned along the new gas riser in a layout that enables safer mobilization and demobilization, provides improved egress for personnel, and provides easier access for emergency responders. See Figure 3-2 (proposed Site layout).

Similar to prior seasonal mobilizations, beginning in November Equipment will be delivered and setup at the Project Site. Security will continue to be present full time while Equipment is staged on-site. A trained Company operator will continue to staff the Site full time anytime LNG is on-site. Additional staff will be added as appropriate and consistent with the current operation. Exact Equipment configurations are dependent upon the anticipated demand for the given operation and availability of Equipment. However, for winter season needs, the following Equipment is proposed by the Company to accommodate capacity constraints and provide ancillary support for capacity vulnerabilities: One (1) 750 Dth/hr water bath vaporizer, one (1) backup vaporizer, and approximately 70,000 gallons of static LNG storage. Equipment can vary with manufacture and availability, but 70,000 gallons has been historically stored within five (5) static storage queen trailers (approximately 13,000 gallons each), and one (1) high pressure pump trailer (approximately 5,000 gallons). Advanced queen trailers may be outfitted with submerged high-pressure pumps that would replace the requirement for a standalone high pressure pump trailer. Operations supporting pipeline inspection and maintenance activities traditionally occur in lower gas demand months and generally require Equipment with a smaller footprint in comparison to winter activities supporting capacity vulnerability and capacity constraint.

The seasonal (winter) operation will remain unchanged and the Equipment will be expected to be fully operational by December 1 and, weather permitting, taken out of service by April 1. Once out of service, the portable equipment is removed from the property. Site mobilization may also be required outside the winter season to support pipeline maintenance.

3.3 Safety and Public Health Considerations

3.3.1 Safety Record

The Company owns and operates permanent and portable LNG facilities varying in size and complexity, including one portable facility and two permanent facilities. TNEC is committed to the safe operation of all these assets. The LNG facilities have been designed, constructed, and upgraded, to meet or exceed government and industry standards. These facilities utilize advanced technology and are monitored by qualified and experienced professionals. Regular maintenance and inspections are also performed to ensure the safety of the public and our employees.

The Company has maintained an excellent LNG safety track record over the years which is attributable to several factors. First, the industry as a whole has an excellent safety record because it is continuously evolving both technically and operationally to ensure safe and secure operations. Technical and operational advances include everything from the engineering of LNG facilities, to operational procedures, to technical competency of personnel. Second, the risks and hazards associated with LNG are well understood allowing safeguards and mitigations to be incorporated into technology and operations. Third, rigorous standards, codes and regulations which govern the LNG industry and the Company are in place to prevent incidents from occurring and to reduce or mitigate the impacts of incidents if they do occur. Finally, as described in Section 3.3.3, the Company implements a robust and industry-leading process safety program, as well as emergency planning and prevention programs. The Company strives to maintain a perfect safety record and is committed to ensuring the security of its LNG facilities to prevent unauthorized access and breaches. The Company has made significant operational and financial commitments to ensure that it succeeds.

The seasonal, portable LNG facility at Old Mill Lane is operated by trained personnel with extensive experience operating portable LNG equipment. Site personnel carefully monitor the operation and equipment including gas pressures, temperate, and flow, adjusting as necessary. Constant communication with the Company's regional Gas Control Center is maintained during operations and frequently during non- operational periods. The Company personnel are assisted by contracted professional security officers to maintain constant Site security throughout the duration of the seasonal mobilization. The Company has not had any safety incidents at the Old Mill Lane Facility.

3.3.2 Federal and State Rules Governing Mobile LNG Vaporization

The Pipeline and Hazardous Materials Safety Administration (PHMSA) has exclusive authority to establish and enforce safety regulations for onshore LNG facilities like the Project. Facilities connected to intrastate gas transmission pipelines or gas distribution systems are typically inspected for compliance to federal safety regulations by a State agency through an agreement with PHMSA. The DPUC is the Rhode Island state agency with jurisdictional authority to inspect the Portsmouth portable LNG facility.

PHMSA LNG safety regulations are codified in Title 49 C.F.R. Part 193. 49 CFR §193.2013 identifies documents incorporated by reference, partly or wholly, in Part 193 which are enforceable under federal regulations. This includes the National Fire Protection Association (NFPA) 59A, 2001 edition – *Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)*. 49 CFR §193.2019 addresses mobile and seasonal LNG facilities, and exempts such facilities from requirements of Part 193 if, like the portable LNG facility at Portsmouth, they are in compliance with applicable sections of NFPA 59A, 2001 edition.

3.3.3 Process Safety and Guidelines

The Company performed multiple process safety reviews to identify, quantify and manage risks to employees as well as to members of the public in the nearby areas of this Site. These reviews included facility siting assessments to understand and reduce the potential risk associated with the Old Mill Lane location, which is near a public road. It also included process hazard analyses of the injection station's design to understand and reduce the potential risks that could occur during the unloading and injection process.

3.3.4 Vendor Selection Process and Safety Records

Where the Company looks to secure third party services to meet the needs of the Project, an RFP will be issued detailing the Company requirements which will include exhibits to inform bidders of the Company's policies and procedures with which successful bidders must comply. In addition, the Company utilizes ISNetworld, a global firm that supplies best practice and performance data to enable the proper assessment of contractor and supplier risk, to pre-qualify all service providers by obtaining regulatory performance and Company specific documentation. ISNetworld's team of safety, health, environmental and insurance professionals reviews all service provider information and assigns a grade based on the Company's grading criteria. The Company requires bidders to subscribe to and receive an acceptable rating or higher from ISNetworld for their health, safety and environmental oversight and review for the duration of the Agreement resulting from this RFP.

The Company's Safety, Procurement and Risk organizations review the information provided by bidders to ISNetworld and in the RFP exhibits and evaluate each bidder's compliance with the Company's Safety, Procurement and Risk policies. Only those bidders in compliance with such policies shall be considered. Bidders may also include information regarding experience and qualifications that will enhance the success of the Project through design, engineering and construction associated with the Scope of Work.

3.3.5 Coordination and Training with Local Officials and Emergency Responders

The Company has made a concerted effort to coordinate and train with local officials and emergency responders for an incident at the Portsmouth (Old Mill Lane) facility. The Company has developed emergency procedures to use in response to an incident at the facility. This plan includes comprehensive Emergency Procedures and evacuation procedures developed in coordination with the local fire department. The Company has and will continue to be fully integrated with local police, fire, and town administration officials for all operations conducted at Old Mill Lane, Portsmouth. Engagements with local municipalities also include emergency management and town council meetings which have primarily focused on operational activities and safety measures. Routine engagements with police and fire departments include first responder site visits and familiarization; LNG fire-fighting training; incident impact analysis (to enable community safety planning); and operational notifications such as LNG delivery schedules and truck routing. A log of community and residential engagements since 2018 can be found in **Appendix D**.

3.4 Reliability

Portable LNG has historically been viewed as a contingency operation to augment baseload supply or capacity in the event of an unplanned shortage, or in support of planned pipeline maintenance operations that pose a risk or require interruption of supply to the Company. As a contingency, this capacity option is reliable, and the Company has a demonstrated history of successful deployments of portable LNG operations across its service territory. These operations have been successful in both short-term and longer-term applications ensuring customer reliability during off-peak and peak periods of demand. Portable solutions are most viable to support contingency and peaking options for supply capacity–i.e., to be available to support firm gas demand during the coldest winter periods. Additionally, in certain applications, portable facilities can support emergency operations however, staffing levels and availability of real estate must be carefully planned to site any long-term portable pipeline operation.

Inherent with this option is the necessity to procure LNG supply upstream of the Company's system and transport the supply to the portable LNG site. The transportation of LNG could be impacted by multiple events (e.g., road/bridge closures due to automobile accidents or construction, high winds, and inclement weather) with the risk of a customer service interruption if supply cannot be delivered on-time to meet the demand. The portable LNG Equipment deployed at Old Mill Lane considers those risks, and the operation includes on-site storage to mitigate the transportation risks associated with inclement weather and other transportation impacts allowing greater flexibility of operations. However, a prolonged event accompanied by inclement weather impacting the ability to replenish on-site inventory will run the risk of customer service interruptions as the facility can only run for a limited period without refueling. The Company operations team works from a multi-day forecast that provides the transportation vendor an ability to pre-position vehicles ahead of any impending cold or inclement weather. Additionally, the Company has previously conducted quantitative risk assessments for similar transportation operations and as a result has incorporated additional procedures and controls including regular audits of LNG transportation with our vendors.

3.5 Stakeholder Engagement

3.5.1 Aquidneck Island Long-Term Capacity Study Engagement

In September 2020, the Company published the Aquidneck Island Long-Term Gas Capacity Study outlining the gas supply challenges and constraints specific to Aquidneck Island. The study proposed four potential long-term energy solution portfolios along with an anticipated timeframe of need for portable LNG associated with each solution. The goal of the study was to help inform the communities and gather feedback from a variety of key stakeholders on a preferred pathway forward, which included continuing LNG operations at Old Mill Lane.

Although not inclusive of all engagements, the key stakeholder engagements that were conducted between September 2020 and December of 2020 are listed in the table below. Note that these engagements included a public Open House and website that provided formal feedback options.

State/Local Leader/Regulatory Briefings on Proposed Report Options	Key Division (DPUC) Personnel, Aquidneck Island Town Administrators, OER, Gov's office, Key Legislators, and Navy	Sept 1-11
Aquidneck Advisory Group (AAG)	AAG Members – Division, OER, Aquidneck Island Town Administrators, Aquidneck Island Economic Development Groups, Newport Chamber	Sept 14
SRP Technical Working Group Meeting	System Reliability Procurement TWG Members – Acadia Center, NE Clean Energy Council, Green Energy Consumers Alliance	Sept 23
Aquidneck Island Webpage – site to view full study, feedback form, survey, and Open House info	Viewable to Public	Sept 23
Social Media and On-Bill Messaging	AI Facebook Accounts and Aquidneck Island Customer Bills	Started Oct 1
Legislator Briefing	Aquidneck Island Senators and Representatives	Oct 8
AI Energy Matters Open House – Open to Public	Members of Public, Town Officials, and Legislators	Oct 14
Conservation Law Foundation	CLF Leadership	Oct 23
Customer Advocacy Groups	Center for Justice	Oct 23
Portsmouth Town Council Meeting	Portsmouth Council and Public	Oct 26
Middletown Town Council Meeting	Middletown Council and Public	Oct 27
Newport Town Council Meeting	Newport Council and Public	Nov 12
Reminder for Feedback Email to all AI Gas Customers	13,000+ Aquidneck Island Gas Customers	Nov 20

As a result of the outlined stakeholder engagement, the Company received feedback from our customers and community leaders about their priorities for the energy future of Aquidneck Island. In January 2021, the Company held briefings with key stakeholder groups to summarize the findings of feedback. Similar details were disclosed during a Public Utilities Commission Tech Session that was held in May 2021. The Company presented alternatives for a refined permanent path forward that harnessed the momentum of the clean energy future, ensured reliability, and recognized the importance of customer choice. In October and November 2021, the Company held another round of briefings with key stakeholder groups to share updates to its assessments, including town council meetings in Portsmouth and Middletown. It was during these October and November briefings that the final recommended path forward was summarized (as detailed herein). The final recommendation was also

3.5.2 Property Owner Engagement

Numerous residential meetings, forums, and engagements have been conducted regarding operations at Old Mill Lane, Portsmouth, with anticipated engagements forthcoming as required to address impacts (sound/lighting) and safety concerns from nearby residential owners. A log of community and residential engagements since 2018 can be found in **Appendix D**.

In recognition of feedback from area residents, several site enhancements have already been made to mitigate impacts (with positive feedback already received on enhancements from abutting residences). These site enhancements are listed below.

- Electrical transformer installation to reduce generator noise, fuel deliveries, and emissions (September 2020);
- Light shields on all overhead lighting to reduce light pollution (November 2020);
- Heavy duty, wind-resistant privacy screen on fencing to reduce visibility (November 2020);
- Improved berm design and vehicle protection barriers for enhanced site safety (November 2020);
- Vapor recovery system to reduce blowing down vessels to atmosphere for reduced noise and emissions (December 2021); and
- Adjust boiler settings to limit evening noises (started in February 2021).

The Project will maintain and, in certain circumstances, improve upon the enhancements that were made to support the previous winter mobilizations of LNG equipment at the Property.

3.6 Costs (O&M and Estimated Project)

Annual operation and maintenance activities for portable LNG operations include internal labor and vendor equipment and labor to support standby coverage from December 1st through March 31st and operation for each cold weather event. In addition, the Company incurs internal labor costs and vendor costs to support operations and maintenance associated with maintaining the Property when the Equipment is not on the Property. Based on the current plan to contract with a vendor for use and operation the Equipment, the Company anticipates future annual operation and maintenance costs to be approximately $1.5M.

The Company estimates a total Project cost of $15M plus approximately $1.5M for the annual operation and maintenance costs.

3.7 Project Schedule

Construction of the Project is expected to take 6 months to complete and will be coordinated around the winter operation. The Project is expected to mobilize seasonally until the capacity vulnerability and capacity constraints are resolved.

4

Alternatives to the Proposed Action

4.1 Introduction

This section describes the alternatives identified to address the need for a backup to the natural gas supply to Aquidneck Island. The cost estimates provided with each alternative include costs for engineering and design, development, real estate acquisition, material procurement, site preparation, construction of the assets, testing, and commissioning. The estimates also include contracts with vendors, operation costs, and labor costs. The estimates for the infrastructure projects (Sections 4.2 through 4.6) do not include the costs of operating winter mobilization pending completion of the project. The estimates for the non-infrastructure alternatives do include the costs of constructing and operating the Project. LNG supply and trucking from the point of purchase are not included as these costs will vary based on weather and system demand. The Greenhouse Gas Analysis of the alternatives follows in Section 4.10.

4.2 Preferred Solution – Seasonal Portable LNG Operation on Company-Owned Property at Old Mill Lane

The Old Mill Lane portable LNG operation is situated on a 5-acre Company-owned parcel located in Portsmouth, Rhode Island. The Property is located adjacent to the take station which is where the distribution system connects to the AGT gas pipeline that supplies Aquidneck Island.[13] The Project would continue the seasonal and emergency use of the Property, and it would also expand the operation to the south for a more efficient layout. Since the Project will be located next to the Portsmouth Take Station, the Project can supply the Island in the same matter hydraulically without needing reinforcement of the gas distribution network. The Old Mill Lane Property is also favorable in that no additional underground distribution infrastructure is required in the public way.

During mobilizations, the Project utilizes the following equipment: portable vaporizers, portable booster pumps, portable storage tanks, portable odorizer trailer, portable backup diesel generator, mobile office trailers, and portable lavatory. When equipment is delivered to the property, security is staffed on-site 24/7. Additionally, Company personnel are present full time whenever LNG is stored on-site. Because the current operation involves rental and support services by a third party, at least one owner representative of the vaporization equipment is also scheduled to be on-site whenever the contracted equipment is being operated.

The Company will continue to have Old Mill Lane LNG operations fully staffed and available for vaporization at 45 HDD conditions or colder as a contingency for any upstream issue that adversely impacts pipeline deliveries to the Portsmouth Take Station.

In an "average" year, the Old Mill Lane facility would rarely be used[14.] Even in a design year, the facility might only be used during a few days each winter, with limited trucking traffic, if any. However, the Company's contingency planning provides adequate resources for two days of substantial upstream disruption, under which the Project's capacity would be maximized in order to replace pipeline capacity. These two days, or 48 hours, of mobilization would require a total volume of 31,200 Dth, warranting 34 LNG trailer truck deliveries with a total LNG volume of 32,000 Dth. Having sufficient notice to prepare for such a scenario would be vital, as it would likely require supplemental technician support, and incremental staging for truck deliveries.

The vaporization capability of 650 Dth/hour currently provides nearly 50% of the required Aquidneck Island volume for a 68 HDD and 75% of the required volume for a 45 HDD. The vaporization capability would provide almost 100% of the required volume on a 30 HDD. A volume of 15,600 Dth (24 x 650 Dth/hour) provides ~ 60% daily volume required for a 68 HDD and ~ 90% daily volume required for a 45 HDD.

Construction will include temporary and permanent impacts to wetland resources but has been designed in a manner that minimizes impacts to the maximum extent feasible. Temporary impacts will be mitigated in-situ after concluding civil construction. Where permanent wetland impacts cannot be avoided, TNEC is

13 The property is also the former propane tank site that provided peaking capability for the Aquidneck Island natural gas distribution system until the late 1980s when Providence Gas expanded its pipeline supply capability on the Algonquin pipeline. The propane tanks were removed from the site in 2014, and the site was vacant until the spring of 2018.

14 It was not used in 2019-2020, 2020-2021, and 2021-2022.

prepared to provide compensatory mitigation, as required for United States Army Corps of Engineers (USACE) and RIDEM permitting.

The project is not expected to have any significant long term social impacts beyond the facility construction, setup and removal of the Equipment, the traffic increase from people working on the Project, and the delivery of LNG to the Project. For the same reasons there are no anticipated impacts to the public health, safety, and welfare. In addition, the setup and operation of the Equipment will be completed in a manner that meets or exceeds the federal regulations for Mobile and temporary LNG facilities, 49 C.F.R. § 193.2019. The Project is only needed on the most extreme cold winter days or in the event of a pipeline capacity disruption. It should be noted that during the winter mobilizations of 2019-2020 and 2020-2021, the Project was not needed to supplement natural gas capacity. However, in the event of a pipeline disruption prompting the use of the Project to meet customer gas demand, trucking of LNG would be necessary to sustain any prolonged periods of operation.

The estimated cost for the civil site improvement work, wetland mitigation and installation of mitigation measures is approximately $15M. Annual ongoing costs are estimated at approximately $1.5 million per year.

4.3 Seasonal Portable LNG Operation at a New Navy Site

The Company explored the possibility of running seasonal portable LNG operations on a Navy-owned property on Aquidneck Island. Specifically, there are two parcels, known as the former Transfer Station and the former Tank Farm 3, along the western coastline of Middletown that are currently available to lease from the Navy. The Company identified the following requirements to relocate the portable LNG operations to the Transfer Station of the available Navy parcels:

- Environmental site remediation, if needed, civil site preparation for temporary portable LNG use, and purchase of equipment for the portable LNG operation.
- Installation of nearly 2.5 miles of 16-inch 99 psig steel main to interconnect to the existing 99 psig system.[15]
- Installation of a new 99 psig to 55 psig district regulator in the vicinity of the parcel.

This alternative would be an operation equal in size to what is presently proposed at Old Mill Lane. However, due to the facility's 'downstream' position on the distribution system, utilizing this location would result in a lower vaporization capability (as compared to Old Mill Lane's 'upstream' position at the Portsmouth take station).

15 Psig = Pounds per square in gauge, a measure of pressure.

The estimated cost for the main installation to connect to the 99 psig system, installation of a new 99 psig to 55 psig district regulator, civil site preparation work, environmental mitigation and installation mitigation measures are approximately $54.4M[16]. The annual operation cost is estimated at approximately $1.5 million per year.

The use of either Navy site is not expected to have any environmental impacts or social impacts beyond the setup and removal of the Equipment, the traffic increase from people working on the site, and the delivery of LNG to the site. For the same reasons there are no anticipated impacts to the public health, safety, and welfare. However, the Navy sites are located in close proximity to residential neighborhoods and therefore will require noise mitigation measures.

This option was ultimately rejected due to significant infrastructure investments required for connection to the natural gas distribution system. In addition, the 'downstream' location of the system did not provide the operational advantages of a location closer to the take station.

4.4 Permanent LNG at a New Navy Site

Another potential alternative is the installation of a fixed LNG peaking facility on the Navy-owned Tank Farm 3 parcel. This would involve the construction of a new LNG peak shaving plant and related infrastructure (e.g., tanks, structure, vaporization, etc.). The peak-shaving plant would allow for storing LNG and then vaporizing and injecting that supply for use during peak times (e.g., during colder temperatures when the base load capacity cannot meet the required demand). The Company owns and operates two LNG facilities in Rhode Island, the Exeter LNG Plant and the Cumberland LNG Plant. This proposal would be for a third facility.

The plans for this option would potentially supply up to 12,000 Dth/day of capacity with 600 Dth capacity in the design hour.

The estimated cost for the approximately five mile long main installation to connect to the 99 psig system, installation of a new 99 psig to 55 psig district regulator, construction of new LNG facility, and environmental mitigation are approximately $149M.

Local environmental impacts, beyond initial construction of the site, are not expected.

Once in operation, the impacts to the community would be limited to the volume of LNG tractor trailer trucks traveling on the interstate highways, over bridges, and on local roads to access each facility to support site operations. This is likely to occur during the spring, summer, and fall when LNG prices are lower.

16 Cost does not include lease/rental fees.

This option was ultimately rejected due to significant infrastructure investments required for connection to the natural gas distribution system and a permanent storage tank. In addition, the 'downstream' location of the system did not provide the operational advantages of a location closer to the take station.

4.5 LNG Barge

An LNG Barge option would include contracting with a third-party owner for one (or more) specialty LNG Barge(s). These barges can be sized and designed for function to serve Rhode Island's peak capacity needs. Vaporization, metering, and odorant equipment will be integrated into the design providing a small-scale LNG peak shaver. In this configuration, these are referred to as Floating Storage and Regassification Barges (FSRB). FSRBs are further categorized as either (1) a tow barge—a vessel that is pulled by a tug boat or (2) an Articulated Tug/Barge Unit (ATB)—a vessel that is pushed by a tug boat connected to a notch in the stern of the FSRB via pinions. For Aquidneck Island service, a shallow water offshore location within 3 miles of the coast would benefit the region. This method would require minimal on-land construction and allows for appropriate clearance from shipping lanes, marine commerce, and the coast. Utilizing an FSRB is a new concept for the U.S. market.

Two more barges are under construction in U.S. shipyards. Rhode Island could model a solution on these projects and requisition a purpose-built barge for the Aquidneck Island market. The barge would have a capacity of approximately 50,000 Dth, the equivalent of 50 LNG trucks, and would be outfitted to deliver the projected peak service calculated in this study for a period of up to 10 days without replenishment. The physical size of this barge would be roughly 200 feet long and less than 50 feet wide (beam). The Company previously conducted a request for information with regards to a potential LNG Barge solution to which it received several responses indicating cost and lead time. Based on the solicitation results, it is presumed that a vessel able to meet the needs of the Company would require at least three years before it is ready to be in service from the time the Company is able to commit to the barge developer.

To prepare the gas system for the offshore barge connection, a tee connector must be installed on the existing system connecting a pipe leading out to a buoy. A land connection will be accomplished by horizontal directional drill (HDD) to an area offshore away from the nearby coast. This method is the most effective method to avoid erosion and disruption of the coastal zone. The depth of the pipe using the HDD will protect both the pipe and the environment by eliminating erosion potential. Temporary impacts of an HDD include the need for a pipe laydown area and excavation of the drill site.

Costs associated with the project including the construction and fabrication of the LNG barge, the mooring and the tie in would likely be levelized over a 15-20 year contract if pursued. The estimated cost for main installation to connect to the offshore barge connection to the 99 psig system including the mooring and tie in is approximately $76M. The estimated annual cost of barge construction and LNG barge vaporization services over a 15-year contract is $10M.

Similar to the Navy site alternatives, daily capacity for the barge would have an upper bound due to the resource's 'downstream' positioning on the distribution system. The barge would be crewed and dispatched on-site during the winter.

Permitting and construction of this option would take at least 3-4 years to complete. During the permitting and construction phase, the Company would continue to rely on winter mobilizations at Old Mill Lane to address the capacity constraint and vulnerability until the barge is in service.

Since the barge would be moored offshore in the winter months, there would be minor visual impacts from the sight of the barge on water views. Additionally, there may be potential loss of waterside recreation use when the barge is on-site in the immediate area due to the security perimeter protocols developed during the siting process. Stakeholder impacts of the security zone (typically 500 yards) will be a consideration when identifying the specific mooring location. Given the summer tourism and commercial season on Aquidneck Island, construction of the tie in pipe would be planned for the offseason.

This alternative was rejected due to the costs associated with purchasing a barge, installing the required infrastructure to connect the barge to the distribution system, and permitting uncertainty.

4.6 AGT Reinforcement Project

The Company and AGT explored the possibility of pursuing an infrastructure enhancement project to mitigate potential delivery challenges to AGT's gas delivery to the Portsmouth delivery point resulting from constraints caused by AGT's 6-inch main and the fully subscribed G System.

A system reinforcement project could potentially construct new main to Aquidneck Island and related investments on other affected areas on the AGT G-lateral. This would reduce the potential for delivery constraints and thereby increase the reliability of the gas capacity to Aquidneck Island. A system reinforcement project would likely involve investments that would also benefit AGT's customers in Massachusetts.

An AGT project could be designed to have a broader scope providing additional gas capacity to meet the growing customer demand including other gas utilities that take service from AGT. This would be a larger scale project that would require multiple AGT customers on the G System to support the project. It would also take five or more years to design, permit, and construct, for which period of time the Company would need an alternate means of supplying Aquidneck Island, so while it may be a long-term option, it does not meet the needs of Rhode Island customers today.

An AGT project that is focused only on system reinforcement would not provide additional gas capacity to Aquidneck Island directly. However, the Company expects that such a project would enable it to shift contracted capacity from upstream take stations on the G-lateral to Portsmouth on Aquidneck Island. That means that the capacity constraint on Aquidneck Island could be addressed by reducing demand upstream (or increasing local low-carbon gas supply upstream) or by reducing demand on Aquidneck Island.

While there is no AGT project proposed at this time for which cost information might be presented, based on recent pipeline projects in the northeast, it is estimated that a system reinforcement project could have an estimated cost of $183M, plus interim portable LNG but excluding additional demand side measures. This estimate assumes other AGT customers will also agree to participate in the project (absent this participation, cost estimates would range higher to approximately $265M). The cost would be paid for by Rhode Island gas customers via a contracted rate with AGT for pipeline service. There would be no additional annual operation and maintenance costs for this Project.

As compared to existing infrastructure, an AGT project would provide a reliability benefit for Aquidneck Island, particularly in mitigating the risk of a single point of failure on the 6-inch main that crosses the Sakonnet River. This is the key to eliminating the capacity vulnerability for Aquidneck Island.

The lead time for an AGT project is four years at the minimum. If the Company were to move forward with an AGT project, pursuant to the Company's agreement with its regulators, the Company would execute one or more Precedent Agreements with AGT, subject to review by the Rhode Island Division of Public Utilities and Carriers. AGT would be responsible for completing final engineering and other studies, beginning the FERC application process and applying for other necessary permits. In order to begin construction of an AGT project, AGT would first have to satisfy all conditions precedent in an agreement with the Company, including the receipt of its FERC Certificate and any and all necessary governmental authorizations, approvals, and permits as may be required to construct and operate the facilities.

As part of the Permitting, Policy and Regulatory Requirements described above, AGT would be required to complete an environmental assessment for the AGT project which would address GHG emissions and climate change as well as proposed mitigation techniques associated with the project.

The community impacts are expected to be limited to the initial construction of the project. Once the project is in service, in particular the G-2 loop to Portsmouth Take Station, seasonal LNG mobilization would no longer be required at Old Mill Lane.

Although this alternative addressed the capacity constraint and vulnerability issues, it was not chosen due to the expected challenges associated with permitting new pipeline infrastructure and the associated timeframe for project completion provided no immediate relief for customers.

4.7 Non-Infrastructure Solution

The Company evaluated potential demand-side management programs to resolve the existing capacity constraint, with and without contingency to mitigate the capacity vulnerability concern. These non-infrastructure programs would aim to eliminate the gap between available supply and customer demand by reducing customer demand.

4.7.1 Non-Infrastructure Solution to address Capacity Constraint and Provide Contingency for Capacity Vulnerability

In the September 2020 Long-Term Capacity Report, the Company was focused on maintaining the benefits currently provided by the Old Mill Lane portable LNG project through various alternatives, including a non-infrastructure option. This option included what the Company believed, informed in part by third-party market potential studies, to be maximum levels of achievable Energy Efficiency and Gas Demand Response, as well as electrification of 100% of assumed annual HVAC system turnover[17]. This option required the continued use of Old Mill Lane until 2035, by which time when there were sufficient contributions from the demand-side management ("DSM") programs to fully resolve the capacity constraint and mitigate capacity vulnerability in a manner roughly equivalent to the other options evaluated at the time. As noted in the 2020 report, once Old Mill Lane portable LNG has been phased out of this solution, the absolute reduction in demand from incremental demand-side measures means that this solution could provide comparable levels of resilience in the face of AGT disruptions of up to 50% of pipeline capacity under design day conditions, but less resilience than the infrastructure solutions for larger disruptions.[18] This non-infrastructure option that addresses the capacity constraint and reduces the capacity vulnerability concern has an estimated cost of $286M[19] on a utility cost basis over a fifteen-year period.

The energy efficiency component of this solution evaluated building upon the Company's existing energy efficiency programs with a more aggressive, targeted program that would ultimately reduce both the annual natural gas energy consumption as well as design day peak demand on Aquidneck Island. The nature of this initiative would be the utilization of localized, enhanced incentives and

17 The Company assumes that 5% of customers will need to replace their HVAC equipment each year based on a 20-year useful life for that equipment. The electrification option includes a 4-6 year ramp up period, after which it is assumed that ALL HVAC turnover is electrified, representing approximately 63% of AI gas customers. It also assumes all new potential gas customers electrify their heating systems instead. It should be noted that electrifying 100% of HVAC turnover presents an enormous challenge in terms of customer uptake and cost.

18 National Grid, Long Term Gas Capacity Study, Page 100.

19 The Company has updated the costs originally proposed in the 2020 Long-Term Gas Capacity study with the same cost and savings assumptions for energy efficiency and demand response as used in the additional 2021 analysis. To aid in comparisons of costs among options, this estimate is not discounted, and does not assume any inflation. The net present value over a fifteen-year period, assuming a 7.54% discount rate (from FY 2021 Gas ISR, RIPUC No. 4996, Pg. 170) and 2% inflation rate, is $198M.

geographically targeted customer outreach and engagement approaches that emphasize robust and aggressive natural gas efficiency savings incentivized by intensive weatherization and HVAC measures for both residential and commercial customers. In order to achieve these levels of gas demand reduction, the EE program would have to scale to approximately double the annual activity on Aquidneck Island by 2027. The adoption of energy efficiency measures by 2035 would result in up to ~35% of commercial customers and ~80% of residential customers on Aquidneck Island participating in the baseline and incremental HVAC upgrades and/or weatherization programs. These assumptions represent substantial growth, and the number of customers who agree to participate in energy efficiency programs, and/or the impact of these programs on those who do participate, may not meet estimated required need. This creates risk of not achieving the full projected potential on peak days. Additionally, this approach will likely have the effect, in the near term, of displacing implementation efforts from other parts of the state in order to increase delivery capacity of energy efficiency on Aquidneck Island. Over the long term, the costs of this approach could also have the impact of displacing more cost-efficient spending in the pursuit of energy efficiency measures elsewhere in the state, with the overall implication of a potential reduction in the overall statewide adoption of energy efficiency measures and resulting benefits.

The Gas Demand Response (DR) component of this solution involves customers reducing the amount of natural gas that they consume over a specific period of time, typically for either a few hours or a whole day. This reduction can be achieved either by reducing energy needs (e.g. lowering thermostat temperatures, reducing manufacturing output) during the specified period, or through the use of an alternate fuel source (e.g. fuel switching). The initiative modeled for C&I participation in DR assumed 100% participation in the fifteenth year of the DSM solution for the two largest customers; ~40% participation for the next 33 largest customers; and ~33% participation from the remaining 204 of the top C&I accounts. The modeled non-Infrastructure approach assumes 23% residential participation in the fifteenth year of the DSM solution. The total technical potential for these programs is limited by the customer population on Aquidneck Island and by the eligibility of those customers to participate. Demand response can be an effective tool to reduce peak day consumption. However, current program structures allow customers to override event calls and continue to utilize gas at 'normal' levels. Additionally, meeting customer enrollment requirements will be critical to the program's success. The number of customers who agree to participate can fluctuate or even fail to meet projections. Therefore, there is a risk of not achieving the full projected need on peak days.

Heat electrification via air source or ground source heat pumps could be achieved using cold climate heat pumps, which operate efficiently at low outdoor temperatures. The heat electrification component of this solution focused on electrifying 100% of HVAC turn over to enable the conversion of gas-heated customers to electric heat. A meaningful portion of the peak demand reducing contribution from this solution will also come from using heat electrification to displace the use of delivered fuels by customers who currently rely on oil and propane for heating but might otherwise connect to the gas system over the forecast window of this study. The biggest drawback for electrification of gas-heated customers in Rhode Island is the cost – both upfront cost and ongoing operating costs. Even with significant up-front incentives designed to both reduce customer installation costs as well as mitigate ongoing operating cost increases, this proposal asks customers to adopt a technology that will likely lead to higher ongoing cost for at least the near-term future.

Currently, customer awareness and adoption of heat pumps in Rhode Island is low. Through a partnership with OER, National Grid supported the installation of just 247 heat pumps across the state in 2021. Importantly, these were all conversions of heating through deliverable fuels to electric (which typically yield better customer economics than conversions from natural gas to heat pumps). Several other obstacles currently exist to the widespread deployment of heat pumps across the states: there is a relatively immature installer base and capacity to install, as most current HVAC installers see heat pump installs as higher risk; there is a longer sales cycle for installations, which requires active engagement with customers and the HVAC installation community in order to promote heat pump adoption. Finally, the mitigation of these barriers would typically involve a longer-term market transformation strategy, one that will be difficult to maintain in support of a relatively geographically narrow opportunity limited to Aquidneck Island.

Additional considerations for this component of the solution include the impacts of an aggressive heat electrification initiative on the electric distribution network. Based on National Grid's preliminary, aggregated review of summer and winter feeder capacity on Aquidneck Island as presented in the 2020 report, there is sufficient winter and summer capacity to accommodate heat electrification in the near term for the non-infrastructure approach. However, the location of load growth from heat electrification matters, and even with sufficient capacity in aggregate, individual feeders, feeder sections, or secondaries would likely experience loading that produces system thermal and voltage performance concerns. As the amount of heat electrification grows, addressing such concerns would require potentially significant incremental investment in the electric distribution system.

4.8 Non-Infrastructure Solutions to Address Capacity Constraint Only

During the summer of 2021, the Company assessed two other non-infrastructure options, this time only focusing on resolving the capacity constraint. The Company assessed how DSM programs can close the demand-supply gap under a business-as-usual ("BAU") scenario and a scenario in which new customer connections are prohibited (i.e. moratorium). For the moratorium scenario, it was assumed that the moratorium held load at 2022/23 winter levels identified in the BAU forecast per the direction from Order 150 in EFSB Docket SB-2021-04.

As with the earlier non-infrastructure option, these options relied on the assumed maximum potential achievable incremental volumes of EE and DR which, as noted above, require significant scaling of the programs and adoption of measures by a large portion of the Aquidneck customer base. The EE component of this effort, as modeled with a moratorium in place, would require nine years of program effort, while EE programs would need to run at these sustained higher levels for fifteen years without a moratorium in place. The number of customers who agree to participate in energy efficiency programs, and/or the impact of these programs on those who do participate, may not meet estimated required needs which creates risk of not achieving the full projected potential on peak days. Similarly, for demand response programs modeled to assumed maximum potential levels, meeting customer enrollment requirements will be critical to the program's success. Additionally, as noted above, current program structures allow customers to override the event and use gas. The number of customers who agree to participate can fluctuate or even fail to meet projections. Therefore, there is a risk of not achieving the full projected need on peak days.

The heat electrification component of this initiative requires less contribution (as the marginal DSM resource) because these options do not solve for the capacity vulnerability and therefore, the Company could look to retire the current Old Mill Lane site by 2029/30. Although it allows for less aggressive levels of heat electrification, the modeled levels remain challenging and costly to achieve. Without a moratorium, 40% of HVAC turnover would be required to electrify with a 5-year ramp up period. This represents approximately 15% of Aquidneck Island gas customers. On a utility cost basis, this solution has a cost of $143M[20]. If the described moratorium were to be enacted, 20% of HVAC turnover would be required to electrify with a 5-year ramp up period. This represents approximately 7% of AI gas customers. On a utility cost basis, this solution has a cost of $100M[21]. Note that these cost estimates do not account for any potential investments in the electric distribution system that may be needed to support significant uptake of heat electrification.

As noted above, even with significant up-front incentives designed to both reduce customer installation costs as well as mitigate ongoing operating cost increases, this proposal asks a significant number of customers to adopt a technology that will likely lead to higher ongoing costs for at least the foreseeable future. It would also require a significant scaling in adoption of heat pumps than what is observed today and overcoming current obstacles to scaling the market as detailed in the prior section.

20 To aid in comparisons of costs among options, this estimate is not discounted, and does not assume any inflation. The net present value over a fifteen-year period, assuming a 7.54% discount rate (from FY 2021 Gas ISR, RIPUC No. 4996, Pg. 170) and 2% inflation rate, is $86M.

21 To aid in comparisons of costs among options, this estimate is not discounted, and does not assume any inflation. The net present value over a fifteen-year period, assuming a 7.54% discount rate (from FY 2021 Gas ISR, RIPUC No. 4996, Pg. 170) and 2% inflation rate, is $63M.

Table 4-1. Summary of Evaluated Non-Infrastructure Solutions

Option	Capacity Constraint	Capacity Vulnerability	EE (Dth/day)	DR (Dth/day)	EH (Dth/day)	Utility Cost
LTCR Non-Infrastructure	Solved	Solved	1,394	1,851	10,554	$286M
2021 Non-Infrastructure	Solved	Unsolved	1,278	1,801	2,560	$143M
2021 Non-Infrastructure with Moratorium	Solved	Unsolved	792	1,821	1,087	$100M

In closing, the company undertook a robust analysis of potential demand-side contributions to both the capacity constraint as well as the capacity vulnerability challenges on Aquidneck Island as summarized in Table 4-1. Ultimately, the Company determined that pursuing the non-infrastructure alternatives at the above scale and scope was not the best alternative at this time, given both the overall cost to implement these initiatives at this required scale and duration, as well as the uncertainty associated with obtaining the necessary level of customer uptake to address gas reliability needs. Furthermore, the proposed improvements to the Project would still be required, as all non-infrastructure options require continued reliance on portable LNG at Old Mill Lane for several years. The Company does remain dedicated to advancing demand side measures throughout the state as well as through targeted initiatives focused on Aquidneck Island and will continue to do so through its ongoing energy efficiency programs at the scope and scale determined to be aligned with least cost procurement requirements.

4.9 Other Options Considered and Ruled Out

In addition, the Company considered other options for inclusion as potential solutions but ruled them out due to feasibility or cost concerns, or because they would not meaningfully address the capacity constraint or capacity vulnerability needs on Aquidneck Island. These options considered and ruled out include the following:

4.9.1 Existing LNG Facility at the Naval Station Newport

TNEC had limited LNG operations at the Naval Station Newport until 2010, when the Company procured additional pipeline capacity from Algonquin. From 2006-2010, the site was typically operated once per year. Three issues make the existing Navy facility unfeasible as a solution:

- The current lease expires in 2026. The Navy has informed National Grid that it does not intend to renew it, as it plans to expand the use of this waterfront property for additional piers and ship mooring.
- The current lease only allows operation of the Naval Station LNG facility for peak shaving 8-10 times per year, with limited trucking capacity (5 truck deliveries per

day). In 2019, TNEC engaged the Navy in discussions to modify the lease to allow for expanded use, but the Navy denied the request.

- While unlikely, in a national security event the Naval Station could be secured for any external visits.

4.9.2 Portable CNG

In the Company's Spring 2019 RFP, the Company sought non-pipeline alternatives in the form of CNG or LNG storage and vaporization capability in the amount of ~300 Dth/hr at the Company's Old Mill Lane location, as well as an additional ~100-200/hr at a third-party site to be identified by bidders. With respect to CNG offers received, only a single vendor contemplated using a third-party location however that vendor could not guarantee that the additional location would be available to TNEC for the first winter of service or for the duration of a multi-year contract. Furthermore, offers for CNG injection services, both on Company property and at third party location, were considerably more costly than LNG injection and storage services offered.

A portable CNG operation was reviewed as an alternative to portable LNG operations, but after consideration it was determined that a LNG option was preferable in terms of operational constraints and cost. When compared to LNG storage, CNG storage for the same trailer footprint is much less, being approximately one third to one half less than a comparable LNG trailer. A larger site footprint would be required to facilitate a portable CNG operation of the same capacity as a LNG operation.

4.9.3 Gas Decarbonization Through Hydrogen Blending

Utilizing a relatively small-scale hydrogen project including a commercially available electrolyzer system that converts electricity and city water into high purity hydrogen and oxygen. The system is relatively easy to install consisting of containerized equipment placed on foundations holding the electrolyzers, transformers, control systems, and a de-ionizing system to purify the water. For reliability purposes, TNEC would recommend some level of compressed hydrogen storage be kept on-site to ensure daily delivery levels. This hydrogen would then be blended into TNEC's gas distribution network.

4.9.4 Local Supply of Renewable Natural Gas

Renewable Natural Gas (RNG) typically refers to bio-methane, methane that is produced from the breakdown of organic material and that has a lower lifecycle carbon intensity than geologic natural gas. Typical sources of RNG involve wastewater treatment plants, capped landfills, agricultural facilities (e.g. dairy farms), or biomass facilities (e.g. facilities that produce wood waste). Since the primary constituent of RNG is also methane, it is compatible with the pipe materials and end-use equipment for the vast majority of the gas network. RNG can have lower energy content and/or non-methane constituents in it that could impact sensitive gas-fired equipment, but this can often be managed by adjusting the feedstock or blending the RNG into a larger volume of natural gas. As a note, this option considers the specific limitations of supplying RNG to Aquidneck Island, focusing on the potential for on-island supply. These limitations likely would not apply in many other areas throughout the state. Given local limitations, an RNG solution was not modeled as part of the long-term solution for Aquidneck Island's gas capacity constraint and vulnerability needs, despite the potential for RNG to play an important role for broader gas network decarbonization. However, there may be potential for RNG to play a minor role in meeting the gas capacity needs for Aquidneck Island.

4.9.5 Accelerated Leak Reduction

TNEC prioritizes distribution main leak fixes based on safety concerns. Undertaking the excavation needed to address leaks can disrupt traffic patterns and significantly inconvenience residents and businesses. Implementing a more aggressive leak reduction plan would have only marginal impacts on gas capacity, while posing significant cost and inconvenience to customers on Aquidneck Island.

4.9.6 Methanation

A nascent technology that would combine hydrogen production with a CO2 source to make synthetic methane, which overcomes the blending limits for hydrogen described above. This would require not only the installation of electrolysis equipment for hydrogen production but also a local source of waste CO2. While "green" methanation technologies might contribute in the long-term to decarbonizing the heating sector, they do not offer meaningful short-term capacity on Aquidneck Island. TNEC will continue to monitor advancement of this technology as it matures.

4.10 Greenhouse Gas Analysis

In accordance with direction provided by the ESFB's Order Granting Conditional Waiver and Staying Licensing Proceedings[22] and with consideration of the 2021 Rhode Island Act on Climate (S-0078A, H-5445A), we evaluated the impact on greenhouse gas (GHG) emissions for the final proposed solution of continuing seasonal LNG trucking at Old Mill Lane without incremental demand-side management (DSM) measures in comparison to all other alternatives considered that were deemed to be technically feasible for further analysis. All alternatives considered assume baseline DSM as approved by the Rhode Island Public Utilities Commission in RIPUC Docket No. 5189. This baseline DSM consists primarily of energy efficiency measures such as Home Energy Assessments, EnergyStar HVAC upgrades, and *EnergyWise* services like weatherization. It also incorporates a relatively small amount of demand response program natural gas savings, as a demonstration project, in which customers that are capable of using both natural

22 Docket No. SB-2021-04, Order Granting Conditional Waiver and Staying Licensing Proceedings at 30 (September 17, 2021).

gas and delivered fuels such as heating oil use such alternative fuels in lieu of natural gas on the coldest days. While the demand response programs reduce natural gas use, the use of fuel oil to replace natural gas results in a net increase in GHG emissions for those programs.

4.10.1 Solution Options Considered

For the purpose of evaluating the impact of GHG emissions, the following options were considered in this analysis:

- **Moratorium with Seasonal LNG Trucking (baseline scenario):** A moratorium on new gas connections for potential customers that would be served by the Portsmouth take station and Old Mill Lane, coupled with continued seasonal LNG trucking to and vaporization at the Old Mill Lane portable liquified natural gas (LNG) site to provide supplies to existing customers.
- **Seasonal LNG Trucking (Final proposed solution):** Seasonal LNG trucking to and vaporization at the Old Mill Lane portable LNG site. No incremental DSM measures are included with this option.
- **Seasonal LNG Trucking with Incremental DSM:** Seasonal LNG trucking to and vaporization at the Old Mill Lane portable LNG site coupled with geographically targeted energy efficiency, demand response, and heat electrification measures to hold customer natural gas requirements constant at 2027 levels.
- **Moratorium with Incremental DSM, with Seasonal LNG Trucking Discontinued in 2030:** An immediate moratorium on new gas connections for potential customers that would be served by the Portsmouth take station and Old Mill Lane, coupled with energy efficiency, demand response, and heat electrification measures to phase out the need for Old Mill Lane by 2030.
- **Incremental DSM, with Seasonal LNG Trucking Discontinued in 2030:** Energy efficiency, demand response, and heat electrification measures that grow over time such that the existing load served by Old Mill Lane, and the design day requirements of all new customers, are entirely offset by 2030.

The description of alternatives is more thoroughly provided above in this Section 4 of the siting report.

The findings related to Seasonal LNG Trucking are applicable to all of the available options that include a continuation of natural gas distribution service because the end users remain a constant. Thus, the analysis for Seasonal LNG Trucking is also applicable to Seasonal LNG Trucking at the Navy yard, permanent LNG Operations at the Navy Yard, AGT pipeline alternative, and the LNG Barge.

4.10.2 Global Warming Potential

The GHGs quantified in this analysis are converted to CO_2-equivalence based on their 20-year global warming potential (GWP) as identified by the Intergovernmental

Panel on Climate Change (IPCC)'s Fifth Assessment Report.[23] The conversion factors from this report are copied in Table 4-2 below. Global warming potential is a measure that recognizes the impact of different GHGs on the Earth's atmospheric warming relative to CO_2. It accounts for how GHGs differ in their ability to absorb energy (i.e., radiative efficiency) and how long they stay in the atmosphere (i.e., lifetime). As shown in Table 4-2, nitrous oxide and methane have much higher warming impacts than carbon dioxide, 264 and 84 times greater, respectively, in a 20-year period. The majority of emissions from pipeline gas, fuel oil, and electricity are attributed to CO_2, but both pipeline gas and fuel oil result in nitrous oxide (N_2O) and methane (CH_4) emissions as well.

GHG emission savings are calculated by multiplying the GHG emission rates identified in Table 4-3 by the amount of energy attributed to each source netted against the baseline scenario of a moratorium with seasonal trucking. Results are expressed in terms of carbon dioxide-equivalent (CO_2e) to provide a single measure for comparison that accounts for the relative impacts on global warming attributed to different types of greenhouse gases (CO_2, N_2O, CH_4) that are emitted at different rates depending on the fuel source. For comparison, one ton of CO_2e represents the emissions associated with about 2,280 miles driven in a typical passenger vehicle.[24]

Table 4-2 20-Year Global Warming Potential Relative to CO_2 by Greenhouse Gas

Greenhouse Gas	20-Year GWP Factor
CO_2	1
N_2O	264
CH_4	84

4.10.3 Baseline Emissions, GHG Emission Rate, and Demand-Side Management Assumptions

The Company estimated the cumulative GHG savings measured as CO_2-equivalent (CO_2e) emissions through winter 2034-35 for each option relative to a baseline moratorium alternative. Under this baseline alternative, all of the otherwise projected growth in customer demand relative to 2023 levels on Aquidneck Island is assumed to be met with fuel oil-powered equipment. This assumption is made because absent substantial subsidies or mandates, electrification is not a cost-effective heating option, and according to US Census data a majority of households in southeast RI currently use fuel oil for home heating.[25]

23 Available at: https://www.ipcc.ch/report/ar5/syr/.

24 U.S. Environmental Protection Agency (EPA) website, Greenhouse Gas Emissions from a Typical Passenger Vehicle, available at: https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle. The U.S. EPA Greenhouse Gas Equivalencies Calculator was used to make the calculations presented later in this section for each option, available at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

25 US Census 2019 American Community Survey Public Use Microdata, see: https://data.census.gov/mdat/#/search?ds=ACSPUMS1Y2019&rv=ucgid,HFL&wt=WGTP&g=7950000US4400300

Fuel oil-powered equipment is assumed to be 11 percent less efficient than natural gas-powered equipment at converting a unit of fuel to heat energy.[26] This, in conjunction with a relatively higher GHG emission rate than natural gas per unit of fuel, as shown in Table 4-3 below, results in an estimated net increase in emissions of approximately 45,000 tons of CO_2e through 2034/35 if customers relied on heating oil as their primary fuel source. By avoiding a moratorium beginning in 2023 and allowing customers to convert to natural gas instead of using fuel oil, GHG emission savings are achieved.

As noted above, the GHG saving estimates shown in Figure 1 below are based on the assumed GHG emissions rates for natural gas, fuel oil, and electricity production shown in Table 4-3. Pipeline gas and fuel oil emissions rates are assumed to remain constant over time, while emissions associated with electricity production are assumed to decline linearly to zero emissions by 2030 in accordance with the state's goal of 100% renewable electricity by 2030.

Table 4-3 GHG Emission Rates by Fuel Source

Greenhouse Gas	Pipeline Gas [lb per MMBtu][27]	Fuel Oil [lb per MMBtu][527]	2020 Electricity Production [lb per MWh][28]	2030 Electricity Production [lb per MWh]
CO_2	117	165	575	0
N_2O	0.00022	0.0013	0.24	0
CH_4	0.022	0.066	0	0

For scenarios that include DSM components, the net GHG emissions savings shown in Graphic 4 includes both the decrease in GHG emissions from avoided natural gas consumption and, if applicable for that DSM component, the increase in GHG emissions from alternative fuel consumption associated with that DSM measure (e.g., increased electric consumption due to electrification). DSM components include:

› **Energy efficiency –** The annual natural gas savings through winter 2034/35 from energy efficiency measures, shown in Table 4-4, is multiplied by the emissions rate of pipeline gas, shown in Table 4-3, to yield the GHG savings from energy efficiency. There is no alternative fuel consumption assumed for energy efficiency measures, so this GHG savings amount represents the total net GHG savings for energy efficiency per solution.

26 Assuming 85% Annual Fuel Utilization Efficiency (AFUE) for oil-fired equipment, based on U.S. Department of Energy (DOE) appliance standards for oil-fired boilers found at 10 CFR 430.32(e)(2)(iii)(A), and assuming 95% AFUE for gas-fired equipment, based on a Massachusetts study of Heating, Air-conditioning, & Refrigeration Distributors International (HARDI) data from HVAC distributors, available at https://ma-eeac.org/wp-content/uploads/TXC65_HARDI_Data_Memo_Final_2019.11.15.pdf.

27 U.S. EPA website, Emission Factors for Greenhouse Gas Inventories, available at: https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf

28 Table 1-1 of 2019 ISO New England Electric Generator Air Emissions Report, available at: https://www.iso-ne.com/static-assets/documents/2021/03/2019_air_emissions_report.pdf

- **Demand response** – For all demand response programs considered, participants are assumed to avoid natural gas consumption on peak days, as shown in Table 4-4. Peak days are defined as days with an average temperature below 10 °F, which appear in the Company's design weather pattern 5 times per heating season. The resulting natural gas savings is multiplied by the emissions rate of pipeline gas shown in Table 4-3 to estimate GHG emission savings. However, some of the demand response participants are assumed to switch to consuming fuel oil on those event days, and that fuel oil consumption, scaled up by the assumed 16% lower efficiency of fuel oil-powered equipment, is multiplied by the emissions rate of fuel oil shown in Table 4-3 to estimate an increase in GHG emissions. These emissions impacts are then summed together to yield the net GHG emissions savings associated with demand response. This increase in GHG emissions associated with switching to fuel oil consumption for demand response events is greater than the decrease in GHG emissions associated with switching off of natural gas consumption, resulting in demand response having negative net GHG emissions savings (i.e., a net increase in GHG emissions relative to the baseline). The relative magnitude of these negative net GHG emissions savings is small, however, because there are relatively few demand response event days assumed per year.
- **Electrification** – The annual natural gas savings through winter 2034/35 from electrifying customers (both existing natural gas customers and forecasted new customers, in the case of no moratorium) as shown in Table 4-4 is multiplied by the emissions rate of pipeline gas shown in Table 4-3 to estimate a GHG emission savings. The increase in annual electric consumption through winter 2034/35 from those same customers is multiplied by the emissions rate for electricity production shown in Table 4-3 to estimate the increase in GHG emissions associated with those electrified customers consuming additional electricity. These emissions impacts are then summed together to yield the net GHG emissions savings associated with electrification. As noted above, emissions associated with electricity production are assumed to decline linearly from 2020 values shown in Table 4-3 to zero emissions by 2030 in accordance with the state's goal of 100% renewable electricity by 2030.

Graphic 4 Cumulative GHG Emission Savings from January 1, 2023 through Winter 2034/35

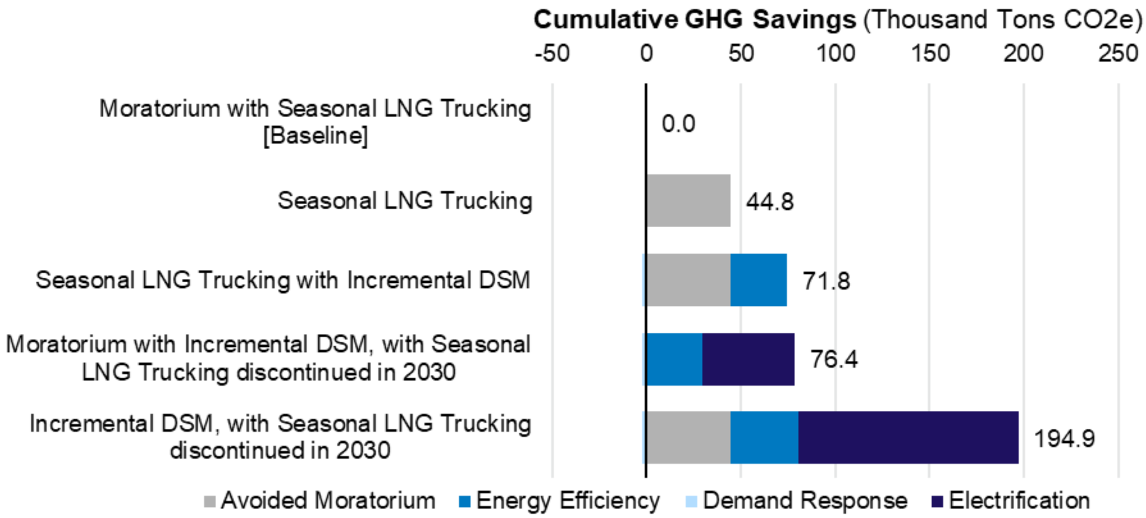

Table 4-4 Cumulative Natural Gas Savings through 2034/35 by DSM Component (MDth)

Compared Solution	Energy Efficiency	Demand Response	Electrification
Moratorium with Seasonal LNG Trucking [Baseline]	-	-	-
Seasonal LNG Trucking	-	-	-
Seasonal LNG Trucking with Incremental DSM	495	95	-
Moratorium with Incremental DSM, with Seasonal LNG Trucking Discontinued in 2030	505	95	860
Incremental DSM, with Seasonal LNG Trucking Discontinued in 2030	600	95	2,060

4.10.4 GHG Emission Savings Results

Figure 1 compares the estimated GHG emission savings of each analyzed alternative. Results are presented in the form of GHG emission savings (i.e., avoided emissions) relative to a baseline of a moratorium on new gas connections beginning in 2023 and with continued seasonal LNG trucking at Old Mill Lane to meet forecasted demand through winter 2034/35 under the existing contracted capacity. Seasonal LNG trucking at Old Mill Lane is currently being utilized to address an existing capacity constraint and therefore a moratorium on new gas connections limiting growth in demand would not be sufficient to offset the need for seasonal LNG trucking or an alternative supply option, even if combined with incremental DSM. For this reason, the last two alternatives shown in Figure 1 assume seasonal LNG trucking at Old Mill Lane is continued through the winter of 2028/29 at which time incremental DSM programs and/or a moratorium is estimated to alleviate the capacity constraint. These alternative solutions, however, do not provide any contingency in the event of an upstream pipeline disruption after 2029, a benefit that is provided with continued seasonal LNG trucking.

4.10.5 Discussion of Results

Since a moratorium with seasonal LNG trucking is the baseline option, no GHG savings are attributed to that option. This option assumes reliance on fuel oil by customers that would otherwise look to convert to natural gas while serving existing customers with natural gas from the interstate pipeline network supplemented with seasonal LNG at Old Mill Lane.

Seasonal LNG trucking at Old Mill Lane, which is the Company's recommended option, enables conversions to natural gas and results in savings of approximately 44,800 tons CO2e relative to the baseline, which is the continued use of fuel oil. This represents 102,141,073 miles driven by a typical passenger vehicle.

Seasonal LNG trucking with incremental DSM results in increased levels of GHG savings relative to both the baseline and the Company's recommended option because the energy efficiency associated with this option reduces overall energy requirements. It provides an incremental savings of approximately 27,000 tons CO2e relative to the Company's recommended option (and total savings of 71,800 tons CO2e). The GHG savings of this option, taken in total (LNG trucking + EE, offset by demand response), represents 163,699,308 miles driven by a typical passenger vehicle.

A moratorium with incremental DSM, with seasonal LNG trucking to Old Mill Lane discontinued in 2030, provides total GHG savings of 76,400 tons of CO2e. This represents 174,187,008 miles driven by a typical passenger vehicle. This option includes demand response, which increases GHG emissions slightly, along with substantial energy efficiency and electrification measures that provide GHG savings. However, because this option includes a moratorium, like the baseline option there is some reliance on heating oil by residents that would have otherwise looked to convert to natural gas for heating.

Incremental DSM with seasonal LNG trucking discontinued in 2030 results in the greatest potential savings relative to the baseline option. This option avoids a moratorium and includes similar amounts of demand response and energy efficiency as the previous two options. However, to eliminate trucking of LNG by 2030, much greater amounts of electrification are required. Total GHG savings for this option are estimated at 194,900 tons CO2e, which represents 444,359,265 miles driven by a typical passenger vehicle.

4.10.6 Limitations of this GHG Analysis

These estimates do not include all sources of emissions associated with LNG activities such as construction or other stationary source activities. It also does not account for a differential in emissions that could be attributed to differences between Old Mill Lane and potential other portable LNG sites, such as the length of road vehicles travel on to transport material. Therefore, no difference in emissions is identified among portable LNG options due to the location of seasonal LNG trucking. Further, these estimates do not account for any upstream emissions associated with natural gas such as sourcing and leaks or flaring at a source location (e.g., a shale field). However, these estimates of net GHG emissions do account for fugitive unburnt methane emissions due to gas pipeline and equipment leaks as well as methane emissions associated with flaring or venting at the point of use (i.e., downstream emissions) – these fugitive emissions are captured in the methane values included in Table 4-3.

4.11 Conclusion on Project Alternatives

For the reasons summarized in the previous sections, the Company concluded that the Project is the preferred solution to addressing the Island's capacity vulnerability and capacity constraint.

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5

Description of Affected Natural Environment

This section of the Siting Report describes the existing natural environment that may be affected by the proposed Project, both within and surrounding the proposed seasonal portable LNG operation. This section includes a detailed description of environmental characteristics within and surrounding the proposed Project (in the Project Study Area defined below). The following section describes the specific natural features which have been assessed for the evaluation of impacts and the preparation of a mitigation plan. Information pertaining to existing site conditions has been obtained through available published resource information, the Rhode Island Geographic Information System (RIGIS) database, various state and local agencies, and field investigations of the Project Site.

5.1 Project Study Area

A Project Study Area was established in which to assess the existing environment within and surrounding the Project Site. The Project Study Area (or Study Area) consists of a half-mile radius centered on the proposed seasonal Portable LNG Operation Property (Project Site) in Middletown, Rhode Island (See Figure 5-1). The defined radius was selected to accommodate a comprehensive review and inventory of existing conditions within and adjacent to the Project Site.

5.2 Climate and Weather

Rhode Island has a moist continental climate with four distinct seasons. Its weather is tempered by sea winds, particularly in the Seaboard Lowland, which has a more moderate climate than the rest of New England. Aquidneck Island in particular enjoys a moderate climate due to its close proximity to the Narragansett Bay and influence from the Gulf Stream which helps to minimize extreme temperatures (City of Newport, 2017). Although the Bay has a modifying effect, temperatures in Rhode Island tend to fluctuate by large ranges both daily and annually. The mean annual temperature of Rhode Island's coastal areas, such as Aquidneck Island, is 51 degrees Fahrenheit, with an average minimum temperature of 30 degrees Fahrenheit and an average maximum temperature of approximately 70 degrees Fahrenheit (Runkle et al. 2017, City of Newport, 2017). Rhode Island is characterized by an even distribution of precipitation throughout the year with an annual average of 42 to 46 inches over most of the state, with approximately 20 inches of that total attributed to snowfall in the coastal Narragansett Bay regions (Runkle et al. 2017). Rhode Island experiences a considerable diversity of weather over the short term and long term scale (Runkle et al. 2017).

Climate change has had measurable effects in the state. According to the 2017 NOAA Rhode Island Climate Change Report and the 2012 Rhode Island Climate Change Commission Report, the average air temperature in Rhode Island has increased by three degrees Fahrenheit over the last century and the water temperature at the surface of Narragansett Bay has risen by four degrees Fahrenheit since the 1960s. Climate change has also resulted in an increased frequency of rainfall events that lead to flooding and longer periods of hot, dry weather that lead to drought and strain the state's water resources. These climate effects have begun to impact the local economy; farmers experience less predictable rainfall which translates to uncertain crop yields while the fishing industry has been forced to adapt to a change in fish species composition from cold-water, bottom-dwelling (benthic) species to warm-water, water-column (pelagic) species. Rhode Island will continue to experience warmer temperatures, more extreme weather events such as intense precipitation and flooding, and sea level rise (Runkle et al. 2017, Rhode Island Climate Change Commission, 2012).

5.3 Geology

5.3.1 Bedrock Geology

The Study Area is located within the Seaboard Lowland section of the New England physiographic province. Bedrock in the Study Area primarily consists of the Narragansett Bay Group – Rhode Island Formation (Pennsylvanian Age). This group consists of meta-sandstone, meta-conglomerate, schist, carbonaceous schist, and graphite (Hermes et al., 1994). This formation is part of the Esmond-Dedham Subterrane Narragansett Bay Group – deposited upon older rocks of both West Bay and East Bay parts of the Esmond-Dedham subterrane (Hermes et al. 1994).

The primary rock type in this area is arenite, a "clean" sandstone that is well-sorted, contains little or no matrix material, and has a relatively simple mineralogic composition; specifically, a pure or nearly pure, chemically cemented sandstone containing less than 10 percent argillaceous matrix (Hermes et al. 1994).

5.3.2 Surficial Geology

The present landscape of Aquidneck Island, as with much of the northeastern United States, was shaped by the repeated advance and retreat of glaciers since the beginning of the Pleistocene epoch between 2.5 and 3 million years ago (Raposa and Schwartz, 2009). The last glacial period to affect the Study Area was the Wisconsin ice sheet, approximately 10,000 to 12,000 years ago (Raposa and Schwartz, 2009). The surficial geology in the Study Area is generally derived from the action of the advancing ice sheet overriding the landscape.

Glacial till deposits were formed as the glacial front advanced and overrode the landscape. This process would reshape the landform, grinding down hills and depositing material in valleys creating the streamlined elongate hills with axes oriented along the direction of glacier travel known as “drumlins”. The Study Area is generally centered along the axis of a drumlin. The material deposited by this process is classified as glacial till and consists of a mix of separates sized from boulders and stones down to sand, silt, and clay. The form of glacial till found in the Study Area is lodgement till. Lodgement till was deposited directly under the glacier as it advanced and ablation till was deposited from material atop and within the ice as it melted. Lodgement till is the dominant surficial deposit in the Study Area and is characterized by a dense, slowly permeable layer two or three feet below the ground surface locally known as “hardpan”. The glacial till deposits present in the Study Area are typically capped by windblown deposits of silt or silt and fine sand.

Very small areas of alluvial sediment and organic deposits are also found with the Study Area. Alluvial soils form in Holocene-age stream sediments. Organic deposits occupy portions of larger wetland systems.

5.3.3 Geological Hazards

Rhode Island is located in a region of the North American plate and falls within seismic zone 2A with 10-14 percent ground acceleration, which translates to a “moderate” seismic hazard (Petersen et al. 2008; US Seismic Zone Map). This means that people may experience moderate intensity shaking that can lead to slight damage during an earthquake event (FEMA Earthquake Hazard maps). There are no significant geologic fault lines in Rhode Island or New England, and the U.S. Geological Survey (USGS) Earthquake Hazards Program identifies all of Rhode Island as occurring in a low seismic risk area (<2 percent peak ground acceleration). Earthquakes that occur in the northeast, which is considered an intraplate area, do not meet the assumptions of the plate tectonic theory since there is no obvious relationship between earthquake occurrence and fault lines in intraplate areas (Kafka, 2014).

A commonly accepted explanation for the occurrence of earthquakes in the northeast is that “ancient zones of weakness” are being reactivated by the present stress field (Kafka, 2014). This theory hypothesizes that pre-existing faults and other geologic features formed during ancient geological episodes persist today and that earthquakes occur when present-day stress is released along these zones of weakness (Kafka, 2014). Earthquakes occur infrequently in Rhode Island and surrounding New England and therefore present a minimal risk for the design life of the Project.

5.3.4 Sand and Gravel Mining

There are no quarries or regulated mining facilities located in the Study Area, likely due to the unsuitable surficial geology of the area.

5.4 Soils

Detailed information concerning the physical properties, classification, agricultural suitability, and erodibility of soils in the vicinity of the Study Area are presented in this section. Descriptions of soil types identified within the Study Area were obtained from the Natural Resources Conservation Service (NRCS) Web Soil Survey[1], the Soil Survey of Rhode Island (Rector, 1981), and from on-site investigations conducted by VHB. The Soil Survey delineates map units that may consist of one or more soil series and/or miscellaneous non-soil areas that are closely and continuously associated on the landscape. In addition to the named series, map units include specific phase information that describes the texture and stoniness of the soil surface and the slope class. A total of six named soil series and one great group (Udorthents) have been mapped within the Study Area. Table 5-1 lists the acreages and selected characteristics of the 10 soil map units found within the Study Area. A map unit consists of one or more named series along with other unnamed inclusions. Further information on map unit composition can be obtained from Web Soil Survey. Figure 5-2 depicts soil classes grouped by erodibility hazard and presence soils that are classified as hydric.

Table 5-1 Soil Phases within Study Area

Soil Map Unit Symbol	Soil Phase	Acres	Drainage Class	Percent Slope
CeC	Canton and Charlton-fine sandy loams, very rocky	5.38	wd	3 to 15
Ma	Mansfield mucky silt loam	62.46	vpd	0 to 3
NeA	Newport silt loam	99.11	wd	0 to 3
NeB	Newport silt loam	133.83	wd	3 to 8
NeC	Newport silt loam	13.94	wd	8 to 15
NfB	Newport very stony silt loam	14.24	wd	3 to 8
PmA	Pittstown silt loam	73.4	mwd	0 to 3
PmB	Pittstown silt loam	93.52	mwd	3 to 8
Se	Stissing silt loam	143.55	pd	0 to 3
UD	Udorthents	6.42	mwd to ed	0 to 15

Notes: ed – excessively drained; pd – poorly drained (hydric in part); wd – well drained; vpd – very poorly drained (hydric); mwd – moderately well drained; 8-15 percent slope – highly erodible

Source: Web Soil Survey (Soil Survey Staff NRCS) Accessed: February 2021 website: http://websoilsurvey.sc.egov.usda.gov/

5.4.1 Soil Series

The soil series detailed in the following subsections have been identified within the Study Area. The classification follows that published in the Soil Survey of Rhode Island (Rector, 1981).

5.4.2 Canton and Charlton Series

The Canton series is classified as coarse-loamy over sandy or sandy skeletal, mixed, mesic Typic Dystrudepts (National Cooperative Soil Survey, 2010). These well drained soils formed in glacial till derived mainly from schist and gneiss. The similar Charlton series is classified as coarse-loamy, mixed, mesic Typic Dystrudepts (National Cooperative Soil Survey, 2010). These soils were also formed in glacial till derived mainly from schist and gneiss. Charlton soils have a finer textured substratum than Canton soils. Because these series are similar they are together in a single map unit known as an association.

5.4.3 Mansfield Series

The Mansfield series consists of very poorly drained loamy soils formed in dense till. These soils are moderately deep to a densic contact and very deep to bedrock. They are nearly level soils in depressions and drainageways of uplands. The soils have a water table near or above the surface most of the year. Permeability is moderately rapid or moderate in the surface layer and subsoil and slow or very slow in the substratum.

5.4.4 Newport Series

The Newport series consists of well drained loamy soils formed in lodgement till derived mainly from dark sandstone, conglomerate, argillite, and phyllite. The soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on till plains, low ridges, hills, and drumlins.

5.4.5 Pittstown Series

The Pittstown series consists of moderately well drained soils formed in lodgement till derived mainly from slate, phyllite, shale, and schist. These soils are very deep to bedrock and moderately deep to a densic contact. They are nearly level through moderately steep soils on uplands. Slope ranges from 0 through 25 percent. Saturated hydraulic conductivity is moderately high or high in the mineral solum and moderately low or moderately high in the substratum.

5.4.6 Stissing Series

The Stissing series consists of poorly drained soils formed in dense till derived principally from dark phyllite, slate, shale, and schist. These soils are very deep to bedrock and shallow to a densic contact. They are nearly level to strongly sloping soils on glaciated uplands. Slope ranges from 0 to 15 percent. Saturated hydraulic conductivity is moderately high or high in the solum and moderately low or moderately high in the dense substratum.

5.4.7 Udorthents

Udorthents are moderately well drained to excessively drained soils that have been cut, filled, or otherwise altered typically by human activity. The areas have had more than two feet of the upper part of the original soil removed or have more than two feet of fill on top of the original soil. Udorthents are extremely variable in texture. These soils can occur in a variety of surficial geologic setting including made land.

5.4.8 Prime Farmland Soils

Prime farmland, as defined by the United States Department of Agriculture (USDA), is the land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to economically produce a sustained high yield of crops when it is treated and managed using acceptable farming methods.

Rhode Island recognizes 35 prime farmland soils (USDA, 2012). Prime farmland soils can be used for cropland, pastureland, rangeland, forestland, or other land. Urbanized land and water are exempt from consideration as prime farmland. The proposed Study Area will cross 4 prime farmland soil units as listed in Table 5-2. Within the Study Area, prime farmland soils exist on land occupied by commercial, institutional, recreational, agricultural, and residential land use, cleared ROW, forestland, and roads.

Table 5-2 USDA Prime Farmland Soils within the Study Area

Soil Map Unit Symbol	Name	Percent Slope
NeA	Newport silt loam	0 to 3
NeB	Newport silt loam	3 to 8
PmA	Pittstown silt loam	0 to 3
PmB	Pittstown silt loam	3 to 8

Source: Web Soil Survey (Soil Survey Staff NRCS) Accessed: February 2021 Soil Data Mart (USDA NRCS website: http://websoilsurvey.sc.egov.usda.gov/)

5.4.9 Farmland of Statewide Importance

Farmland of statewide importance is land that is designated by the Rhode Island Department of Administration Division of Planning to be of statewide importance for the production of food, feed, fiber, forage, and oilseed crops (USDA, 2012). Generally, farmlands of statewide importance include those lands that do not meet the requirements to be considered prime farmland, yet they economically produce high crop yields when treated and managed with modern farming methods. Some may produce as high a yield as prime farmland if conditions are favorable.

In order to extend the additional protection of state regulation to prime farmland, the State of Rhode Island has expanded its definition of farmland of statewide importance to include all prime farmland areas. Therefore, in Rhode Island, all USDA-designated prime farmland soils are also farmland of statewide importance.

Table 5-3 lists soil units designated as farmland soils of statewide importance that are found within the Study Area. The Study Area encompasses the following farm properties: The Local Patch, and Plane View Nursery.

Table 5-3 Farmland Soils of Statewide Importance within the Study Area

Soil Map Unit Symbol	Phase	Percent Slope
NeA	Newport silt loam	0 to 3
NeB	Newport silt loam	3 to 8
NeC	Newport silt loam	8 to 15
PmA	Pittstown silt loam	0 to 3
PmB	Pittstown silt loam	3 to 8
Se	Stissing silt loam	0 to 3

Source: Web Soil Survey (Soil Survey Staff NRCS) Accessed: February 2021 Soil Data Mart (USDA NRCS website: http://websoilsurvey.sc.egov.usda.gov/)

5.4.10 Potentially Erosive Soils

The erodibility of a soil is dependent upon the slope of the land occupied by the soil and the texture of the soil. NRCS has characterized soil map units as “highly erodible”, “potentially highly erodible”, or “not highly erodible” due to sheet and rill erosion (USDA, 1993). This determination is done by using the Universal Soil Loss Equation (USLE). The USLE relates the effects of rainfall, soil characteristics, and the length and steepness of slope to the soil’s tolerable sheet and rill erosion rate .

Soils are given an erodibility factor (K), which is a measure of the susceptibility of the soil to erosion by water. Soils having the highest K values are the most erodible. K values in Rhode Island range from 0.10 to 0.64 and vary throughout the depth of the soil profile with changes in soil texture. Very poorly drained soils and certain floodplain soils usually occupy areas with little or no slope. Therefore, these soils are not subject to erosion under normal conditions and are not given an erodibility factor. Soil map units described as strongly sloping or rolling may include areas with slopes greater than eight percent and soil map units with moderate erosion hazard are listed in Table 5-4.

Table 5-4 Soil Mapping Units with Potential Steep Slopes within the Study Area

Soil Map Unit Symbol	Soil Phase	Percent Slope	Erodibility Hazard	Surface K Values
CeC	Canton and Charlton-fine sandy loam, very rocky	3 to 15	Phel	0.17-0.24
NeB	Newport silt loam	3 to 8	Phel	0.24
NeC	Newport silt loam	8 to 15	Hel	0.24
PmB	Pittstown silt loam	3 to 8	Phel	0.24

Source: Web Soil Survey (Soil Survey Staff NRCS) Accessed: February 2021 Soil Data Mart (USDA NRCS website: http://websoilsurvey.sc.egov.usda.gov/)

Hel Highly Erodible

Phel Potentially Highly Erodible

[1] Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed [October 31, 2014].

5.5 Surface Water

The Study Area lies within the Narragansett Bay drainage basin of Rhode Island. A drainage basin is the area of land that drains water, sediment, and dissolved materials to a common outlet at some point along a stream channel (Dunne and Leopold, 1978), and is synonymous with watershed. Narragansett Bay extends approximately 45 kilometers (km) from north to south and 18 km at its widest point from west to east (Chinman and Nixon, 1985). The Narragansett Bay watershed is composed of nine subwatersheds and only one is located within the Study Area, the Sakonnet River subwatershed (Raposa and Schwartz, 2009). The bodies of water that are located within these watersheds are Little Creek, Unnamed Tributary to the Sakonnet River, and five (5) small unnamed open water areas/ponds. The Narragansett Bay Basin flows east into Rhode Island and Block Island sounds, and ultimately the Atlantic Ocean.

The waters of the State of Rhode Island (meaning all surface water and groundwater of the State) are assigned a Use Class which is defined by the most sensitive uses which it is intended to protect. Waters are classified according to specific physical, chemical, and biological criteria which establish parameters of minimum water quality necessary to support the water Use Classification. The water quality classification of the major surface waters within the Study Area are identified in the descriptions of the water courses that follow. Classification use of all water courses within the Study Area are presented in Table 5-5.

The Study Area is drained by waterways which generally flow to the north and southeast into the Sakonnet River. Figure 5-3 depicts surface waters within the Study Area.

Pursuant to the requirements of Section 305(b) of the Federal Clean Water Act, waterbodies which are determined to be not supporting their designated uses in whole or in part are considered impaired, and placed on the Clean Water Act, Section 303(d) List of Impaired Waters or have a total maximum daily load (TMDL) assessment where they are prioritized and scheduled for restoration. The causes of impairment are those pollutants or other stressors that contribute to the actual or threatened impairment of designated uses in a waterbody. Causes include chemical contaminants, physical parameters, and biological parameters. Sources of impairment are not determined until a TMDL assessment is conducted on a water body. Little Creek was assessed and included in the 2018 -2020 Integrated Report Lists, it was found to be impaired, having Enterococcus bacteria. None of the other water bodies within the Study Area were assessed for impairments (Table 5-6; EPA, 2014; RIDEM 2015).

Table 5-5 Surface Water Resources within the Study Area

Water Body Name	Town	Use Classification	Approximate Location
Little Creek	Portsmouth and Middletown	B	Flows south from Little Creek Pond to Sakonnet River
Unnamed Tributary to the Sakonnet River	Portsmouth	A	Flows north from unnamed pond to the Sakonnet River

Classification:

AA: Designated as a source of public drinking water supply (PDWS) or as a tributary waters within a public drinking water supply watershed, for primary and secondary contact recreational activities and for fish and wildlife habitat. These waters shall have excellent aesthetic value.

A: Primary and secondary contact recreational activities and for fish and wildlife habitat. Suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have excellent aesthetic value.

B: Fish and wildlife habitat and primary and secondary contact recreational activities. Suitable for compatible industrial processes and cooling, hydropower, aquacultural uses, navigation, and irrigation and other agricultural uses. These waters shall have good aesthetic value.

Source: RIDEM, Water Quality Regulations (December 2010); RIDEM Appendix A. 2018 Index of Waterbodies and Category Listing.

Table 5-6 Surface Water Resource Categories within the Study Area

Water Body Name	Impairment	Category
Little Creek	Impaired for Primary Contact Recreation, Secondary Contact Recreation, Reason: Enterococcus	5
Unnamed Tributary to the Sakonnet River	Not assessed	3

Category Explanation:

Category 3 Insufficient or no data and information are available to determine if any designated use is attained or impaired. Waterbodies will be placed in this Category where the data or information to support an attainment determination for all uses are not sufficient, consistent with the requirements of the CALM. In general, these uses and waterbodies are considered Not Assessed.

Category 4 Impaired or threatened for one or more designated uses but does not require development of a TMDL. (Three subcategories):

A. TMDL has been completed. Waterbodies will be placed in this subcategory once all TMDLs for the waterbody have been developed and approved by EPA.

B. Other pollution control requirements are reasonably expected to result in attainment of the water quality standard in the near future. Waterbodies will be placed in this subcategory where other pollution control requirements are stringent enough to attain applicable water quality standards.

C. Impairment is not caused by a pollutant. Waterbodies will be placed in this subcategory if pollution (e.g., flow) rather than a pollutant causes the impairment.

Category 5: Impaired or threatened for one or more designated uses by a pollutant(s) and requires a TMDL. This Category constitutes the 303(d) List of waters impaired or threatened by a pollutant(s) for which one or more TMDL(s) are needed.

Source: EPA Watershed Assessment, Tracking, & Environmental Results, 2012 http://ofmpub.epa.gov/tmdl_waters10/attains_state.control?p_state=RI&p_cycle=2012&p_report_type=

Source: RIDEM Integrated Water Quality Monitoring and Assessment Reporting, 2021 http://www.dem.ri.gov/programs/water/quality/surface-water/integrated-water-quality-monitoring.php#:~:text=Category%205%20%2D%20Impaired%20or%20threatened,TMDL(s)%20are%20needed.

5.5.1 Little Creek

Little Creek is a 3.1 mile state-designated Class B watercourse that flows southerly from Little Creek Pond through Portsmouth and Middletown to the Sakonnet River, a tidal waterway located east of Portsmouth, Rhode Island (RIDEM, 2021). As of the 2021 303(d) List of Impaired Waters, Little Creek has been listed for an impairment of *Enterococcus*. A TMDL is scheduled for *Enterococcus* in Little Creek and will be created in 2030. Little Creek is not impaired for fish and wildlife habitat. The waterbody is currently listed as Category 5 because the required TMDL has not been completed. This waterbody has not been assessed for fish consumption or public drinking water supply.

5.5.2 Unnamed Tributary to the Sakonnet River

The Unnamed Tributary to Sakonnet River is a state-designated Class A waterway located in Portsmouth, Rhode Island. The Brook runs north of an Unnamed Pond east of Wapping Road to the Sakonnet River. The Unnamed Tributary to Sakonnet River has no official Category Classification because it is not a state-registered water body, however, due to its lack of classification and water quality, for this report's purposes it may be considered a Category 3 waterbody.

5.5.3 Unnamed Small Waterbodies

There are a number of small open water resources throughout the Study Area, and the following list describes five (5) unnamed waterbodies that appear to meet the definition of a pond.

Open water area 1 is located 170 feet north of Old Mill Lane and 175 feet east of Little Creek. The basin encompasses 6,969 square feet.. Open water area 2 is located 425 feet north of Old Mill Lane and 415 feet west of Prince Henry Ave. The basin encompasses 9,757 square feet. Open water area 3 is the starting point of an Unnamed Tributary to the Sakonnet River. It is located 944 feet west of Wapping Road and 1,299 feet north of Old Mill Lane. The basin encompasses 10,036 square feet. Open water area 4 is 530 feet south of Peckham Ave. and 622.5 feet west of Bartlett Rd. The basin encompasses 6,133 square feet. Open water area 5 is 611 feet west of Wapping Road and 330 feet northeast of Peckham Lane. The basin encompasses 7,248 square feet.

These Open water areas have no official Category Classification because they are not state-registered water bodies, however, due to lack of classification and water quality, for this report's purposes they may be considered Category 3 waterbodies.

5.5.4 Floodplain

Special Flood Hazard Areas are areas that are subject to inundation by the one percent annual chance flood. Based on available FEMA Flood Insurance Rate Mapping for the towns of Portsmouth[1] and Middletown[2] portions of the Study Area lie within Zone X .2% Annual Chance Flood Hazard, including areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. The .2% Annual Chance Flood Zone is located at Cotton Swamp, north of Old Mill Lane in Portsmouth, with the unnamed tributary to Sakonnet River running through it. The remainder of the Study Area is designated as Zone X (Areas determined to be outside the 0.2% annual chance floodplain) and no one percent annual chance flood hazard area is mapped by FEMA.

It is recognized that, by definition provided in the RIDEM Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (RIDEM 2014) , a floodplain is the land area adjacent to a river, stream, or other body of flowing water that is, on average likely to be covered with flood waters resulting from a one percent annual chance flood event. In the event that these floodplains are not mapped by FEMA then a registered Professional Engineer may be enlisted to determine the base flood elevation. Therefore, while there are no FEMA-mapped Flood Zones within the Study Area, there are two streams; Little Creek and unnamed tributary to the Sakonnet River whose riparian areas are expected to include a floodplain function.

5.5.5 Surface Water Protection Areas

Drinking water supplies are designated as Special Resource Protection Waters (SRPW; RIDEM, 2006). This designation offers protection under Tier 2 ½ of the Rhode Island Antidegradation provisions as part of Rule 18 of the Rhode Island Water Quality Regulations (GL Ch. 46-12, 42-17.1, 42-35) based on the Federal Antidegradation Policy requirements (40 CFR 131.12) (RIDEM, 2006). The Tier 2 ½ designation requires that there shall be no measurable degradation of the existing water quality necessary to protect the characteristic(s) which cause the waterbody to be designated as an SRPW and adopted under the authority of Chapter 46-12, 42-17.1 and 42-35 of the General Laws of Rhode Island, as amended (RIDEM, 2006). There are no drinking water reservoirs located within the Study Area. Portsmouth and Middletown have each designated their own watershed protection areas described in the following sections.

5.5.5.1 Portsmouth Watershed Protection District

The Study Area is not located within Portsmouth's Watershed Protection District.

5.5.5.2 Middletown Watershed Protection District

The Watershed Protection Districts in the Town of Middletown are divided into two zones and it appears that the Study Area is not located within either of these zones.

5.6 Groundwater

Groundwater resources within the Study Area are depicted in Figures 5-3. The presence and availability of groundwater resources is a direct function of the geologic deposits in the Study Area. The entire Study Area is classified as GA (RIDEM, 2020). These groundwater resources are presumed suitable for public drinking water use without prior treatment; however, these resources have a lower potential yield and quality than that of the highest state classification, GAA. The GA class is subject to the same groundwater quality standards and preventative action limits for organic and inorganic chemicals, microbiological substances, and radionuclides as the GAA classification. A portion of the western half of the Study Area is within a Non- Community Wellhead Protection Area (NCWHPA), or the portion of an aquifer through which groundwater moves to a well. A Non-Community well regularly serves at least 25 people at least 60 days of the year. The Project Site is not within this NCWHPA.

The neighborhood surrounding the Project Site is serviced by municipal water, however some of the properties in the area have private well systems. The direct abutters to the project along Old Mill Lane are serviced be municipal water.

There are no sole source aquifers located within the Study Area.

5.7 Vegetation

The Study Area contains a variety of upland vegetative cover types typical of southern New England. These types include oak/pine forest, shrubland, agricultural fields, and managed lawn. This section of the ER focuses on upland communities. Wetland communities are discussed in Section 5.8 of this ER.

5.7.1 Oak Forest Associations

Forested cover types within the Study Area are typically dominated by oaks and maples with or without a white pine (*Pinus strobus*) component. Although these woodlands may appear similar throughout the Study Area, differences in the structure and composition of species in these forests may occur. Soil drainage class, position on the landscape, and slope aspect are important factors in determining the plant associations present at a particular site.

The forests on well-drained and moderately well drained acidic soils are typically composed of red oak, black oak and/or scarlet oak (*Quercus rubra*, *Q. velutina*, and/or *Q. coccinea*). White oak (*Q. alba*) is a common component, but rarely dominant. Other common associates, especially in moister sites, include black birch

(*Betula lenta*), black gum (*Nyssa sylvatica*), red maple (*Acer rubrum*) and sassafras (*Sassafras albidum*). Occasionally pitch pine (*Pinus rigida*) or white pine may be encountered. Unless thinned, crown closure is generally greater than 75 percent.

The shrub layer on drier sites is typically dominated by member of the blueberry family including huckleberry (*Gaylussacia baccata*), mountain laurel (*Kalmia latifolia*), and lowbush blueberries (*Vaccinium pallidum and V. angustifolium*). Wild sarsaparilla (*Aralia nudicaulis*), greenbrier (*Smilax rotundifolia*), and hay-scented fern (*Dennstaedia punctilobula*) are common components of the herbaceous stratum (Enser and Lundgren, 2006).

5.7.2 Old Field Community

Upland vegetation within the Study Area is typically representative of an old field successional community. Old field communities are established through the process of natural succession from cleared land to mature forest. Within the Study Area, these areas may support a mix of herbs, forbs and shrubs depending on the frequency of vegetation management. Common herbs include Canada and rough-stemmed goldenrod (*Solidago canadensis* and *S. rugosa*), Alleghany blackberry (*Rubus allegheniensis*), mullein (*Verbascum thapsus*), grass-leaved goldenrod (*Euthamia graminifolia*), tansy (*Tanacetum vulgare*), and wormwood (*Artemisia vulgaris*).

5.7.3 Upland Shrub Communities

Most of the Project Site has been managed to remove trees as they interfere with safe operation of Transfer Station and seasonal portable LNG equipment. Shrubs dominate portions of the Study Area where succession of old field are located and where management has resulted in tree sapling removal. Thickets of multiflora rose (*Rosa multiflora*) and Allegheny blackberry are common. Other shrubs commonly found within the managed portions of the Study Area include autumn olive (*Elaeagnus umbellata*), black cherry (*Prunus serotina*), bebb willow (*Salix bebbiana*), and gray birch (*Betula populifolia*).

Abandoned farmland also progresses through a shrub dominated stage before succeeding to forest cover. These areas are located within the larger Study Area and are dominated by a mix of trembling and big tooth aspen (*Populus tremula* and *P. grandidentata*), black cherry, gray birch, and bayberry (*Myrica pensylvanica*) often intermixed with multiflora rose and autumn olive. The understory in these densely stocked stands is weakly developed and often includes poison ivy (*Toxicodendron radicans*), sensitive fern (*Onoclea sensibilis*), and wild geranium (*Geranium maculatum*).

5.7.4 Managed Lawn/Grass

The Northern portion of the Project Site is managed as lawn. Typically, these areas consist of a continuous grass cover which may include Kentucky bluegrass (*Poa pratensis*), red fescue (*Festuca rubra*), clover (*Trifolium* sp.), and plantains (*Plantago* sp.). Some ornamental shrubs are also located within these areas along Old Mill Lane.

5.7.5 Agricultural Areas

Agricultural land managed in corn and row crops are encountered in the Study Area. Large fields are managed in corn, hay, or potatoes with smaller fields in other various vegetables crops. These fields are tilled between plantings and are often provided a cover crop such as winter rye to reduce soil loss during intercrop periods.

Pasture and hayfields are also present in the Study Area and are typically managed in European cool season grasses such as timothy (*Phleum pratense*), orchard grass (*Dactylis glomerata*), sweet vernal grass (*Anthoxanthum ordoratum*), clover (*Trifolium* spp.) and several other forb species.

5.8 Wetlands

Wetlands have been identified as resources providing ecological functions and societal values. Wetlands are generally characterized by three criteria: (i) the presence of underlying hydric soils, (ii) a prevalence (>50 percent) of hydrophytic vegetation, and (iii) the presence of wetland hydrology, or hydrologic indicators. These conditions typically support the presence of soils that are saturated near the surface, or flooded, for a sufficient duration during the growing season to support hydrologic modification and hydric vegetation.

5.8.1 Study Area Wetlands

State-regulated freshwater wetlands have been identified and delineated adjacent to the Project Site. Figure 5-3 depicts wetlands field delineated adjacent to the Project Site and those wetland resource areas mapped in the wetlands shapefile [1] from the RIGIS website within the Study Area. Field methodology for the delineation of State-regulated resource areas was based upon vegetative composition, presence of hydric soils, and evidence of wetland hydrology. Based on the provisions of the Rhode Island Fresh Water Wetlands Act and the RIDEM Freshwater Wetland Rules, State-regulated freshwater wetlands include swamps, marshes, bogs, forested or shrub wetlands, emergent plant communities and other areas dominated by wetland vegetation with evidence of wetland hydrology. Swamps are defined as wetlands dominated by woody species and are three acres in size, or greater. Marshes are wetlands dominated by emergent species and are one acre or greater in size. Emergent wetlands communities are areas similar to marshes in vegetation composition; however, they are less than one acre in size. Forested and shrub wetlands are also dominated by woody species, similar to swamps, but do not meet the three-acre size criteria.

The upland area within 50 feet of the edge of a swamp, marsh, or bog is regulated as the 50-foot Perimeter Wetland under the RIDEM Freshwater Wetland Rules. Emergent wetland communities, forested wetlands, and shrub wetlands do not merit a 50-foot Perimeter Wetland.

In addition to these vegetated wetland communities, Rhode Island also regulates activities in and around streams and open water bodies, which include Rivers, Ponds, and Areas Subject to Storm Flowage (ASSF). A River is any perennial stream indicated as a blue line on a USGS 7.5-minute series topographic map. If the River or stream is less than 10 feet wide, the area within 100 feet of each bank is regulated as 100-foot Riverbank Wetland. If the River or stream is greater than 10 feet wide, the area within 200 feet of each bank is regulated as 200-foot Riverbank Wetland.

A Pond is an area of open standing or slow moving water present for six or more months during the year and at least one-quarter acre in size. Ponds have a 50-foot Perimeter Wetland associated with the boundary. An ASSF is defined as any body of flowing water as identified by a scoured channel or change in vegetative composition or density that conveys storm runoff into or out of a wetland.

Wetland vegetation community types and their dominant plant species located within the existing Project ROW are described below.

5.8.2 Ponds

Five small unnamed ponds are present within the Study Area.

5.8.3 Swamp

Swamps are currently defined in Rhode Island as areas occupying at least three acres of land area, that are dominated by woody vegetation, and where groundwater is at or near the ground surface for a significant part of the growing season. A 50-foot Perimeter Wetland is currently applied to Swamps, regardless of whether they support forest or shrub cover types. Shrub Swamps lack a dominant tree overstory and generally occur in areas having stronger water regimes and where wetlands might occur within managed ROWs, or where overstory trees are periodically removed.

Dominant canopy species present within swamps in the Study Area include red maple (Acer rubrum), tupelo (Nyssa sylvatica), weeping willow (*Salix* babylonica), American elm (*Ulmus americana*), and swamp white oak (*Quercus bicolor*). Dominant shrub species present in forested Swamps associated with a shrub understory often include sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinium corymbosum*), winterberry (*Ilex verticillata*), swamp azalea (*Rhododendron viscosum*), and spicebush (*Lindera benzoin*). Other common understory species, and those often present in shrub swamps in association with the species previously listed, include northern arrowwood (*Viburnum dentatum*), pussy willow (*Salix discolor*), speckled alder (*Alnus* rugosa), and silky dogwood (*Cornus amomum*). Drier portions of Shrub Swamps are often densely overgrown with fox grape (*Vitus labrusca*) and greenbrier (*Smilax rotundifolia*). Common species in the herbaceous layer of Swamps often include skunk cabbage (*Symplocarpus foetidus*), cinnamon fern (*Osmundastrum cinnamomeum*), interrupted fern (*O. claytonia*), royal fern (O. regalis), sensitive fern (*Onocleas sensibilis*), false hellebore (*Veratrum viride*), poison ivy (*Toxicodendron radicans*), and dewberry (*Rubus hispidus*). Cotton Swamp, a large, forested Swamp, north of Old Mill Lane, is an off-site example of a Swamp present within the Study Area near the Project Site.

Portions of a forested Swamp located on, and to the west, south, and east of, the Project Site are part of a larger wetland complex associated with Little Creek. The Swamp supported seasonally- to temporarily-flooded water regimes and contained shrub components interspersed with marsh cover types, transitioning to the Marsh described below. Representative species of vegetation observed in forested portions of the wetland and its marsh interspersion included red maple, tupelo, weeping willow, pussy willow, winterberry, northern arrowwood, silky dogwood (*Swida amomum*), American elderberry (*Sambucus nigra*), northern bayberry (*Morella caroliniensis*), multiflora rose (*Rosa multiflora*), Tartarian honeysuckle (*Lonicera tatarica*), grape (*Vitis spp*.), Asian bittersweet (*Celastrus orbiculata*), sensitive fern (*Onoclea sensibilis*), spotted jewelweed (*Impatiens capensis*), eastern Joe-pye-weed (*Eutrochium dubium*), New York aster (*Symphyotrichum novi-belgii*), bushy aster (*S. dumosum*), square-stemmed monkeyflower (*Mimulus ringens*), curly dock (*Rumex crispus*), beggar ticks (*Bidens frondosa*), , marsh marigold (*Caltha palustris*), halberd-leaved smartweed (*Persicaria arifolia*), grass-leaved goldenrod (*Euthamia graminifolia*), slender-leaved goldenrod (*E. tenuifolia*), purple loosestrife (*Lythrum salicaria*), water purslane (*Ludwigia palustris*), reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), Canada rush (*J. canadensis*), sedges (*Carex spp*.), and nutsedge (*Cyperus spp*.).

5.8.4 Marsh

Marshes are wetlands dominated by nonwoody vegetation and must be at least one acre in size to meet the current Rhode Island definition of “Marsh.” Standing water in marshes is generally present at or above the surface of the substrate, and vegetation is typically dominated by emergent, herbaceous species.

A Marsh associated with Little Creek is located southwesterly and southerly of the Project Site. Representative species of vegetation observed in portions of the Marsh adjacent to the Site included tupelo, pussy willow, speckled alder (*Alnus incana*), winterberry, swamp rose (*Rosa palustris*), broad-leaved cattail (*Typha latifolia*), grass-leaved goldenrod, rough-stemmed goldenrod (*Solidago rugosa*), smooth goldenrod (*Solidago gigantea*), willowherb (*Epilobium sp*.), beggar ticks, halberd-leaved smartweed, stinging nettle (*Urtica dioica*), water horehound (*Lycopus americanus*), spotted jewelweed, eastern Joe-pye-weed, blue flag (*Iris versicolor*), New York aster, common reed (*Phragmites australis*), reed canary grass, woolgrass (*Scirpus cyperinus*), tussock sedge (*Carex stricta*), and sensitive fern.

5.8.5 Rivers

Rivers, as defined by RIDEM, are not present within the Study Area.

5.8.6 Stream/Intermittent Stream

Streams, or intermittent streams, are watercourses, that do not meet the legal definition of rivers but which flow long enough each year to develop and maintain a defined channel. Streams identified within the Study Area comprise Little Creek and an unnamed watercourse, both tributary to the Sakonnet River. Little Creek drains through the Property west and south of the Project Site and extends for a distance of 3.1 miles from its headwater wetlands, located northwesterly of Newport National Golf Club, to its confluence with the Sakonnet River. The unnamed watercourse is located northerly of the Project Site and drains easterly and northeasterly for a distance of 0.75 miles. Further descriptions of these watercourses are provided in Section 5.5 of this Project Siting Report.

5.8.7 Emergent Plant Community

Emergent plant communities within the Study Area are wetlands that are too small to meet the legal definition of Marsh. They typically are associated with areas that are mowed with sufficient frequency to control the establishment of woody vegetation. Within the Study Area, they are typically present in pastures and hay fields. Common species associated with these areas include rough-stemmed goldenrod, New England aster (*Symphotrichum novae-angliae*), Joe-Pye weed (*Eupatoriadelphus maculatus*), sensitive fern, soft rush, and reed canary grass.

5.8.8 Shrub/Forested Wetland

Freshwater wetlands that are not Swamps or Marshes due to their size as being less than three acres, and that are dominated by woody vegetation, are legally classified as "Freshwater Wetlands," but more specifically may be classified as either Shrub Wetlands or Forested Wetlands. In the Study Area, Shrub Wetlands often include highbush blueberry, sweet pepperbush, northern arrowwood, multiflora rose, winterberry, silky dogwood, and elderberry. Associated herbaceous species may include skunk cabbage, cinnamon fern, and spotted jewelweed.

Forested wetlands are located within the Study Area where most shrub wetlands are also present. Vegetation often includes red maple, American elm, and black gum with an understory generally consisting of vegetation mentioned previously for Shrub Wetlands.

On the Project Site, a small, forested wetland had developed on the compacted, stony fill presumably associated with a former pad created for propane tanks. The small wetland appeared to support a saturated water regime. Representative plant species observed in the wetland included cottonwood (*Populus deltoides*), pussy willow (*Salix discolor*), multiflora rose, Tartarian honeysuckle, poison ivy

(*Toxicodendron radicans*), grass-leaved goldenrod, New York aster, other asters (*Asteraceae*), and tussock sedge.

5.8.9 Floodplain

A floodplain is the land area adjacent to a river or stream or other body of flowing water that is, on the average, likely to be covered with flood waters resulting from a one percent annual chance flooding event. These regulated floodplain areas include areas mapped by FEMA, as well as un-mapped floodplain.[29] The Study Area does not have any FEMA mapped 100 year floodplain, however, it is expected that the riparian areas of Little Creek and the unnamed tributary to the Sakonnet River will have a minor floodplain function.

5.8.10 Area Subject to Storm Flowage

ASSFs are channel areas and water courses which carry storm, surface, groundwater discharge or drainage waters out of, into, and/or connect freshwater wetlands or coastal wetlands. ASSFs are recognized by evidence of scouring and/or a marked change in vegetative density and/or composition. An ASSF is located within the Study Area between the Project Site and the Portsmouth Take Station to the east.

5.9 Wildlife

The wildlife species present within the Study Area vary according to the habitat cover types present. The suitability of habitat for a particular species is influenced by its setting (inland, terrestrial, wetland/deep water, etc.) along with current and historic land management practices which affect the floristic composition and structure of the vegetation cover types present. The proposed Project Study Area includes work in or proximate to 11 different habitats that are identified in New England Wildlife: Habitat, Natural History and Distribution (DeGraaf and Yamasaki, 2001). Habitat resources are variable across the Study Area.

The Project Site is removed from coastal habitats. The Study Area encompasses woodlands, farmlands residential housing developments palustrine wetlands, streams, and small open water areas. The Property is subject to routine vegetation management to maintain a grass/forbes dominated cover type so the pipe connections do not become overgrown.

An overall list of wildlife species expected to occur within the Study Area has been compiled based upon the major habitats present. This list relies on the species geographical distribution data provided by DeGraaf and Yamasaki (2001) and August et al. (2001) with information on certain amphibians and reptiles supplemented by Amphibians and Reptiles of Connecticut and Adjacent Regions by

29 University of Rhode Island Environmental Data Center. 1993. Wetlands Shapfile as interpreted from 1988 aerial photography; Cowardin 16 classification scheme.

Klemens (1993). It should be noted that individual species may not occur in any given part of the Study Area even if apparently suitable habitat is present.

Table 5-7 provides a list of vertebrates (amphibian, reptiles, birds, and mammals) with the potential to occupy specific habitats in the Project Study Area. Species observed in the field are annotated in this table. Observations include direct visual identification of the animal, its tracks or scat, or in the case of birds and frogs by vocalizations.

Table 5-7 Expected and Observed Wildlife Species within the Study Area

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
AMPHIBIANS AND REPTILES																
Spotted Salamander	X					X	X	X	X	X				X		
Northern Redback Salamander	X	X													X	
Four-toed Salamander	X					X	X	X	X			X			X	
Northern Two-Lined Salamander	X											X		X		
American Toad	X	X	X	X		X	X	X	X	X	X			X		
Northern Spring Peeper	X					H	H	H	X	X				X		
Gray Treefrog	X					X	X	X	X	X	X			X		
American Bullfrog								X	X	O	X	X	X	X		
Green Frog						X	X	X	X	X	X	X	X	x		
Northern Leopard Frog [rare]						X	X	X	X					X		
Pickerel Frog	X			X		X	X	X		X	X	X		X		
Common Snapping Turtle	X	X	X	X				X	X	X	X	X	X	X		
Spotted Turtle	X	X	X	X		X	X	X	X	X		X		X		
Wood Turtle	X	X	X	X		X	X	X	X	X	X	X	X	X		
Eastern Box Turtle	X	X		X		X	X	X	X			X		X		
Painted Turtle						X	X	X	X	X	X	X	X	X		
Common Musk Turtle		X		X			X	X	X	X	X	X	X	X		
Northern Water Snake							X	X	X	X	X	X	X	X		X

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Northern Red-bellied Snake	X	X				X			X						X	X
Northern Brown Snake	X	X		X		X	X	X	X	X	X	X		X	X	X
Common Garter Snake	X	X		X		X	X	X	X	X		X		X	X	X
Ribbon Snake	X					X	X	X	X	X		X		X		
Eastern Hognose Snake	X	X	X	X		X		X						X	X	X
Northern Ringneck Snake	X					X									X	X
Northern Black Racer	X	X		X		X		X	X					X	X	X
Eastern Smooth Green Snake	X	X		X		X	X	X	X						X	
Eastern Milk Snake	X	X		X		X									X	X
BIRDS																
Double-crested Cormorant[B]										X	X		X	X		
Least Bittern[B (Rare)]								X	X							
Great Blue Heron[B]	X					X	X	X	X	X	X	X	X	X		
Great Egret[B]										X	X					
Snowy Egret[B]																
Little Blue Heron[B]																
Green Heron[B]	X					X	X	X	X	X	X	X	X	X		
Black-crowned Night Heron[B]								X	X	X						
Yellow-crowned Night Heron[B]								X	X	X						

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Glossy Ibis^{B}				X			X	X	X							
Turkey Vulture^{B}	X	O	X	X												
Canada Goose^{B}			O	X	O		X	X		O		X	O	X		
Mute Swan^{B}			X	X			X	X	X	O	X	X	X			
Wood Duck^{B}	X							X	X	X	X	X	X	X		
American Widgeon^{M}								X		X						
American Black Duck^{B}							X	X	X	X	X	X	X	X		
Mallard^{B}			X	X			X	X	X	O	X	X	X	X		
Canvasback^{M}																
Ring-necked Duck^{M}								X	X	X	X	X	X	X		
Bufflehead^{M}											X	X	X			
Common Goldeneye^{M}										X	X	X	X			
Common Merganser^{M}	X									X	X	X	X	X		
Osprey^{B}										X	X	X	X			X
Bald Eagle^{M}											X					
Turkey Vulture			O				O									
Northern Harrier^{M}																
Sharp-shinned Hawk^{M}	X												X			
Cooper's Hawk^{B}	O	O		X												
Northern Goshawk^{B} (Rare)	X	X		X												
Red-shouldered Hawk^{B}	X								X					X		
Broad-winged Hawk^{B}	X			X												

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Red-tailed Hawk[B]	O	O	O	X			O		X							
Rough-legged Hawk[M]		X	X	X			X	X	X							
American Kestrel[B]	X	X	X	X			X	X								
Peregrine Falcon[M]		X	X	X	X		X	X	X				X	X		
Ring-necked Pheasant[B]		X	X	X												
Ruffed Grouse[B]	X	X														
Wild Turkey[B]	X	X	X	X												
Northern Bobwhite[B] (Rare)	X	X	X	X												
Virginia Rail[B]								X								
Sora[B] (Rare)							X	X	X	X						
Killdeer[B]			X	O			X							X		
Willet[B]																
Spotted Sandpiper[B]				X						X	X	X	X	X		
Wilson's (Common) Snipe[M]		X					X	X	X					X		
American Woodcock[B]	X	O	X				X		X					X		
Ring-billed Gull[B]																
Herring Gull[B]										O	X		X			
Common Tern[B]											X					
Rock Pigeon[B]			X	X												X
Mourning Dove[B]	O	O	O	O												O
Black-billed Cuckoo[B]	X	X							x							
Yellow-billed Cuckoo[B]	X	X														

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Barn Owl[B]			X	X												X
Eastern Screech-Owl[B]	X	X		X			X	X						X		
Great Horned Owl[B]	X	X	X	X			X	X	x					X		
Long-eared Owl[B]	X	X	X	X			X	X								
Short-eared Owl[M]			X	X			X	X								
Northern Saw-whet Owl[B]	X			X										X		
Common Nighthawk [B]	X	X	X	X			X							X		X
Whip-poor-will[B]	X	X		X												
Chimney Swift[B]		X	X	X			X									X
Ruby-throated Hummingbird[B]	X	X				X			X							
Belted Kingfisher[B]										X	X	X	X	X		
Red-bellied Woodpecker[B]	O,H					O,H								X		
Downy Woodpecker[B]	O,H	O				O,H								X		
Hairy Woodpecker[B]	X					X								X		
Yellow-bellied sapsucker	S					X										
Northern Flicker[B]	O	X	X	O		X									X	X
Eastern Wood-Pewee[B]	O	X				X			O					X		
Acadian Flycatcher[B] (Rare)	X					X								X		
Willow Flycatcher[B]	X	X				X			X							
Least Flycatcher[B]	X					X								X		

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Eastern Phoebe[B]	O	X		X		X			O							X
Great Crested Flycatcher[B]	X	X				X										
Eastern Kingbird[B]	X	X		X		X	X	X	O				O	O		
Northern Shrike[M]	X	X		X		X	X	X								
White-eyed Vireo[B]	X	X				X			X					X		
Warbling Vireo[B]	O	O				X								X		
Red-eyed Vireo[B]	O					X								X		
Blue Jay[B]	O	O		O		O HX								O		
American Crow[B]	O	O	O	O		X	O									
Fish Crow[B]			H,O					H,O		X	X	X	X	X		
Horned Lark[B (Rare)]			X	X												
Purple Martin[B]		X	X	X			X	X		X	X	X	X	X		X
Tree Swallow[B]	X	X	X	X		X	X	X	X	X	X	X	X	X		
Northern Rough-winged Swallow[B]	X	X	X	X			X	X		X		X	O	O		
Bank Swallow[B]	X	X	X	X			X	X		X		X	X	X		
Barn Swallow[B]	X			X			O	O		O		X	X	X		X
Black-capped Chickadee[B]	O	O				X			O					X		
Tufted Titmouse[B]	O	O				X			O					X		
Red-breasted Nuthatch[B]	X					X										
White-breasted Nuthatch[B]	O	O				X								X		
Brown Creeper[B]	X					X								X		
Carolina Wren[B]	O,H	O				O,H		O	O					X		
House Wren[B]	O	O		O		X			O					X		X

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Winter Wren[M]	X					X	O,H		X					X		
Marsh Wren[B]								X	X							
Golden-crowned Kinglet[B]	X					X										
Ruby-crowned Kinglet[M]	X					X										
Blue-gray Gnatcatcher[B]	O	O				X			O							
Eastern Bluebird[B]	O	O		X		X			O							X
Veery[B]	X					X								X		
Hermit Thrush[B]	X	X				X			X							
Wood Thrush[B]	X					X								X		
American Robin[B]	O	O	X	X		X			O					X		
Gray Catbird[B]	O	O		O		X			O					X		
Northern Mockingbird[B]	O	O		O,H					O							
Brown Thrasher[B]	X	X												X		
European Starling[B]	O	O	X	O										X		X
Cedar Waxwing[B]	X	O				X			O		O			X		
Blue-winged Warbler[B]	X	X		X					X							
Nashville Warbler[B]	X								X							
Yellow Warbler[B]	X	O				X			O					X		
Chestnut-sided Warbler[B]		X				X			X							
Yellow-rumped Warbler[M]		O,H				X	O,H		X					X		
Black-throated Green Warbler[B]	X					X										

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Pine Warbler[B]	X															
Prairie Warbler[B]	X	O														
Black–and-white Warbler[B]	X					X								X		
American Redstart[B]	X					X			O					X		
Worm-eating Warbler[B]	X															
Ovenbird[B]	X					X										
Northern Waterthrush[B]	X					X			X							
Common Yellowthroat[B]	X	X				X	X	X	X	X				X		
Canada Warbler[B]	X					X			X					X		
Scarlet Tanager[B]	O															
Eastern Towhee[B]	O	O				X										
American Tree Sparrow[M]	X	X		X			X	X	X					X		
Chipping Sparrow[B]	X		X	X												
Field Sparrow[B]		O	X	O												
Vesper Sparrow[M]		X	X	X	X		X									
Savannah Sparrow[B]			X	X			X	X								
Grasshopper Sparrow[B] (Rare)			X	X												
Fox Sparrow[M]	X	X														
Song Sparrow[B]	O	O	X	OH		X	OH	X	O					X		
Swamp Sparrow[B]						X	X	X	X	X				X		
White-throated Sparrow[B]	X	O		X		O,H			O,H					X		

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
Dark-eyed Junco [B] (Rare)	X			X												
Lapland Longspur[M]			X	X												
Snow Bunting[M]			X	X			X	X								
Northern Cardinal[B]	O	O				X			O					X		
Rose-breasted Grosbeak[B]	O	O				O			O					O		
Indigo Bunting[B]	X	X		X										X		
Bobolink[B]				X			X	X								
Red-winged Blackbird[B]			O	O		X	X	O,H	O	O				X		
Eastern Meadowlark[B]			X	X						X						
Rusty Blackbird[M]						X								X		
Common Grackle[B]	X		X	X		X	X	O	O		X			X		O
Brown-headed Cowbird[B]	O	O	X	O		O		X						X		
Orchard Oriole[B] (Rare)	X					X								X		
Baltimore Oriole[B]	O	O				O			O					X		
Pine Grosbeak[M]	X		X													
Purple Finch[B]	X	X				X										
House Finch[B]	X															O
Common Redpoll[M]	X	X	X	X				X	X							
Pine Siskin[M]	X	X		X		X			X					X		
American Goldfinch[B]	O	O	X	O		X	O	O	O					X		
Evening Grosbeak[M]	X					X								X		
House Sparrow[P]		O	O	O												O

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	Shrub/Old Field	Ag. Field	Grass Field	Lawn Fairway	Swamp	Wet Meadow	Shallow Marsh	Shrub Swamp	Pond	Lake	Stream	River	Riparian	Debris Pile	Structure
MAMMALS																
Virginia Opossum	X	X	X	X		X	X	X	X					X	X	
Masked Shrew	X	X		X		X	X	X	X					X		
Northern Short-tailed Shrew	X	X		X		X	X	X	X					X		
Eastern Mole	X	X	X	X	X	X										
Star-nosed Mole						X	X	X	X	X	X	X	X	X		
Little Brown Myotis	X	X	X	X		X	X	X	X	X	X	X	X	X		X
Northern Myotis	X	X	X	X		X	X	X	X	X	X	X	X	X		X
Silver-haired Bat[M]	X	X	X	X		X	X	X	X	X	X	X	X	X		
Eastern Pipistrelle[B]	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Big Brown Bat[B]	X	X	X	X		X	X	X	X	X	X	X	X	X		X
Red Bat[B]	X	X	X	X		X	X	X	X	X	X	X	X	X		
Hoary Bat[M]	X	X	X	X		X	X	X	X	X	X	X	X	X		
Eastern Cottontail[B]	X	O		S		S	X	X	O					X	X	
Snowshoe Hare[B]	X	X						X	X					X		
Eastern Chipmunk[B]	O	O		X												
Woodchuck[B]	X	X	X	X											X	
Gray Squirrel[B]	X					X								X		
Red Squirrel[B]	X					X										
Southern Flying Squirrel[B]	X					X										
White-footed Mouse[B]	X	X		X		X	X		X					X	X	X
Southern Red-backed Vole[B]	X	O	X	X		X			X					X		
Meadow Vole[B]	X	X		X		X	X	X	X					X		
Woodland Vole[B]	X	X		X		X										

	Terrestrial Habitats									Aquatic Habitats					Other	
	Forest	**Shrub/Old Field**	**Ag. Field**	**Grass Field**	**Lawn Fairway**	**Swamp**	**Wet Meadow**	**Shallow Marsh**	**Shrub Swamp**	**Pond**	**Lake**	**Stream**	**River**	**Riparian**	**Debris Pile**	**Structure**
Muskrat[B]							O	X	X	X	X	X	X	X		
Southern Bog Lemming[B] (Rare)	X	X		X		X	X	X						X		
Norway Rat[B]		X	X	X		X									X	X
House Mouse[B]		X	X	X		X									X	X
Meadow Jumping Mouse[B]	X	X		X		X	X	X	X					X		
Coyote[B]	X	X		X		X	X	X	X					X	X	
Red Fox[B]	X	X	X	X		X	X	X	X					X	X	
Gray Fox[B]	X	X				X	X	X	X					X	X	
Raccoon[B]	X	X	X	X		X	X	X	X					O	X	
Ermine[B] (Rare)	X	X	X	X		X		X	X					X	X	X
Long-tailed Weasel[B]	X	X	X	X		X	X	X	X					X		X
Mink[B]	X					X	X	X	X	X	X	X	X	X		
Striped Skunk[B]	X	X	X	X		X	X	X	O					X	X	X
River Otter[B]	X							X	X	X	X	X	X	X		
Bobcat	X	X				X	X		X							
White-tailed Deer[B]	O	O	X	X	X	S	S	S	O					X		

Legend for Observations: O = observed by VHB H = heard by VHB S = sign observed by VHB X = expected to occur

Legend for Named Species: B = breeding in Rhode Island M = migrant/visitor

Observation data at the Project Site collected by VHB Ecologists in Summer and Fall of 2021.

5.10 Fisheries

The RIDEM Division of Fish and Wildlife conducted fish surveys in Rhode Island's streams and ponds between 1993 and 2002. Waterbodies of appreciable size are absent within the Study Area, so no waterbodies within the Study Area were surveyed. For reference, however, , Lawton Valley Reservoir, located 5 miles northwest of the Project Site, was surveyed . The primary means of sampling Lawton Valley Reservoir was electrofishing via boat, and a typical warm-water fish assemblage was identified in the sampling. Representative species comprised largemouth bass (*Micropetrus salmoides*), chain pickerel (*Esox niger*), pumpkinseed (*Lepomis gibbosus*), bluegill (*Lepomis macrochirus*), brown bullhead (*Ameiurus nebulosus*), white perch (*Morone americana*), yellow perch (*Perca flavescens*), American eel (*Anguilla rostrata*), and golden shiner (*Notemigonus crysoleucas*). Similar assemblages are expected to occur in the two small, unnamed ponds within the Study Area.

A segment of Little Creek, a first order headwater tributary stream, flows southward through the Study Area in Portsmouth and continues southerly and southeasterly through Middletown to the Sakonnet River. A second tributary to the Sakonnet River, an unnamed intermittent stream, flows northeasterly through the Study Area in Portsmouth. These streams appear to have suffered severe scour, as evidenced by their deep channel incision and undermined banks. Summer flows in the waterbodies are expected to be too small to support permanent fish populations.

Little Creek and open water within the Study Area support fish populations that require warm water habitat such as pumpkinseed, goldfish (non-native), inland silversides, golden shiner, white perch, yellow perch, and banded killifish. American eel may occur in Little Creek and the unnamed tributary to the Sakonnet River. This species is catadromous meaning they will migrate from freshwater to oceans in order to spawn.

5.11 Rare and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPAC) system was queried on February 19, 2021 to determine if any federally listed or proposed, threatened and endangered species protected under the Federal Endangered Species Act are located within the Study Area. This query resulted in the identification of the northern long-eared bat (*Myotis septentrionalis*), a federally threatened species. The Study Area may host suitable habitat for the northern long-eared bat which roosts singly or in colonies within live and dead trees (USFWS, 2015a).

In April 2015 the USFWS listed the northern long-eared bat as a threatened species under the federal Endangered Species Act (ESA) due to severe population declines that have been caused by white nose syndrome.

As aforementioned, trees are a critical aspect of the northern long-eared bats' summer roosting habitat and are used by the bats to rear their pups (USFWS, 2015a). According to the final 4(d) Rule for the Northern Long-eared Bat (USFWS, 2016), the work within the existing Company owned property at the Take Station and Project Site is considered to be exempt from ESA prohibitions. As an extra precaution, the U.S. Fish and Wildlife Service IPAC tool was used on February 19, 2021 to determine vulnerability of the northern long-eared bat to the proposed Project. A verification letter was received that determined the Project "may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o)." Jennifer Brooks with the Rhode Island Division of Fish and Wildlife was consulted on March 24, 2022 to determine if any northern long-eared bat hibernacula were at or within 0.25 miles of the Project Site. An e-mail received from Ms. Brooks on March 24, 2022 confirmed that there are no hibernacula at or within 0.25 miles of the Project Site.

The Rhode Island Natural Heritage Program (RINHP) database hosted on the RIDEM Environmental Resource Mapping website identifies one Natural Heritage Program polygon that covers nearly all of the Study Area. VHB requested information concerning this polygon from Paul Jordan, the Supervising Geographic Information System Specialist from RIDEM, and received his most recent reply on March 28 2022. Mr. Jordan indicated that three species are represented within the polygon: northern leopard frog (*Lithobates pipiens*), sora (*Porzana carolina*), and the marsh wren (*Cistothorus palustris*). The northern leopard frog is a small (roughly 7cm long) frog with bright green or copper skin and round or oval brown spots haloed in iridescent greenish-yellow. They are found only in Newport and Bristol counties and are considered a species of state concern in Rhode Island (Enser, 2007) (RIDEM, 2021). The marsh wren is a small round bodied wren with rusty brown coloring and black and white streaks down its back (Kroodsma and Verner 2020). This migratory species breeds in the eastern and northern regions of the United States within freshwater or saltwater marshes (Kroodsma and Verner 2020). Sora are small waterbirds that nest exclusively in freshwater and saltwater marshes. These birds are seasonal migrants to Rhode Island, arriving to breed in the early spring and departing in the late summer or early fall. Marsh Wren and Sora are also considered species of state concern in Rhode Island (Enser, 2007) (RIDEM, 2021). Northern leopard frog, sora, and marsh wren may occupy habitat within the Study Area.

Animals listed as State Endangered are protected under the provisions of the Rhode Island State Endangered Species Act, Title 20 of the General Laws of the State of Rhode Island. This law states, in part (20-37-3): "No person shall buy, sell, offer for sale, store, transport, import, export, or otherwise traffic in any animal or plant or any part of any animal or plant whether living or dead, processed, manufactured, preserved or raw (if) such animal or plant has been declared to be an endangered species by either the United States secretaries of the Interior or Commerce or the Director of the Rhode Island Department of Environmental Management" (Enser, 2007).

The northern leopard frog, sora, and marsh wren have also been assigned a global rank that reflects their rarity and vulnerability to extinction throughout the world. Global ranks were originally developed by the Nature Conservancy and are used by all Natural Heritage Programs as a standardized method of determining the status of each species throughout its range. The northern leopard frog, sora, and marsh wren animals share the same global ranking of G5, indicating that they are demonstrably secure throughout their range, though they may be rare in some parts.

5.12 Air Quality

The National Ambient Air Quality Standards (NAAQS) were established by the Federal Clean Air Act Amendments (CAAA) and are designed to protect both public health and welfare (EPA NAAQS). Air quality analyses for projects that may impact motor vehicular traffic are required to evaluate their impact on ozone (O3) and carbon monoxide (CO).

Rhode Island developed a State Implementation Plan (SIP) in 1982 to comply with the 1977 CAAA requirements for O3 and CO. While three pollutants, CO, Nitrogen Oxide (NOx), and Volatile Organic Compounds (VOCs), play a role in O3 formation, the Environmental Protection Agency (EPA) determined in 1980 that SIPs must require the reduction of VOCs as the most effective strategy to achieve the O3 standard. The 1990 CAAA requires states to update their SIPs to evaluate the impact of reducing all three pollutants.

The State of Rhode Island is required by the CAAA to attain the NAAQS “as expeditiously as practicable.” In March 2003, the RIDEM submitted the “Rhode Island Attainment Plan for the One-Hour National Ambient Air Quality Standard” to the EPA as a revision to the SIP (RIDEM Office of Air Resources, 2003). The plan demonstrated that Rhode Island would attain the one-hour ozone standard by 2007 (RIDEM Office of Air Resources, 2003). In the Attainment Plan, Rhode Island agreed to submit to EPA by December 31, 2004 a mid-course review demonstrating that Rhode Island remained on track to attain the one-hour standard by 2007 (RIDEM Office of Air Resources, 2003). In December 2004 the RIDEM submitted the “Mid-Course Review of the Rhode Island Attainment Plan for the One-Hour Ozone National Ambient Air Quality Standard” to the EPA which demonstrated that Rhode Island was still on track to attain the one-hour standard by 2007 (RIDEM Office of Air, 2004).

The EPA revoked the one-hour standard as of June 15, 2005 and subsequent planning and emissions reduction efforts were required to focus on achieving the more stringent 8-hour standard (EPA, Green Book).

In April 2008 the RIDEM submitted the “Revision of the Rhode Island State Implementation Plan to Address Interstate Transport of Pollutants Affecting Attainment and Maintenance of the 8-Hour Ozone and Fine Particulate Matter (PM2.5) National Ambient Air Quality Standards” to the EPA as a revision to the State’s SIP (RIDEM, 2008). The plan demonstrated that emissions from Rhode Island sources do not contribute significantly to downwind ozone attainment and will not prevent downwind areas from attaining the NAAQS by their required attainment dates (RIDEM, 2008).

Based on the findings in this ER, it not anticipated that the proposed Project would have a significant effect on the air quality of downwind areas.

6

Description of Affected Social Environment

The EFSB Rules require a detailed description of all social and environmental characteristics of the proposed Site including the land uses within and proximate to the Project Site, visual resources in the vicinity of the Project, and the public roadway systems in the area. The proposed Project is located at an existing gas utility facility in the Town of Portsmouth, Rhode Island, and TNEC's rights to the Project Site are by fee ownership. The Portsmouth and Middletown Town Line traverses the Property, so the Study Area also includes the Town of Middletown which is also included as a Host Community.

As per Sections 45-22.2-2 et seq. of the Rhode Island General Laws, Rhode Island Comprehensive Planning and Land Use Act, all cities and towns are required to adopt and periodically update Local Comprehensive Land Use Plans. In compliance with these requirements, Middletown adopted its Comprehensive Plan Update in November 2015. Portsmouth remains in the process of updating its Plan for 2020; therefore, the Portsmouth Plan (2002) was reviewed for this section and supplemented with current information where available.

6.1 Population Trends

The total population within the Host Communities has decreased steadily between 1990 and 2010 as shown in Table 6-1. The Town of Middletown is projected to continue this downward trend through 2040 while the population of Portsmouth is expected to stay relatively stable through 2040 (Table 6-2). The Host Communities can be characterized as being a mix of suburban and rural areas with a 2010 population that accounted for 3.19 percent of the total State population (Table 6-1).

Table 6-1 Population Trends, 1990-2010

				Change			
				2000-2010		2010-2019	
Area	**2000**	**2010**	**2019**	**Absolute**	**Percent**	**Absolute**	**Percent**
State of Rhode Island	1,048,319	1,052,567	1,059,36	4,248	0.40%	6,794	0.60%
Portsmouth	17,149	17,389	17,226	240	1.40%	163	(1.00 %)
Middletown	17,334	16,150	15,888	(1,184)	(6.83%)	(262)	(1.6%)
Host Community Total	**34,483**	**33,539**	**33,114**	**(944)**	**(2.74%)**	**(425)**	**(1.27%)**
Percent of State Population	**3.29%**	**3.19%**	**3.13%**				

Notes: ( ) Negative Source: U.S. Census Quick Facts Data (2019) R.I. Department of Labor and Training, Labor Market Information Census Data 2000-2010. U.S. Department of Commerce. 1990 Census of Population: Social and Economic Characteristics of Rhode Island

According to the Rhode Island Statewide Planning population projects, the population of Middletown is projected to decrease by 9.70 percent (1,565 people) between 2010 and 2020 and Portsmouth's population is projected to remain stable with a population increase of 0.06 percent (11 people; Rhode Island Division of Planning, 2013). By 2040 Middletown's population is expected to drop by 24.94 percent from 2010 levels (4,029 people) and Portsmouth's population is expected to modestly increase from 2010 levels by 2.32 percent (403 people; Rhode Island Division of Planning, 2013).

Table 6-2 Population Projections, 2010-2040

					Change			
					2020-2030		2030-2040	
Area	**2010**	**2020**	**2030**	**2040**	**Absolute**	**Percent**	**Absolute**	**Percent**
State of Rhode Island	1,052,567	1,049,177	1,070,677	1,070,104	(3,390)	(0.32%)	(573)	(0.05%)
Portsmouth	17,389	17,378	17,773	17,792	(11)	(0.06%)	19	0.11%
Middletown	16,150	14,585	13,460	12,121	(1,565)	(9.69%)	(1,339)	(9.95%)
Host Community Total	**33,539**	**31,963**	**31,233**	**29,913**	**(730)**	**(2.28%)**	**(1,302)**	**(4.17%)**
Percent of State Population	**3.19%**	**3.05%**	**2.92%**	**2.8%**				

Notes: ( ) Negative Source: Rhode Island Division of Planning, Rhode Island Statewide Planning Program. Rhode Island Population Projections 2010-2040.

6.2 Employment Overview and Labor Force

Recent population growth, urbanization, and a substantial commuter-based population have produced greater demands for and a wider selection of trades and services. According to the Rhode Island Economic Development Corporation (RIEDC), Rhode Island as a whole has enormous growth potential in the health and life science industry due to the emerging biotechnology companies. The financial services sector is extremely important to Rhode Island employing over 32,000 individuals. Many manufacturers that invest in technologies and workforce training to compete in the global market have corporate or divisional headquarters in Rhode Island. Labor force and employment trends are shown in Table 6-3.

Table 6-3 Labor Force and Employment Estimates, 1990-2015

2020	**State**	**Portsmouth**	**Middletown**
Labor Force	542,723	8,626	7,807
Resident Employment	500,701	7,986	7,168
Resident Unemployment	42,022	640	639
Unemployment Rate	7.7%	7.4%	8.2%
2015 (October)			
Labor Force	553,119	8,842	8,020
Resident Employment	527,394	8,485	7,709
Resident Unemployment	25,725	357	317
Unemployment Rate	4.7%	4.0%	3.9%
2010			
Labor Force	566,704	8,991	8,107
Resident Employment	503,216	8,113	7,327
Resident Unemployment	63,488	878	780
Unemployment Rate	11.2%	9.8%	9.6%
2000			
Labor Force	543,561	9,215	8,509
Resident Employment	521,313	8,909	8,198
Resident Unemployment	22,248	306	311
Unemployment Rate	4.1%	3.3%	3.7%
1990			
Labor Force	525,361	8,863	8,335
Resident Employment	492,002	8,390	7,872
Resident Unemployment	33,359	473	463
Unemployment Rate	6.3%	5.3	5.6%
Total Employment Changes 1990-2020	17,362	(237)	(528)

Source: Rhode Island Department of Labor and Training, Portsmouth Labor Force Statistics, Not Seasonally Adjusted, 2020. https://dlt.ri.gov/lmi/datacenter/laus.php
Rhode Island Department of Labor and Training, Labor Force Statistics, Not Seasonally Adjusted, 1976-October 2015 http://www.dlt.ri.gov/lmi/laus/state/seas.htm
Rhode Island Department of Labor and Training, Portsmouth Labor Force Statistics, Not Seasonally Adjusted, 1990-October 2015. http://www.dlt.ri.gov/lmi/laus/town/portsmouth.htm

Historically, the leading employment sectors in the Host Communities have been manufacturing and arts, entertainment, and recreation. Recently, however, there has been a general shift from manufacturing employment to the retail, health care, and social services, and government sectors.

Currently, professional and technical services, manufacturing, retail trade, and health and social services, sectors are the largest source of employment in the Host Communities (see Table 6-4).

Table 6-4 Employment by Industry, 2010, 2015, and 2020

	Portsmouth			Middletown			% of Total
	2010	2015	2020	2010	2015	2020	2020
Agricultural, Forestry, Fishing and Hunting	42	32	44	72	21	69	0.76
Mining	*	*	0	*	*	*	0
Utilities	*	*	*	*	*	*	0
Construction	269	279	355	340	370	475	5.60
Manufacturing	1,851	1,490	1,398	302	410	411	12.20
Wholesale Trade	106	92	114	151	147	89	1.37
Retail Trade	494	460	532	1,540	1,427	1,237	11.93
Transportation and Warehousing	75	96	38	104	154	44	0.55
Information	67	68	41	284	243	101	0.96
Finance, Insurance, Real Estate, and Rental and Leasing	177	186	238	706	659	648	5.97
Professional and Technical Services	162	148	147	2,062	2,093	2,466	17.62
Management of Companies & Enterprises	*	2	4	279	317	499	3.39
Administrative Support & Waste Mgmt.	190	150	209	183	131	251	3.10
Government	629	700	729	776	615	591	8.90
Educational Services		286	246	270	*	213	3.09
Other Services (except public administration)	183	176	150	472	458	254	2.72
Arts, Entertainment, & Recreation	779	47	136	210	105	84	1.48
Accommodation & Food Services	434	389	276	1,552	1,365	990	8.54
Armed Forces	291	N/A	N/A	N/A	N/A	N/A	0
Unclassified Establishments	*	*	*		0	0	0
Health Care & Social Services	504	852	772	1,564	1,371	980	11.81
Total	**5,574**	**5,467**	**5,429**	**10,924**	**10,148**	**9,402**	**100.00%**

Notes: * Some data not available to avoid revealing data of a specific employer

Source: Rhode Island Department of Labor and Training: Quarterly Census of Employment and Wages, City and Town Report – First Quarter 2015. http://www.dlt.ri.gov/lmi/es202/town.htm

Rhode Island Department of Labor and Training: Census of Employment & Wages, City and Town Summary – 2010 Annual http://www.dlt.ri.gov/lmi/pdf/town10ann.pdf

Rhode Island Department of Labor and Training: Quarterly Census of Employment and Wages, City and Town Report – Second Quarter 2020. https://dlt.ri.gov/documents/pdf/lmi/town202q.pdf

The Project is not expected to have any measurable impacts on jobs in Newport County. Nor is it expected to impact the state's Gross Domestic Product (GDP).

6.3 Land Use

This section describes existing and future land use within the Study Area and addresses those features which might be affected by the Project.

6.3.1 Study Area Land Use

As depicted in Figure 6-1, several dominant land uses are present within the Study Area. While the Site Property primarily falls within agriculture and brushland areas, other land uses within the Study Area include residential, forest, open space, recreation, commercial, institutional, utility, and wetland areas (Table 6-5). The Project Site and adjacent Portsmouth take station are the only utility land use in the Study Area.

Residential use in the Town of Portsmouth is dominated by single family homes; these tend to be built tightly together in the northern section of Portsmouth, but the southern portions where the Study Area is located are less dense (Town of Portsmouth, 2002). Most Portsmouth residential development in the Study Area is low density with lots sized at greater than 2 acres (Town of Portsmouth, 2002). The Study Area also covers portions of eastern Middletown which is less developed than other parts of the town. Within the Middletown portion of the Study Area, the residential development is mainly low density residential.

Other developed land uses within the Study Area in Portsmouth include one small area of commercial use (engineering building). The northwest border of the Study Area in Middletown includes the Fraternal Order of Police Lodge 21 located off Mitchells Lane, Middletown.

Table 6-5 Study Area Land Use

2021 Land Use Type (2021)	Percentage of Study Area
Brushland (shrub and brush areas, reforestation)	11.5
Commercial (sale of products and services)	0.6
Agricultural (Orchards, Tillable Lane, Fields)	34
Mixed Forest	13.9
Developed Recreation (all recreation)	6.4
Residential (low to high density)	30.9
Open Space	1.6
Institutions (schools, hospitals, churches, etc.)	0.4
Water	0.4
Wetland	0.2

Educational and Institutional facilities located within the Study Area include the Silveira Kindergarten & Nursery School located at 143 Peckham Lane in Middletown. The School is located on the far western side of the Study Area, approximately 2,000 feet west of the Project Site.

Residential use in the Town of Middletown is largely composed of single-family dwellings (57 percent of the housing stock; Town of Middletown, 2014). The central portion of Middletown, where the Study Area is located, is primarily zoned for medium to medium-high density residential, with lots ranging from one-eighth of an acre to one full acre (Town of Middletown, 2014). Other land uses within the Study Area in Middletown include conservation area and agricultural land (Town of Middletown, 2014).

The Study Area also encompasses several large areas of open space and agricultural land, detailed below in Section 6.3.3.

6.3.2 Open Space and Recreation

Much of the southeast and south-central portions of Portsmouth are classified as agricultural land or open space, and as of 2012 approximately 6,484 acres of land on Portsmouth's mainland (excluding the islands) are classified as open space, which amounts to 36 percent of the town's land (Aquidneck Island Planning Commission, 2012). Middletown has approximately 4,732 acres of land that is classified as open space or recreational land, which accounts for approximately 49 percent of Middletown's total area. There are several areas of open space and recreational area present within the Study Area and most of it has been conserved through the cooperation of Aquidneck Land Trust and landowners. Aquidneck Land Trust is a local non-profit dedicated to conserving land on Aquidneck Island.

In Portsmouth there are two areas off Indian Avenue and Swan Drive, totaling less than 5 acres, that is classified as Vacant Land (RIGIS Land Use, 2011). A third location in Portsmouth, totaling approximately 2.2 acres, off Old Mill Land is classified as Idle Agriculture (abandoned fields and orchards) (RIGIS Land Use, 2011).

In the northwestern portion of the Study Area, is the Newport National Golf Club, of which approximately 48.5 acres is located in Middletown (Middletown, 2021), and approximately 133 acres is located in Portsmouth (Portsmouth, 2021).

6.3.3 Local Conservation Land

A corridor of high value/high vulnerability habitat runs west and south of the Project Site (RIDEM Environmental Resource Mapper, 2021). This resource is classified as containing one or more of the following: flood plain forest, hemlock/hardwood forest, northern hardwood forest, pitch pine/barrens, mud flat, inland sand barren, salt marsh, wet meadow, coastal streams, tidal marsh, rocky shore, sand flat, sea level fen, brackish sub-aquatic beds, brackish marsh, and Atlantic white cedar swamp.

6.3.3.1 Rocky Brook Orchard (Middletown)

Rocky Brook Orchard is located at 997 Wapping Road, largely in Middletown is located approximately 1,200 feet northwest of the Project Site.

6.3.3.2 Harrison Farm (Middletown)

The 2.8-acre Harrison Farm is located on the west side of Little Creek Road. Aquidneck Land Trust helped to establish a conservation easement for the farmland which buffers Little Creek (Aquidneck Land Trust, 2021). This property is located approximately .44 miles southwest of the Project Site.

6.3.3.3 Idle Hour Farm (Middletown)

The 16.5-acre Idle Hour Farm is an equestrian facility located on the north side of Fayal Lane. The Aquidneck Land Trust helped to establish a conservation easement for the farmland which includes agricultural fields and wetlands associated with Little Creek. This property is located approximately .38 miles west of the Project Site.

6.3.3.4 Mitchell Land (Middletown)

Mitchell Land consists of 19 acres of forest, shrubland and wetland associated with Paradise Brook (a designated drinking water supply) (RIDEM 2020). The land was put into a conservation easement by the Aquidneck Island Land Trust and is held for habitat protection. The property is located approximately .49 miles west of the Project Site.

6.3.3.5 Newport National Golf Club (Portsmouth/Middletown)

The Newport National Golf Club includes 308.73 acres of maintained lawn, grassland, shrubland, wetland and forest on which the Aquidneck Island Land Trust has a conservation easement for habitat protection. Roughly five miles of the Sakonnet Greenway Trail, a public walking path, runs along the course perimeter. This property is located approximately .3 miles northwest of the Project Site.

6.3.3.6 Reposa Square (Portsmouth)

Reposa Square includes 1.3 acres of Conservation land designated for cluster open space within a residential subdivision. This property is located approximately .4 miles east of the Project Site.

6.3.3.7 Swan Farm (Portsmouth)

The 138.31 acres of agricultural fields and woodland in Swan Farm were put into a Conservation Easement in 2008 by the Aquidneck Island Land Trust. Swan Farm is the largest un-fragmented forest on Aquidneck Island and contains a number of habitat types including vernal pools, meadows, forest, and wetland (Aquidneck Land Trust, 2021). This property is located approximately 550 feet north of the Project Site.

6.3.4 Compatibility with Future Land Use Planning

In order to assess future land use, the Town of Portsmouth undertook an analysis of current and future zoning. Typically, towns and cities manage future growth through zoning regulations which provide a degree of control over land use development in a community. The Study Area is zoned residential and open space.

The most current future land use plan developed by the Town of Portsmouth is from 2002 (Town of Portsmouth, 2002). According to this plan, the Study Area will contain low density residential, open space, and low-medium density residential future land uses. These predicted uses are consistent with the present use of the Study Area.

The current land use of the Study Area in Middletown consists of conservation/open space, non-urban developed, and Prime Farmland (Town of Middletown, 2014). The Middletown land use plan for 2025 predicts that these uses will change only slightly within the Study Area: some of the existing medium-density residential areas will change over to conservation and farmland.

A review of Portsmouth's Comprehensive Plan (2002) contains limited discussion of electrical utilities. There is a provision in the implementation of the economic development strategy (Economic Development Element, Section VI Subsection F) to plan for utilities and services development to improve the reliability of electrical power and meet the requirements of targeted businesses (Town of Portsmouth, 2002).

Middletown's Comprehensive Plan (2014) calls for the development of an economic policy that will "invest in critical infrastructure necessary to develop a robust and diversified economy." The policy calls for an action item concerning the development of a comprehensive assessment of projected infrastructure needs, including electrical, versus the available resources and capabilities.

Based on the Towns' similar interests in improving the reliability of natural gas infrastructure/reliability to businesses and residents, the implementation of the Project will help the towns to achieve this shared objective.

6.4 Visual Resources

The visual quality of a place is determined by the perceived aesthetic value of the available views, as influenced by topography, vegetation, and land use. The Study Area for this Project was defined as the area within a .5-mile radius of the Project Site on Old Mill Lane. Aquidneck Island is a relatively narrow landform that rises, from the Sakonnet River on the east and Narragansett Bay on the west, to an elevated central ridge that runs in a north-south direction. The topography in the Study Area is variable and includes level benches or terraces, saddles and valleys, and sloped ridges and hillsides. Elevations within the Study Area range from 75 to 150 feet above mean sea level.

Land use in the Study Area is dominated by low density residential development and open/forested/agriculture space. The residential homes along Old Mill Lane in

Portsmouth are individual single-family homes that range in age. The houses on the south side of Old Mill Lane, aside from a few farm properties, were built during the 1970s. The north side of Old Mill Lane near the Project Site but on the opposite side of the street is dotted with homes from the 1990s that are situated on larger lots. There are no major highways within the Study Area. The main roads that traverse the Study Area are Wapping Road, Old Mill Lane, and Peckham Avenue.

Large areas of open agricultural land are scattered throughout the Study Area (primarily within the northern and western portions). These agricultural areas offer more open, long-distance views of the surrounding landscape. An approximately 70-acre forest occurs within the northeast part of the Study Area, and two smaller forest areas occur on either side of Peckham Avenue. Vegetation in forested areas is dominated by deciduous trees and includes both mature and successional stands. Where forest vegetation occurs in larger, more intact blocks, it provides a strong sense of enclosure and screening along roadways and around residential areas. Small ponds, wetlands, and streams are scattered throughout the Study Area, but are typically obscured from direct view by woody vegetation.

A number of resources/sites that could be considered visually sensitive occur within the Study Area. These resources include historic sites, areas designated as scenic by RIDEM, and conservation/open space areas. The only state-designated scenic area within the Study Area is Mitchell's Lane, classified as excellent agricultural area with views across fields (RI Landscape Inventory, 1990). Specific viewer groups within the Study Area include local residents, through-travelers, and visitors.

6.5 Noise

Noise is defined as unwanted or excessive sound. Sound becomes unwanted when it interferes with normal activities such as sleep, work, or recreation. Sound (noise) is described in terms of loudness, frequency, and duration. Loudness is the sound pressure level measured on a logarithmic scale in units of decibels (dB). For community noise impact assessment, sound level frequency characteristics are based upon human hearing, using an A weighted [dB(A)] frequency filter. The A weighted filter is used because it approximates the way humans hear sound. Sound levels are made up of individual components called octave band frequencies. The dB(A) sound levels are weighted to focus on the octave band frequencies that humans hear best. A pure tone condition can occur when a sound can be distinctly heard as a single pitch or set of single pitches. Generally, a 1 or 2 dB(A) increase is not perceptible to the average person. A 3 dB(A) increase is a doubling of acoustic energy but is just barely perceptible to the human ear. A 10 dB(A) increase is a tenfold increase in acoustic energy but is perceived as a doubling in loudness to the average person.

Table 6-6 presents a list of common outdoor and indoor sound levels. The duration characteristics of sound account for the time varying nature of sound sources.

Table 6-6 Typical Sound Pressure Levels Associated with Common Noise Sources

Sound Pressure Level (dBA)	Subjective Evaluation	Environment: Outdoor	Environment: Indoor
140	Deafening	Jet aircraft at 75 ft	
130	Threshold of Pain	Jet aircraft takeoff at 300 ft	
120	Threshold of Feeling	Elevated train	Rock band concert
110	Extremely Loud	Jet flyover at 1000 ft	Inside propeller plane
100	Very Loud	Motorcycle at 25 ft, auto horn at 10 ft, crowd noise at football game	
90	Very Loud	Propeller plane flyover at 1000 ft, noisy urban street	Full symphony or band, food blender, noisy factory
80	Moderately Loud	Diesel truck (40 mph) at 50 ft	Inside auto at high speed, garbage disposal, dishwasher
70	Loud	B-757 cabin during flight	Close conversation, vacuum cleaner, electric typewriter
60	Moderate	Air-conditioner condenser at 15 ft, near highway traffic	General office
50	Quiet		Private office
40	Quiet	Farm field with light breeze, birdcalls, soft stereo music in residence	Bedroom, average residence (without television and stereo)
30	Very Quiet	Quiet residential neighborhood	
20	Very Quiet	Rustling leaves	Quiet theater, whisper
10	Just Audible		Human breathing
0	Threshold of hearing		

Source: Adapted from Architectural Acoustics, M. David Egan, 1988 and Architectural Graphic Standards, Ramsey and Sleeper, 1994.

6.5.1 Facility

A noise study was carried out to evaluate sound levels in the residential area that abuts the Property. The noise study included a noise monitoring program to establish existing sound levels, calculations of Project-related sound levels at the nearby sensitive receptor locations, and determination of compliance with the applicable noise impact criteria.

6.5.2 Noise Impact Criteria

The State of Rhode Island does not have regulations that set community noise exposure criteria or abatement measurements. Instead, noise abatement criteria are instituted by the municipalities of Rhode Island. The Project is located in Portsmouth, but the Property is also on the town line with Middletown. Both towns have developed noise impact criteria as follows:

Table 6-7 Town of Portsmouth Sound Limit, dB(A)

Receiving Land Use	Time	Sound Limit
Residential and Open Space	7 AM to 10 PM	65
	10 PM to 7 AM	55
Commercial and Waterfront	At all times	75
Light and Heavy Industrial	At all times	75
Public Water	At all times	75

Source: Table I: Maximum Permissible Sound Levels by Receiving Land Use, Code of the Town of Portsmouth, Rhode Island, Chapter 257-7.

Table 6-8 Town of Middletown Sound Limit, dB(A)

Receiving Land Use	Time	Sound Limit
Residential and Open Space	7 AM to 10 PM	65
	10 PM to 7 AM	55
Business (General, Office, Limited)	At all times	75
Light Industrial	At all times	75
Industrial Park	At all times	75
Municipal	At all times	75
Public Water	At all times	65
Noise Sensitive Areas	7 AM to 10 PM	65
	10 PM to 7 AM	55

Source: Maximum Permissible Sound Levels By Receiving Land Use, Town of Middletown, Rhode Island Code of Ordinances, Section 130.80 (A).

6.6 Cultural Resources

TNEC's cultural resource consultant, The Public Archaeology Laboratory, Inc. (PAL), reviewed the proposed temporary LNG facility location on Old Mill Lane in Portsmouth, RI and determined that the Project area is in the midst of existing natural gas pipeline infrastructure and has been subject to previous ground disturbances from the construction and maintenance of the original facilities from the 1960s through the present. PAL reviewed information on file at the Rhode Island Historical Preservation & Heritage Commission (RIHPHC) and PAL, as well as historic aerial mapping to document the previous land-use history, and recommends that the Project area has no/low archaeological sensitivity and no further cultural resource investigations are recommended. PAL previously reviewed a portion of the Project area as part of an assessment conducted for Algonquin Gas Transmission, LLC as part of their 2011 Integrity Management Program along the G-2 System natural gas pipeline. Algonquin used workspace that conforms with the proposed Project area. On February 14, 2011, PAL submitted correspondence to the RIHPHC), recommending that the then-proposed project would not affect historic properties, and the RIHPHC responded on February 25, 2011, concurring with PAL's assessment.

6.7 Transportation/Traffic

The transportation needs of the Study Area are served by a network of local town roads (Table 6-9). The Project Site will be located on and accessed by local road Old Mill Lane.

Table 6-9 Road Names

Road Name	Town
Old Mill Lane	Portsmouth and Middletown
Wapping Road	Portsmouth and Middletown
Indian Avenue	Portsmouth and Middletown
Peckham Avenue	Middletown
Vaucluse Avenue	Middletown

7

Impact Analysis

This chapter presents an analysis of the potential impacts of the Project on existing environmental and social conditions within the Study Area. As with any project, potential adverse impacts can be associated with the mobilization/demobilization or operation of the proposed seasonal portable LNG operation. These impacts have been minimized by the careful location of the facility and by the adoption of numerous mitigation practices.

This Project will be constructed in a manner that minimizes and mitigates for the potential for adverse impacts to the natural and social environment. A monitoring program will be conducted by TNEC during the construction phase to ensure that the Project is constructed in compliance with all relevant licenses and permits and applicable federal, state, and local laws and regulations. Additionally, the Project will be required to adhere to a RIDEM approved Long Term Operation and Maintenance Plan for the on-site stormwater management structures. Design and mobilization mitigation measures will ensure that related environmental impacts are minimized.

In case of an emergency in which the Project would need to mobilize outside of its expected winter seasonal use, the Project mobilization/demobilization and operation would occur similar to the winter operation. Following completion of the emergency use, the mobile equipment would be removed and the Site would not be staffed which would minimize effects to any transient wildlife species utilizing the abutting wetland.

7.1 Geology

The Project will have a negligible impact on the bedrock and surficial geologic resources within the Property. The Study Area consists of Pleistocene-aged lodgement till along with recent Holocene organic deposits associated with certain wetland pockets. The construction of the seasonal portable LNG operation will require limited excavation to remove unsuitable soil material before structural fill is imported to support the permeable pavers and asphalt pavement structure. These activities will alter the exposed portions of surficial deposits in about one acre of the Site. Much of this area was previously occupied by prior gas operations such that surficial geologic deposits have already been disturbed. These proposed activities will not negatively affect the underlying bedrock or makeup of the surficial geology at the Site.

7.2 Soils

Activities which expose unprotected soils have the potential to accelerate erosion and sedimentation rates above that of natural background rates. Equipment operations can cause soil compaction and decreased infiltration rates resulting in higher rates of runoff. The Project includes limited excavation and grading activities to prepare the Site for construction of the access and egress routes through the facility and the temporary hardened surface for the mobile tanks and other temporary equipment. When needed, standard National Grid construction techniques and BMPs such as the installation of compost filter sock, sediment traps, temporary and permanent vegetative stabilization, and dust control measures, will be employed to minimize any short- or long-term effects due to construction activity. Short-term structural and non-structural BMPs will be inspected by the Environmental Monitor frequently during the construction phase of the Project and supplemented, repaired or replaced when needed. The Company will assign an Environmental Monitor to the construction phase of the Project who will inspect environmental conditions within the construction-site, reviews the contractors' compliance with environmental permit conditions during the construction phase of a project, and makes recommendations for corrective actions to protect sensitive environmental resources proximate to a construction-site.

TNEC will develop and implement a Soil Erosion and Sediment Control (SESC) Plan which will detail BMPs and inspection protocols. The SESC Plan will be reviewed by both the RIDEM and the Town of Portsmouth Building Official. Long-term stormwater BMPs will ensure runoff discharged from the operational phase of the project leaves at rates comparable to the present condition and that these flows are discharged in a manner that will not accelerate natural erosion and sedimentation rates.

7.3 Surface Water

Any impact of the Project upon surface watercourses will be minor and temporary. Earthwork activities temporarily increase risks for erosion and sedimentation that may temporarily degrade existing water quality; however, appropriate BMPs will be implemented and maintained to effectively control sediment. In addition, the crossing of rivers and streams will not be required for this Project.

The nearest surface water feature to the Project Site is Little Creek, west of the Site which flows south. Construction of the facility will not directly impact this watercourse.

In the unlikely event of a sediment control failure during construction, potential impacts to surface waters include increased sedimentation (locally and downstream) and subsequent alterations of benthic substrates, decreases in primary production and dissolved oxygen concentrations, releases of toxic substances and/or nutrients from sediments, and destruction of benthic invertebrates. The limited nature and extent of the earthwork operations required to prepare the Site for paving and deployment of erosion and sedimentation controls when needed will effectively minimize the potential for this situation to occur. The implementation and maintenance of erosion and sedimentation control BMPs will limit the levels of Project related sedimentation and will minimize indirect adverse impacts to surface waters, if any.

7.3.1 Water Quality

The primary potential impact to water quality from any major construction project is the increase in turbidity of surface waters in the vicinity of construction resulting from soil erosion and sedimentation from the disturbed Site. A second potential impact is the spillage of petroleum or other chemical products near waterways.

LNG is created by cooling methane gas to -258° F and is approximately half the density of water. If spilled LNG will begin pooling on the ground, will float on water and cause any water it touches to freeze, and begin to vaporize back into a gas due to the warmer surrounding air/ground. At -170° F, the gas becomes less dense than air and dissipates into the atmosphere. These inherent properties of LNG prevent it from impacting either surface or ground water. Transportation, mobilization, and operation of the proposed portable LNG operation will require earthworks, including the filling of wetlands and stripping of unsuitable topsoils. BMPs will be utilized and maintained to minimize impacts to wetlands and surface waters. Therefore, it is anticipated that any adverse impacts to water resources resulting from the proposed portable LNG operation will be negligible.

An SESC Plan will be designed and implemented which will confine sediment within the immediate Project Site and minimize impacts to downstream areas.

7.3.2 Hydrology

Some permanent changes to surface drainage can be expected during and after the construction of the approximately 1.5-acre facility. Runoff from newly created impervious and hardened surfaces will be treated consistent with the Rhode Island Stormwater Rules which seek to control peak discharge rates, water quality, and overall runoff volumes. This is proposed to be accomplished utilizing Low Impact Development (LID) technology including bioretention and biofiltration areas. The intent of these facilities is to maintain surface water quality and minimize impacts to the Site's hydrology.

7.3.3 Floodplain

Based on available FEMA Flood Insurance Rate Mapping for the Towns of Portsmouth[30] and Middletown,[31] the Project occurs within Zone X (Areas determined to be outside the 0.2% annual chance floodplain). There are no SFHA located within the Project Site. It is recognized that by definitions provided in the RIDEM Freshwater Wetland Rules, all rivers, streams, and intermittent streams have one percent annual chance flood though they may not be mapped by FEMA.

The Project will not result in a discharge of fill to mapped SFHAs.

7.4 Groundwater

As discussed below, any impact of the Project upon groundwater resources will be minor.

7.4.1 Proposed Project

Potential impacts to groundwater resources within the Project Site as a result of construction of the Portable Natural Gas Site will be negligible. Vehicles used for the placement of LNG Equipment will be properly maintained and operated to reduce the chances of spill occurrences of petroleum products. Refueling of the backup generator will be conducted on the pavement in an upland area. Spill containment and prevention devices (i.e., absorbent pads, clean up rags, five-gallon containers, absorbent material, etc.) are required to be located on-site at all times. The Company performs regular inspections and maintenance of its LNG equipment. The normal operation and maintenance of the proposed seasonal portable LNG operation will pose no threat to groundwater resources.

The portable emergency generator is refueled with diesel and diesel exhaust fluid (DEF) as needed. A spill kit is maintained on-site in case of a spill. The portable generator is checked once per operating shift (3 times daily) for leaks.

An unloading job brief is performed with all involved personnel before refueling begins and the transfer of LNG from truck to storage vessel is continuously monitored. LNG storage equipment is staged within a containment berm and as a secondary measure, localized temporary containment is used around the manifold during the LNG storage vessel refueling process to minimize any spill of liquified natural gas onto the property. Prior notice is given to the Portsmouth and Middletown Fire Departments of transport schedules.

30 Town of Portsmouth, Map No. 445405 0082 J, Panel 82 of 226, revised September 4, 2013 Town of Portsmouth, Map No. 445405 0092 H, Panel 92 of 226, effective April 5, 2010.

31 Town of Middletown, Map No. 445401 0092 H, Panel 92 of 226, effective April 5, 2010.

7.5 Wetlands

The Project will result in the permanent loss of approximately 16,000 square feet (SF) of state-regulated Swamp. This loss will be compensated through a combination of preservation, wetland restoration of previously filled wetlands and/or enhancement of previously degraded wetland or buffer zone subject to RIDEM and USACE approval.

7.6 Wildlife

During construction and annual (de)mobilization and operation, displacement of wildlife on and surrounding the Project Site may occur due to human activity-levels associated with the facility. Wildlife currently utilizing the Study Area may be affected by the Project. Larger, more mobile species, such as eastern white-tailed deer or red fox, will continue to be restricted from the Project Site due to the perimeter fencing. Some bird species may be temporarily displaced.

Smaller and less mobile animals such as small mammals, reptiles, and amphibians may be affected during construction. Once the facility is constructed the Project will have very limited effects on wildlife during the mobilization and operation as these operations will take place on hardened surfaces that are non-habitat. Indirect effects will be localized to the immediate equipment area. However, this is anticipated to be a temporary impact as it is anticipated that existing wildlife habituate to seasonal site operations.

Impacts to sensitive habitats of rare, threatened, or endangered species will be avoided through careful project planning which avoids operations during the active seasons of these species, and coordination with RIDEM. Impacts to rare, threatened, or endangered species will be considered as part of the RIDEM Freshwater Wetlands permitting required for the Project.

7.7 Social and Economic Impacts

7.7.1 Social Impacts

The Project will enable TNEC to continue to provide reliable natural gas services to homes, business, and industry throughout Aquidneck Island. The proposed Project does not require, nor will it lead to residential or business displacement. Temporary (de)mobilization and operation impacts, primarily related to traffic and equipment operation, are expected to be minor and the Project will not adversely impact the overall social and economic condition of the Study Area. As described in Section 4.0, the LNG facility will be located entirely within the TNEC-owned property at Old Mill Lane that has historically served the natural gas needs of Aquidneck Island. Therefore, the Project will not require the acquisition of property or disrupt orderly planned development, thus avoiding adverse impacts.

In order to minimize social impacts, TNEC has engaged in outreach as described in Section 3.5. TNEC's Community & Customer Management representative will continue to serve as a contact for abutters to the Project during the construction and operation phases.

7.7.2 Population

The Project will maintain the existing natural gas service reliability to the population of Aquidneck Island. It also will maintain the system's ability to reliably serve future residential, commercial, and industrial developments.

7.7.3 Employment

The construction of the Project will have limited beneficial effects on the area economy by creating new jobs during the construction period. Project expenditures may also have a small spin-off impact as funds are recirculated and spent within the local economy.

7.7.4 Economic

By meeting the current and projected demands for natural gas in the area, the Project will support the state's effort to stimulate additional growth and economic activity in the region.

7.8 Land Use and Recreation

The following discussion addresses the compatibility of the proposed seasonal portable LNG operation with various land uses in the Study Area.

7.8.1 Land Use

Land use impacts can be separated into short-term and long-term impacts. Short-term land use impacts may occur during the mobilization phase of the proposed Project. Impacts associated with the mobilization phase of the Project will be temporary and the parcel will be vacant in the remaining months. TNEC will provide notification of the intended plan and schedule to affected abutters so that the effect of any temporary disruptions may be minimized.

The Project is proposed entirely within an existing parcel which is already occupied by gas line connections in coordination with the adjacent Take Station property. From 1963 until 1991 the Site was used to house propane which was injected into the pipeline to bolster supply shortfalls. For the Winter of 2001-2002, a portable LNG vaporization facility was operated at the Site. The Site was used for staging of pipeline maintenance operations until 2018 when TNEC once again began to use the Site as a portable LNG vaporization facility. Considering the longstanding use of the Site for gas operations, the continuation of existing seasonal LNG operations within the existing TNEC-owned parcel will be consistent with the established land use, therefore it will not present long-term land use impacts.

7.8.2 Residential

Residential areas are located in proximity to the Project Site. Temporary impacts to these residences may occur during Project construction and operation in the form of increased traffic. During operation, there may also be visual and noise impacts. Existing vegetation will continue to provide visual screening of the facilities from residences to the sides and rear of the Property.

Because the Project will occupy areas dedicated to use for utilities, the Project will not displace any existing residential uses, nor will it adversely affect any future development proposals.

7.8.3 Agriculture

Although agricultural uses occur within the Study Area, agricultural uses do not occur on the Project Site or abutting properties. Therefore, impacts to agricultural uses will not occur as a result of the proposed Project.

7.8.4 Educational Institutions

The Silveira Kindergarten & Nursery School located at 143 Peckham Lane in Middletown is located approximately 2,000 feet west of the Project Site. No impacts to this facility are expected during construction of the Project or operation of the facility.

7.8.5 Commercial and Industrial

The proposed Project Site is not adjacent to any commercial or industrial areas. Business operations will not be adversely affected by the Project. No displacement of business will result from the Project.

7.8.6 Recreation

The Project will not displace or interfere with any existing recreational uses.

7.8.7 Consistency with Local Planning

The proposed Project was evaluated for consistency with the Comprehensive Plans in Portsmouth and Middletown. These Comprehensive Plan describes each municipality's planning goals and objectives regarding future development and growth. As documented in the Purpose and Need section of this Siting Report, there is a clear need for improving the natural gas distribution reliability to the area.

The Project will be consistent with these Comprehensive Plans because the proposed Project will not alter existing land use patterns. Moreover, the Project will enable each community's planning initiatives by ensuring an adequate supply of gas to support the growth and development envisioned by the Comprehensive Plans of the communities.

7.9 Visual Resources

A desktop review was performed to analyze the potential visibility and visual impact of the Project. Within the half-mile radius Study Area, landscape similarity zones (LSZ's) were defined based on the USGS National Land Cover Data set and field review. LSZ's are areas of similar landscape/aesthetic character based on patterns of landform, vegetation, water resources, land use, and user activity. This effort resulted in the definition of two final LSZs, which included:

- Rural Residential/Agricultural
- Forest

Typical viewer groups and visually sensitive resources within the Study Area were identified. Viewer groups include local residents, through-travelers, and visitors. Visually sensitive resources include historic sites, state-designated scenic areas, state conservation areas, and designated open space.

The combined effect of vegetation (forest areas, Site landscaping, and yard vegetation/landscaping) throughout the Study Area screen (or partially screen) views of the Project. This screening together with the installation of an eight-foot composite fence means that the Project is expected to have negligible impacts on visual resources.

7.10 Noise

7.10.1 Existing Sound Levels

The existing sound levels were measured using a Type 1 sound analyzer (Larson Davis model LD831C sound level meter/real-time analyzer). Measurements were conducted during a typical weekday for 22 hours at the northeast corner of the Property. Attached as **Appendix E** is a copy of letter summarizing the sound measurements. The measured sound level data under existing conditions included noise from the abutting take station, local roadway activities, and wildlife activities. The existing sound levels without the facility were found to be typical of a suburban area with limited existing exceedances of the Towns' daytime and nighttime standards for residential noise criteria. The dominant noise source in the immediate environment is vehicular traffic on Old Mill Lane. Vehicular pass-by noise is the dominant cause of ambient noise related exceedances.

7.10.2 Project Sound Levels and Conclusion

The noise analysis calculated the potential sound levels from the Project assuming full operation of the equipment necessary to vaporize. Modeling results indicate that the highest project related sound levels at the property line of abutting residences is 78 dBA for the existing equipment configuration. On January 11th-12th of 2022, HDR Engineering, Inc. measured the noise from the existing seasonal LNG facility at Old Mill Lane. Noise measurement equipment was placed at the corner of a residence directly abutting the project site, and HDR measured existing noise levels. During these measurements, the equipment cycled on for approximately 15 minutes at 8:33 PM and 3:41 AM. The maximum project-related sound pressure level measured during the two operational periods was 69.7 dBA. Attached as **Appendix F** is a copy of the measurement report. These sound levels exceed the Portsmouth's and Middletown's noise limit of 55 dB(A) for the residential zoned areas during the nighttime period and are therefore not in compliance with their noise ordinances.

7.11 Transportation

The Project-construction-related traffic will be temporary during the single construction period. This will be followed by smaller traffic volumes during annual mobilization, operation, and decommissioning. The addition of this traffic for the limited periods of time is not expected to result in any additional congestion or change in operating conditions along any of the roadways within the Study Area. During construction most work will be completed using excavators brought to the Site on trailers, 10-wheel dump trucks, along with service vehicles and pickup trucks. Dump trucks will be used to move soils within the Site and to truck in structural fill for the new travel and parking surfaces. Stone may be spread using a bulldozer and compaction will likely use one or more vibratory rollers. During paving operation hot mix will be hauled in on dump trucks. Pavers used for pervious parking surfaces will be trucked in on flatbeds that will be off-loaded using traditional forklifts or lulls. Each year during mobilization tanker trucks and other trailer mounted equipment will be hauled to the Site. If the facility remains operational at maximum peak load for a 24-hour period, then approximately 17 LNG tanker trucks would be needed to refill the storage tanks during that time (34 trips).

TNEC's contractor will coordinate closely with Portsmouth to develop acceptable traffic management for mobilization and decommissioning of the facility if needed.

Given the seasonal nature of the proposed portable LNG operation, the Site will not generate any vehicular traffic between May and October other than for periodic site inspection and vegetation maintenance. Further, no long-term impacts to existing traffic patterns or volumes are anticipated following completion of the annual mobilization and de-mobilization.

7.12 Cultural Resources

Based on previous field investigations, including sensitivity assessments and subsurface archaeological investigation, TNEC's cultural resource consultant recommended the Project Site has no/low archeological sensitivity and no further cultural resource investigations were recommended. PAL previously reviewed the Project Site as part of an assessment conducted for AGT within the proposed Project area. On February 14, 2011, PAL submitted correspondence to the RIHPHC, recommending that the then-proposed project would not affect historic properties, and the RIHPHC responded on February 25, 2011, concurring with PAL's assessment. RIHPHC concluded that the then proposed project would not affect historical properties, and the RIHPHC concurred with PAL's assessment. Therefore, since the scope of the temporary portable LNG operation requires little subsurface disturbance, it will have no effect on any significant archeological resources (those listed on, or eligible for listing on the National Register of Historical Places).

7.13 Air Quality

Any impacts from fugitive dust will be negligible. There will be limited soil exposed during the construction of the approximately 1.5-acre facility. Fugitive dust emissions will be controlled by wetting the silty soils that are present in the Project Site. This will be followed by paving and the establishment of permanent vegetation. Once the facility is constructed, there will be no earth moved or disturbed for or during the operation of the facility.

Air quality will not be significantly affected by operation of the Project. Emissions produced by the operation of machinery needed to deliver and remove the equipment (nitrogen oxides, sulfur oxides, carbon monoxide, and particulate matter) are short-term and not generally considered significant. No further regulatory follow up or permitting is required.

As part of the operation, an emergency generator will be installed at the Project Site. Air permitting will be required for this to operate and will result in a de minimis change to air quality.

7.14 Operation Impacts

In part, air quality is a function of area wide emissions of ozone precursors (carbon monoxide, nitrogen oxide, and volatile organic compounds) from the change in daily traffic volumes along lengths of area roadways. The Project will not change traffic and emissions parameters, nor affect the travel characteristics of the vehicles traveling in Portsmouth and Middletown, Rhode Island. Therefore, the mobile source emissions will not be changed due to the proposed Project.

7.15 Safety and Public Health

The proposed facility will be designed, built, and maintained in accordance with the standards and codes as described in Section 3.3, which are designed to protect public health and safety.

The Company has taken measures to prevent the public from entering the Project Site. The proposed seasonal portable LNG operation is locked and enclosed with chain link fence topped with barbed wire to prevent unauthorized entry. Following mobilization of the facility, the perimeter will be clearly marked with warning signs to alert the public to potential hazards if climbed or entered. Further, while the Equipment is present on-site, security is present on-site 24-hours a day. And while the Equipment is operational, Company personnel are also on-site.

Although LNG is defined as hazardous by USDOT, there is minimal risk of general public exposure as described in Section 3.3. The equipment is installed and maintained by trained technical staff and they are checked for integrity during inspections by TNEC personnel.

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8

Mitigation Measures

8.1 Introduction

The seasonal portable LNG operation is proposed at a Site adjacent to the Portsmouth Take Station and on a property that has historically been used and operated as part of Aquidneck Islands gas utility infrastructure since 1963. Mitigation measures will effectively minimize Project impacts on the natural and social environment associated with each phase of the Project. Many of these measures are standard proven procedures that the Company incorporates in all projects. Others are site specific measures designed to meet the needs of this particular Project. These measures are described in the following sections.

8.2 Construction, Mobilization and Operation Phases

The Company has incorporated new design measures to reduce the impacts associated with the mobilization and operation phases of the seasonal portable LNG operation. These design measures will remain in use during both the mobilization and operation phases of the Project and include the continued use of an existing gas utility property, which results in the avoidance and minimization of most residential impacts. Unavoidable wetland impacts will be mitigated through a wetland preservation, enhancement and/or restoration plan, that will be included with the RIDEM Wetland Application and Application to the USACE seeking coverage under the Rhode Island General Permits. A Soil Erosion and Sediment Control (SESC) Plan will be developed for the Site which includes the implementation of BMPs (i.e., compost or wood chip mulch filter sock, vegetation management, stabilized construction exits, etc.) during construction, to minimize impacts associated with the proposed Project. This SESC Plan will be filed with the RIDEM as part of the RIDEM Wetland Application for the Project. The RIDEM approval will be submitted to the Town of Portsmouth. Additional mitigation measures include supervision and inspection of activities within resource areas by an Environmental Monitor and minimization of disturbed areas. The following sections detail the various measures that will be implemented in the mobilization and operation phases of the Project to reduce impacts to the natural and social environment.

Following the demobilization each year, the Company maintains the stormwater features, permeable pavers, and permanent pavement pursuant to the Long Term Operation and Maintenance Plan.

8.3 Mitigation of Natural Resource Impacts

The Company evaluated the potential effects of Project construction has on environmental resources, including wetlands, rare species, water quality, water supply protection, land use, subsurface contamination, and floodplain.

The proposed mitigation plan has been designed to first avoid and minimize impacts to environmental resources to the extent practicable and to mitigate for the unavoidable loss of wetlands that will result from the Project. No significant long-term impacts to wildlife are anticipated to result from the construction and seasonal operation of the facility. Vehicle and equipment traffic will be limited to the existing roadways in the Study Area.

The Project includes earthwork and grading activities to prepare the Site for permanent bituminous and pervious paver pavement. Once paved surfaces are installed and soils are stabilized with vegetation, the Project will not be a source of sediment. During construction, the Company will employ standard construction techniques and BMPs such as perimeter sediment control using compost filter sock, temporary and permanent vegetative stabilization and dust control measures to minimize any short-term effects from Project construction activities. These measures will be inspected by the environmental monitor frequently and supplemented, repaired or replaced when needed. TNEC will develop and implement a SESC Plan which will detail BMPs and inspection protocols.

The proposed seasonal portable LNG operation will be installed within property that has historically housed and been operated as part of Aquidneck Islands gas utility infrastructure. Permanent impacts to wetlands will be limited to approximately 16,000 square feet (0.38 acres) of permanent loss. Unavoidable wetland loss will be mitigated through a combination of wetland preservation; enhancement of previously degraded wetland and/or buffer zone; and/or restoration of previously filled wetlands plan, that will be included with the RIDEM Wetland Application and Application to the USACE seeking coverage under the Rhode Island General Permits. There are no permanent impacts proposed to surface water bodies or waterways.

The Company’s objective is to minimize the potential for erosion and sedimentation impact during annual mobilization and demobilization by performing these operations on permanently paved access drives and a pervious equipment layout surface resistant to erosion.

The Company's objective is to minimize the potential for erosion and sedimentation impact during construction by implementing the erosion and sediment control measures described in this section. In general, the measures are designed to minimize erosion and sedimentation by:

- Minimizing the period during which soils are left exposed and unprotected.
- Installing and maintaining erosion and sediment control measures during construction.
- Establishing vegetation where required as soon as possible following construction.
- Maintaining erosion and sediment controls as necessary until final stabilization is achieved and final inspections completed.

8.3.1 Wetlands

The Project will have direct impacts to wetlands and involve the loss of approximately 16,000 sf of Swamp. The proposed Project does not require a waterway crossing. As noted in Section 8.3 the unavoidable wetland loss will be mitigated through a combination of wetland preservation; enhancement of previously degraded wetland and/or buffer zone; and/or restoration of previously filled wetlands plan, that will be included with the RIDEM Wetland Application and Application to the USACE.

Activities within or in close proximity to wetlands will be carefully managed to minimize direct impacts associated with grading and indirect impacts related to erosion and sedimentation. The Company is committed to ensuring that indirect impacts are avoided and minimized, and as such a SESC Plan will be prepared for the Project that will specify implementation of erosion control measures, including:

- Environmental monitoring of the Project to ensure compliance with the SESC Plan and all other environmental permits.
- Placement of erosion and sedimentation controls such as compost filter socks, at appropriate locations if needed.
- Temporary erosion control barriers will be inspected on a daily basis in areas of active mobilization or equipment operation, on a weekly basis in areas with no construction or equipment operation, and within 24 hours of a storm event that is 0.25 inches or greater.
- Procedures for refueling and lubricating equipment will be established to ensure safety and spill prevention. In all cases, secondary containment, spill containment gear, and absorption materials will be maintained for immediate use in the event of any inadvertent spills or leaks.

8.3.2 Rare Species

Sora are seasonal migrants to Rhode Island who nest exclusively in freshwater and saltwater marshes. Marsh wren do occasionally overwinter in southern New England, but mostly in marshes that maintain at least limited open water. The Project will not affect Marsh with open water. Given that the Project will operate only during the winter months, outside of the active season for each identified rare species (leopard frog, sora, and marsh wren), the Project is not anticipated to result in any impacts on rare species or rare species habitat. The TNEC will coordinate with staff of the RIDEM to incorporate any specific mitigation measures that will minimize potential harm to individuals of these species.

8.3.3 Water Quality and Water Quality Supply Protection

The Company does not anticipate any mobilization or operational impacts related to water quality or water supplies. The following best practices mitigate against any water quality impacts:

- Equipment used for the placement of LNG equipment will be properly maintained and operated to reduce the chances of spill occurrences of petroleum products.
- Refueling of equipment on-site is limited to the emergency generator which will be conducted in upland areas.
- The portable generator is checked once per operating shift (3 times daily) for leaks.
- Refueling equipment will be required to carry spill containment and prevention devices (i.e., absorbent pads, clean up rags, five-gallon containers, absorbent material, etc.) at all times.
- Regular inspections and maintenance of the LNG equipment.

The normal operation and maintenance of the proposed seasonal portable LNG operation will pose no threat to groundwater resources.

8.3.4 Land Use

The Project is not anticipated to have permanent effect on existing land uses since the Project Site is located on an existing TNEC-owned property that has historically housed and been operated as part of Aquidneck Islands gas utility infrastructure; no land uses will be displaced; and limited mature tree clearing is required. The southeastern, southern, and western sides of the Site are not readily visible by the public due to the existing tree and shrub vegetation that acts as natural screening. The Project will not disturb that screening. The central and southwestern portions of the proposed Site include areas covered by tall shrub, saplings and small trees that will be removed. Accordingly, no associated mitigation measures are proposed.

8.3.5 Subsurface Contamination

Subsurface contamination is not known to be present on the Project Site. The Project Site and vehicles will be equipped with spill kits. Secondary containment, spill containment gear, and absorption materials will be maintained for immediate use in the event of any inadvertent spills or leaks. These measures will prevent any new subsurface contamination from the Project. Secondary containment will be installed around the perimeter of the Equipment. Additional, temporary containment will be used during LNG refueling.

8.3.6 Floodplain

The Project Site is not located within FEMA mapped floodplain, and therefore, no mitigation measures are proposed.

8.3.7 Supervision and Monitoring

During the mobilization and operation process, an Environmental Monitor will be retained to perform periodic inspections. The primary responsibility of the monitor will be to oversee mobilization and operation activities including the installation and maintenance of erosion and sedimentation controls, on a routine basis to ensure compliance with federal and state permit requirements, and the Company's policies. The Environmental Monitor will be a trained environmental scientist responsible for supervising mobilization activities relative to environmental issues. The Environmental Monitor will be experienced in the erosion control techniques described in this Siting Report and will have an understanding of wetland resources that require protection.

During periods of prolonged precipitation, the monitor will inspect all locations to confirm that the environmental controls are functioning properly. In addition to retaining the services of an Environmental Monitor, the contractor will be required to designate an individual to be responsible for the daily inspection and upkeep of environmental controls. This person will also be responsible for providing direction to the other members of the crew regarding matters of wetland access and appropriate work methods. Additionally, all Project personnel will be briefed on Project environmental compliance issues and obligations prior to the start of mobilization. Regular project progress meetings will provide the opportunity to reinforce the contractor's awareness of these issues.

8.4 Mitigation of Social Resource Impacts

In addition to avoiding and minimizing impacts to the natural environment within the Property, several design practices have been incorporated to minimize or avoid impacts to the surrounding social environment. To minimize impacts, the proposed LNG equipment will be installed within the portions of the Project Site that previously operated as a gas facility. Vegetation trimming will be limited to those areas around the perimeter of the facility and the existing landscaping plantings will be left as is or enhanced to provide a visual buffer between residences and the Project. The portion of fence abutting Old Mill Lane is affixed with screening in order to obscure facility equipment from neighboring properties. Additionally, a new eight-foot solid composite fence will be installed in order to create a more attractive visual for neighbors to screen the facility.

The Company has engaged and will continue to engage in community outreach to advise abutters and others of Project plans.

Traffic management, cultural resources, open space and conservation land, noise, and visual features were considered with respect to existing conditions and potential Project-related impacts.

8.4.1 Traffic Management

There will only be additional truck traffic during the construction phase and the approximately two-week mobilization and demobilization periods, and very little traffic during operation. The Company does not expect any significant traffic-related impacts. Nonetheless, the Company will continue to coordinate with the Town regarding police details and other appropriate traffic management measures.

8.4.2 Cultural Resources

The Project is within ½ mile of three inventoried historic cemeteries (PO-29, Dennis Lot; MT-51, Thomas Coggeshall Lot; and MT-24, Samuel Allen Burial Ground), three pre-contact archaeological sites (RI-1623; RI-1624; and RI-1625, and an historic architectural property (the Rowland Allen House) that was razed in the 1970s or 1980s. The Project area has been documented by PAL as having been subject to ground disturbances associated with the previous construction and maintenance activities, and has been assessed by PAL as having no/low archaeological sensitivity. Therefore, PAL recommends that the Project will not affect historic properties, including archaeological resources.

8.4.3 Open Space, Conservation, and Recreational Areas

The Project will not displace or interfere with any protected and recreational open space. Therefore, no associated mitigation measures are proposed.

8.4.4 Visual Impact

The southeastern, southern, and western sides of the Site are not readily visible by the public due to the existing tree and shrub vegetation that acts as natural screening. The Project will not disturb that screening. The central and southwestern portions of the proposed Site include areas covered by tall shrub, saplings and small trees that will be removed. The addition of the solid panel fence combined with the new layout is expected to reduce the visual impact by providing additional screening and moving the equipment back from the street.

The existing overhead pole mounted lights and any new lights will utilize dark sky compliant fixtures to reduce stray light casting into neighboring properties. Whenever possible to reduce operating additional overhead pole lighting the Company will use low level auxiliary trailer lighting and limit the use of overhead lights.

Outside of the mobilization and operation period, the Project Site will have negligible visual impacts because the Property will remain in a vegetated condition during the growing season.

8.4.5 Noise Mitigation

With respect to noise, the operation is seasonal and, therefore, the Equipment is present only between the months of November and April. Seasonal, infrequent operations will cause higher noise levels than were considered in the noise modeling analysis for a temporary period. Temporary noise from the Project will occur during mobilization and demobilization each year as equipment is transported to or from the Site. The delivery of equipment will occur during typical work hours between 7:00 a.m. to 5:00 p.m. Monday through Friday. The Company will follow the same work hours for the construction of the facility.

Once the Site is mobilized and in operation, the facility would only need to be fully operational during peak days, which may or may not occur; however, some noise is generated to maintain the Site in standby mode. Some of the portable LNG equipment can generate varying ranges and volumes of noise depending on the operation taking place. Typical noise generated at the Site can stem from blower fans, process burners, pressure venting, and diesel engine-driven electric backup generators. Some of this noise is inherent to the operation of the various equipment and cannot always be entirely eliminated. However, there are opportunities for incremental reductions in noise from the various processes which lead to a reduction in the total noise from the Site.

Due to the location of the facility and its proximity to neighboring residential properties, during previous mobilizations the Company had taken several steps to mitigate equipment-related noise disturbances. These mitigation measures will be utilized and/or improved upon for the Project. The measures include:

- Turning off the vaporizer during evening hours (unless on standby).
- Vapor recovery manifold.

The Company authorized HDR to perform an assessment of noise emissions from the full operation of the existing Equipment layout. The sound levels generated during full operation exceed the Portsmouth, Rhode Island ordinance limit of 55 dB(A) for the residential zoned areas during the nighttime period. For recent seasonal mobilizations, the Company has made certain upgrades to the Equipment, including installing a vapor recovery system to help reduce machine noise emission. In addition, the Company modified the operation of the facility when it is in standby to reduce noise by limiting the equipment cycling during evening and early morning hours. The proposed project goes a step further by adding two major enhancements which are designed to bring the site into compliance with the noise ordinance. The first enhancement was moving the Equipment further south which moves the sound source away from the adjacent neighbors. The second enhancement is the addition of a noise wall [32] that is at least 21 feet tall and will be placed around the vaporizers and high-pressure pump trailer to block noise generated by the equipment.

The noise walls will include an acoustically absorptive lining on the side that faces the equipment, to reduce noise build-up. When installed correctly and in the absence of low frequency noise producers, Sound Transmission Class (STC) 30 and above noise walls are capable of blocking about 15dBA of noise. If the equipment does produce low frequency noise, higher STC noise walls will be necessary. While the high-pressure pump trailer does not emit high levels of low frequency noise, certain portions of the glycol vaporizer does. Thus, higher STC noise walls may be required. Coordination with commercial vendors will be necessary to further identify the appropriate noise wall performance for this application. Preliminary modeling results indicate that a noise wall at least 21 feet tall will bring noise levels at the receiver down to 55dBA, and thus into compliance with Portsmouth, RI noise ordinance.

With these noise mitigation approaches implemented, modeling analysis results based on on-site measurements indicate that Project related noise levels at the property line of the abutters will be 55dBA, and thus compliant with the Portsmouth, RI noise ordinance (See Figure 8-1).

8.5 Property Purchase Plan

8.5.1 Introduction

In its Order 150, the Board directed the Company to develop a plan to "buy out properties of the neighbors in close proximity who are directly and uniquely impacted by what could become a perennial winter mobilization of the LNG facilities at the Portsmouth take station." Condition (e) of the Board's Order contains that directive and reads as follows:

> That the Company include with its supplemental application an evaluation and potential implementation plan which describes a supplemental proposal which offers to purchase the premises of residents who have homes or businesses within the vicinity of the Old Mill Lane take station that are directly impacted by the presence and operations of the facilities that are being mobilized each winter at Old Mill Lane. This potential supplemental plan should recommend a reasonable radius or range of

32 National Grid proposes to source commercially available, industrial grade noise walls for this application. Contemporary vendors such as Behrens and Associates Environmental Noise Control produce noise walls that range from STC25-STC43 (metric of sound blocking capability), and are capable of NRC 1.0 (metric of sound absorption). Without low frequency noise emission, noise walls at STC30 and above are capable of up to 15dBA reduction at receivers within the shadow zone of the noise barrier. Other vendors like Kinetics Noise Control and IAC Acoustics produce similar equipment also.

> radii, depending upon the criteria used to establish the area in which the offers will be made, as proposed by the Company. The Company should assume that the offers would be based on the fair market value of the property, assuming there was no LNG use at Old Mill Lane, that the sale would be strictly voluntary on the part of the owners receiving the offers, and provide a range of the total cost of such an initiative. EFSB Order 150 at 36-37.

Before explaining the details of the property purchase plan, the Company makes two introductory comments. First, for reasons of cost and efficiency the Company carefully scrutinizes the acquisition of property. The Company does not purchase property for new utility projects unless the property is necessary to locate new equipment. The Company also does not purchase property as a means of mitigating facility or project impacts.

When siting a new facility, the Company first identifies what equipment will be necessary to address a specific need. The Company then targets a preferred location or region and determines the approximate property size needed for the project. The Company then conducts a property analysis to determine if there is property already owned by the Company that is available and suitable for the proposed project. In some circumstances the Company will also review property listings to determine if there is suitable property for sale that could be used for the proposed project. In short, the Company seeks to purchase only the property necessary to locate a facility and to avoid acquiring surplus property.

Second, whenever possible the Company sites projects to avoid and minimize impacts and does not purchase surrounding properties as a means of mitigating facility or project impacts. Once a potential site or sites are located, the Company identifies what permits and approvals may be required for the project to be built and operated at the site(s). The goal of this review is to identify a site where the project either conforms with local zoning requirements or one for which minimal relief is necessary to achieve conformance. It is not always possible, however, for a project to conform with all local requirements and some relief may be required. In rare circumstances, the Company may consider purchasing impacted properties where the impacts are severe and cannot be mitigated.

In this case, the Company is endeavoring to design the new Project layout in order to achieve sufficient mitigation of visual and noise impacts from the Project. The ultimate goal is for the mitigation to bring the Site into compliance with the local noise ordinance.

8.5.2 Offer Area

As noted above, the Board has directed that "[t]his potential supplemental plan should recommend a reasonable radius or range of radii, depending upon the criteria used to establish the area in which the offers will be made, as proposed by the Company."

The main driver for the consideration of a property purchase plan has been noise complaints from certain neighboring property owners. Thus, the Company believes that any offers to purchase should be limited to neighbors on whose properties the noise levels exceed local limits after the Project is in operation with all of the mitigation measures installed and who still complain that the Project interferes with their quiet use and enjoyment of their property.

The window for accepting the Company's offer would begin as of the first season the Project is in operation, and the window would close on June 30th following the end of the second complete season of operation. [33]

The Board instructed the Company to develop a property purchase plan "assuming there was no LNG use at Old Mill Lane". The Company does not believe that is an entirely fair assumption to make. As noted in Sections 3.1.1 and 7.8.1, the Property has a long history of utility use beginning in 1963 to the present day. While there were periods of dormancy – e.g., from 1991 when propane storage and injection ceased to the portable LNG operations in 2001 – the Property was continuously owned by the Company. Moreover, it is located immediately adjacent to another gas utility use - the take station. Thus, a reasonable buyer of nearby property could have understood that the Company could return the Property to active use at some point.

Based on Figure 8-1, the Project will comply with the daytime noise limits for Portsmouth and Middletown. However, there are two parcels to the east and west of the Project where the sound levels, as measured at the property line, are estimated to exceed the nighttime limits of the noise ordinances. Based on values obtained from an online real estate market place website, the Company estimates that the combined value for the two homes is approximately $3,000,000. However, both properties have the benefit of existing vegetation buffers to visually screen the Project and the modelled sound levels near the respective residential structures are below the nighttime noise limits. In addition, based on the Company's plan to limit the operation of the vaporizers during the nighttime, it is expected that noise impacts from the Project will be infrequent. For these reasons, the Company estimated that there would be no cost for this plan because the Company believes that the Purchase Plan will not be necessary for the completed Project. However, in the event there are owners of neighboring parcels with measured noise levels from the Project that exceed the nighttime limits in the noise ordinances, the Company will approach them with the voluntary purchase plan. As noted above, the projected noise levels exceed the night time limits on only two parcels, so the estimate cost for this plan ranges from $0 to $3,000,000. The Company expects that any cost will be offset by the eventual resale of the parcel(s).

The levels ~~the Company recognizes that the levels~~ shown on Figure 8-1 are projections, so during the first winter operation of the Project the Company will perform a 24-hour sound study of the Project to determine if the sound levels are equal to or less than the modelled levels shown on Figure 8-1. The sound study will provide the Company with an opportunity to, if necessary, make adjustments to the

33 Complete season is from December through March.

noise mitigation walls to achieve the desired reduction in noise levels or, if the Company is unable to achieve the desired reduction in noise levels, approach neighbors with Project related noise levels that exceed local limits to determine if they want the Company to purchase their property~~revisit the use of the Purchase Plan for impacted and interested neighbors~~.

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9

Permit Requirements

TNEC must obtain permits under the following state, local and federal statutes and regulations prior to the mobilization of the Project.

9.1 Federal Permits

9.1.1 U.S. Army Corps of Engineers, New England District (USACE-NED)

The Project will require an USACE Section 404 Permit for the filling of wetlands in connection with the construction of the facility.

9.1.2 Historic Preservation

Consultation with the RIHPHC (State Historic Preservation Office) and the Tribal Historic Preservation Office is ongoing and will be completed as required by Section 106 of the Advisory Council on Historic Preservation (ACHP) National Historic Preservation Act.

9.1.3 U.S. Fish & Wildlife Service (USFWS)

An Information for Planning and Consultation (IPaC) review will be completed as required by Section 7 of the Endangered Species Act.

9.2 State Permits

9.2.1 EFSB License

The Project will require a license to construct a major energy facility from the EFSB pursuant to Rhode Island General Laws (R.I.G.L.) Section 42-98-1 et seq.

9.2.2 RIDEM Freshwater Wetlands Permit

The Project requires a freshwater wetlands permit from RIDEM pursuant to R.I.G.L. Section 2-1-18 et seq. for alteration of freshwater wetlands in connection with the mobilization/demobilization and operation of the Project.

9.2.3 RIDEM RI Pollutant Discharge Elimination System (RIPDES)

The Project will require a permit from RIDEM for approval of storm water discharge associated with construction activities pursuant to Rule 31 of the Rhode Island Pollutant Discharge Elimination System (RIPDES) Regulations. It is expected that the Project will qualify for authorization under the General Permit and will be automatically authorized as part of the freshwater wetlands permit.

9.2.4 RIDEM Water Quality Certification

The Project will need a Water Quality Certification from RIDEM under Section 401 of the Clean Water Act. It is expected that the water quality certification will be issued as part of the freshwater wetlands permit.

9.2.5 RIDEM General Permit for an Emergency Generator

Pursuant to the provisions of the Air Pollution Control Regulations Part 9, a general permit for an emergency generator will be applied for from the RIDEM Office of Air Resources.

9.3 Local Permits

A special use permit from the Portsmouth Zoning Board of Review will be required for the use of the Equipment at the Property. Portsmouth Zoning Ordinance, Article V, Section B.

Section 257-7 of the Code of the Town of Portsmouth provides the maximum permissible sound levels by receiving land uses. A sound variance from the Portsmouth Town Council will be required for the operation of the Project.

A Determination of Applicability must be filed with the Building Official for any Project that disturbs one acre or more of existing vegetation, grades, and contours of land to determine if an erosion and sediment control plan must be filed, Town of Portsmouth Ordinance #2010-09-20 Article III, Section I.A. Upon a positive determination, TNEC will submit a soil erosion and sediment control plan for approval by the Building Official. The Building Official would approve, approve with conditions or disapprove such erosion and sediment control plan.

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10

Conclusion

This Siting Report presents a comprehensive overview of the Project, including the existing natural and social environment, potential impacts, and the measures that will be implemented to avoid, minimize, or mitigate these impacts.

Completion of the Project as proposed by TNEC will address the capacity vulnerability and capacity constraints to the Aquidneck Island area natural gas distribution system in a cost-effective manner which minimizes environmental and social impacts to the extent practicable. The Project must be operated on a recurring seasonal (winter) basis and as needed during scheduled transmission pipeline service and outages. The Project will be needed as long as there is natural gas distribution in operation on Aquidneck Island unless the risk of vulnerability is mitigated.

Mitigation will be provided for all impacts to state and federal regulated wetland resources as required by the RIDEM and USACE. Impacts to rare, threatened, or endangered species habitat will be prevented through appropriate avoidance or minimization techniques and coordination with the RIDEM. The implementation of appropriate BMPs and mitigation measures during the Project construction and operation will minimize impacts to environmental resources. Similarly, impacts to social receptors will be minimized through installation of an eight-foot solid composite fence along Old Mill Lane, installation of an approximate 20-foot-high sound barrier wall around noise inducing equipment, and preservation of existing vegetation along the western and southern portions of the Site. The potential for significant impact to other environmental or social receptors in the Project vicinity is expected to be minimal.

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Figures

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Key Map

Project Location

Town Line

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Site Location Map
Figure 3-1

0 1,000 2,000
Feet

nationalgrid
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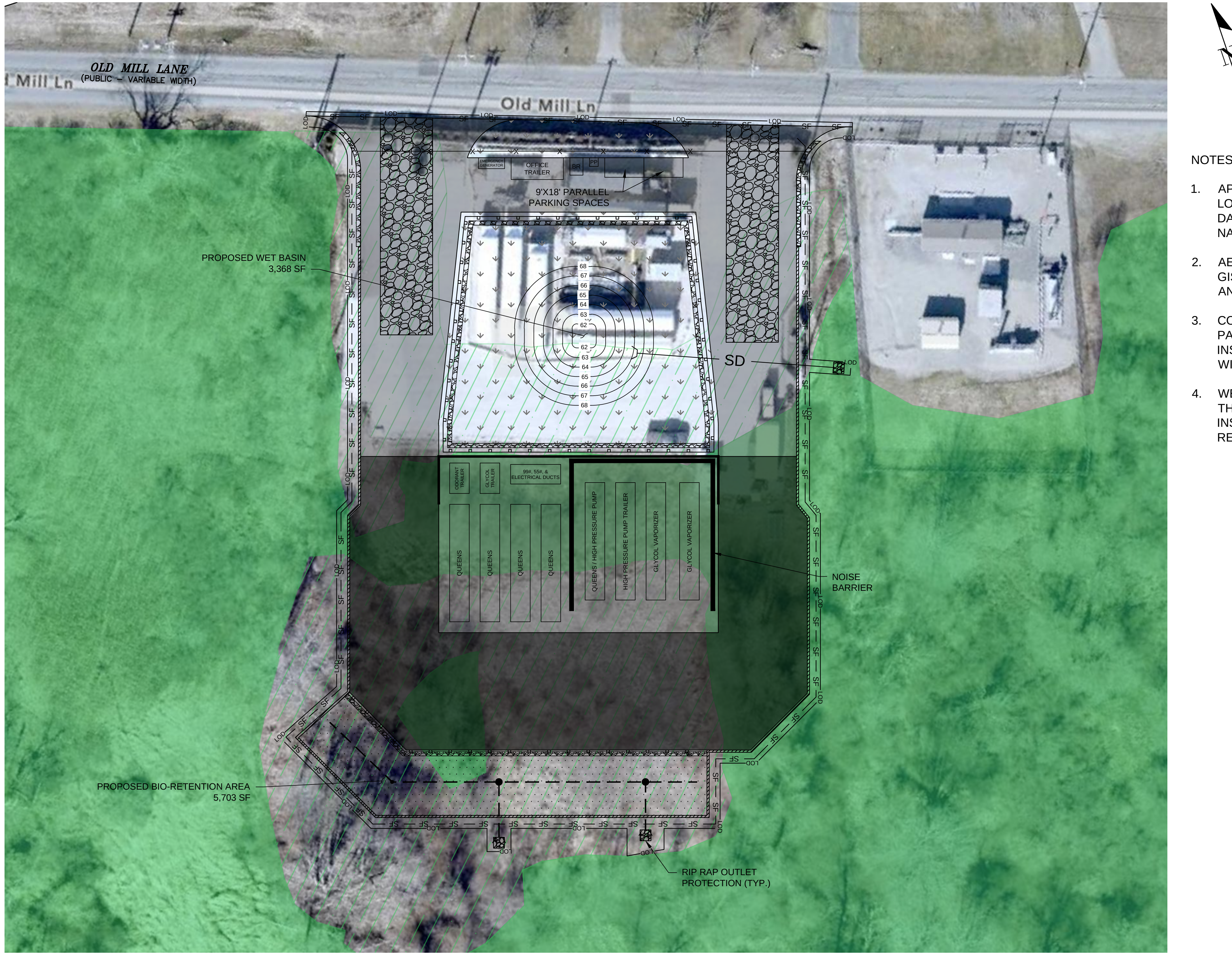

NOTES:

1. APPROXIMATE WETLANDS LOCATION BASED ON FLAGGED DATA PROVIDED TO HDR BY NATIONAL GRID.
2. AERIAL IMAGE TAKEN FROM RIDEM GIS - RI MAPS & AERIAL PHOTOS AND NOT TO SCALE.
3. COMPOSITE FENCE INSTALLED AS PART OF SEPARATE PROJECT TO BE INSTALLED ALONG OLD MILL LANE WITH (2) ROLLING GATES.
4. WEST, SOUTH, AND EAST SIDES OF THE PROJECT WILL HAVE A FENCE INSTALLED ON TOP OF THE RETAINING WALL (TO BE DESIGNED).

LEGEND

ASPHALT PAVEMENT	BIORETENTION SYSTEM	GUARD RAIL	EXISTING WETLANDS	SF — SF SILT FENCE
PERVIOUS PAVEMENT	GRAVEL DIAPHRAGM	FENCE	PERIMETER WETLANDS	BR BATHROOOM TRAILER
GRASSED COVER/ WET BASIN	RETAINING WALL	73 PROPOSED CONTOUR	STABILIZED CONSTRUCTION ENTRANCE	PP PORTA POTTY

HDR

PROJECT TITLE
AQUIDNECK ISLAND GAS RELIABILITY PROJECT

SHEET TITLE
FIGURE 3-2

SCALE
1" = 50'

PROJECT NUMBER
10328992

PROJECT MANAGER
ANKIT DHAR

DATE
03/28/2022

Photo Date:
December 14, 2021

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Figure 3-3a
Drone Photograph of 2021/2022 Winter Season Operation

0 50
Feet

nationalgrid
vhb

Photo Date:
December 14, 2021

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Figure 3-3b
Drone Photo of 2021/2022
Winter Season Operation

Not to Scale

nationalgrid
vhb

3/24/2022 12:59:33 PM

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Photo Date:
December 14, 2021

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Figure 3-4a
Drone Aerial Photograph
with Proposed Project Layout

0 50
Feet

nationalgrid

vhb

3/24/2022 12:21:19 PM

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Photo Date:
December 14, 2021

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

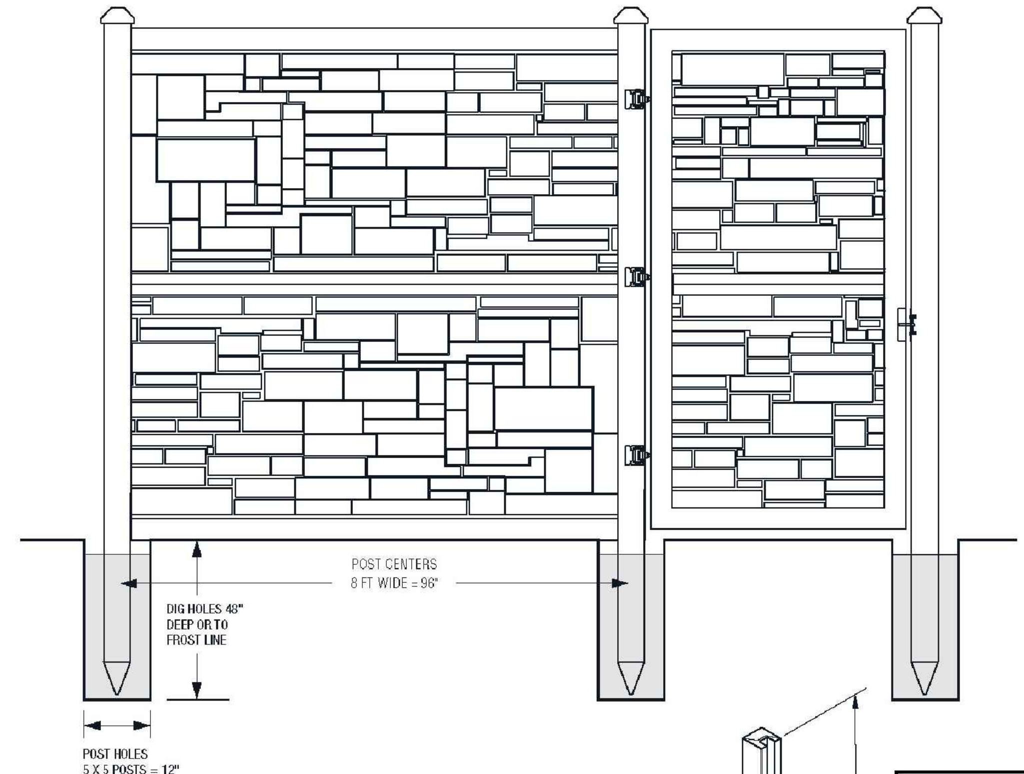
Figure 3-4b
Drone Aerial Photograph-Looking West with Proposed Project Layout

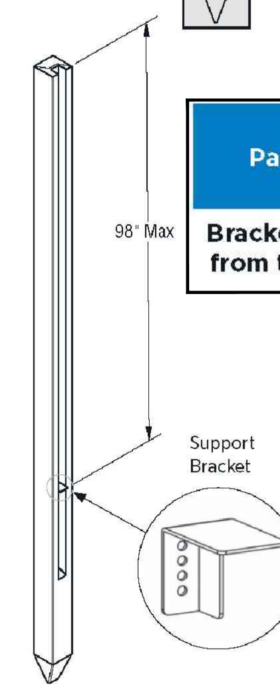
Not to Scale

nationalgrid

vhb

Privacy Fence Detail 1





Panel Size	8′
Bracket Location from top of post	98″

Privacy Fence Detail 2

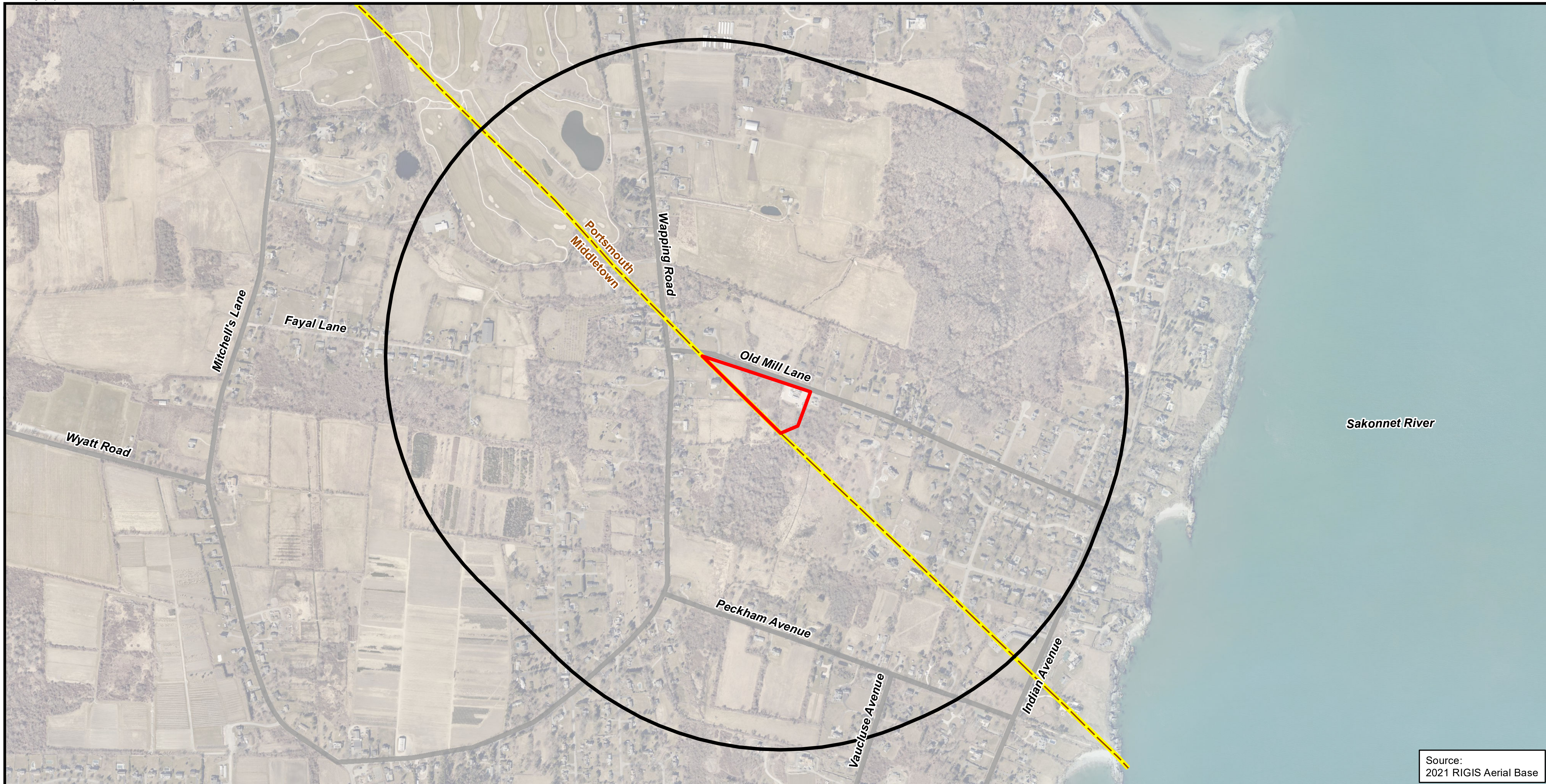
Source:
Manufacturer: CertainTeed
Contact: facebook.com/CertainTeed
youtube.com/certainteedsaintgobain

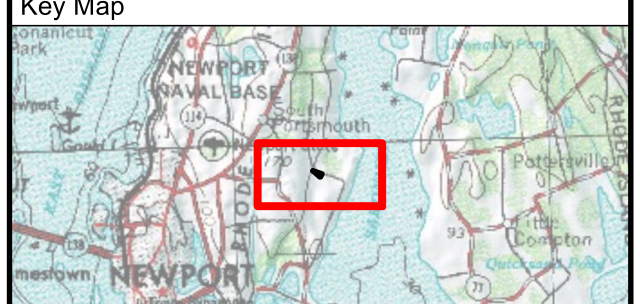
Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Figure 3-5
Privacy Fence Details

nationalgrid
vhb

\\vhb.com\gis\proj\Providence\73195.00\Project\EFSB\FIG 5-1 Base Plan.mxd





Site Property

Limits of Study Area

Town Line

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Base Map
Figure 5-1

0 400 800
Feet

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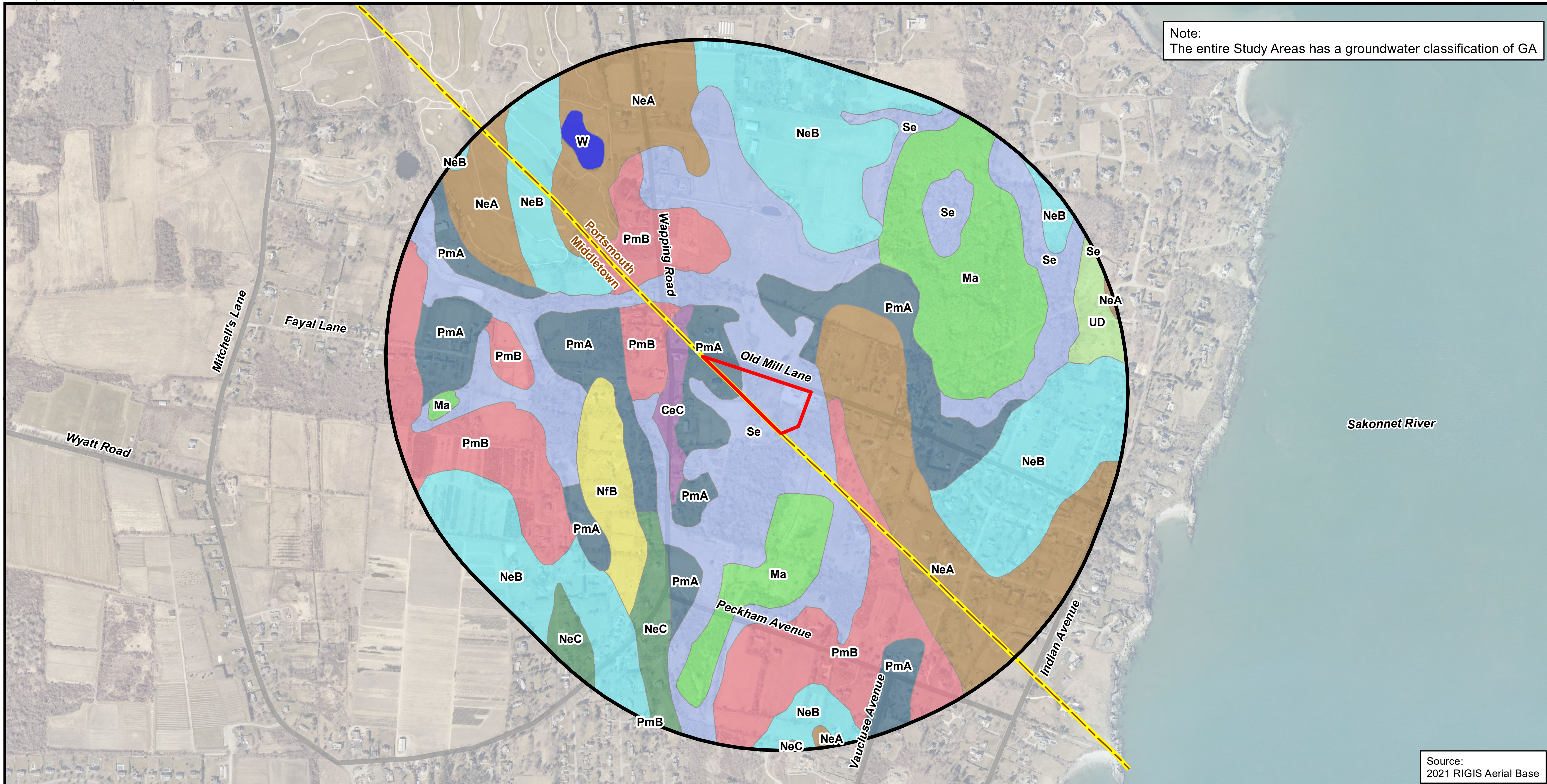
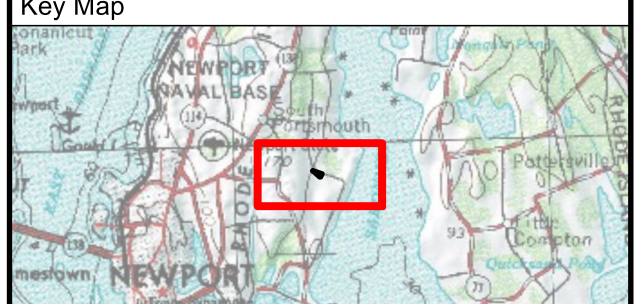
\\vhb.com\gis\proj\Providence\73195.00\Project\EFSB\FIG 5-2 Soils.mxd



Key Map



Site Property

Limits of Study Area

Town Line

Soil Types

CeC NeB PmA UD

Ma NeC PmB W

NeA NfB Se

Aquidneck Island Gas Reliability Project

Old Mill Lane

Portsmouth, Rhode Island

Soils Map

Figure 5-2

0 400 800

Feet

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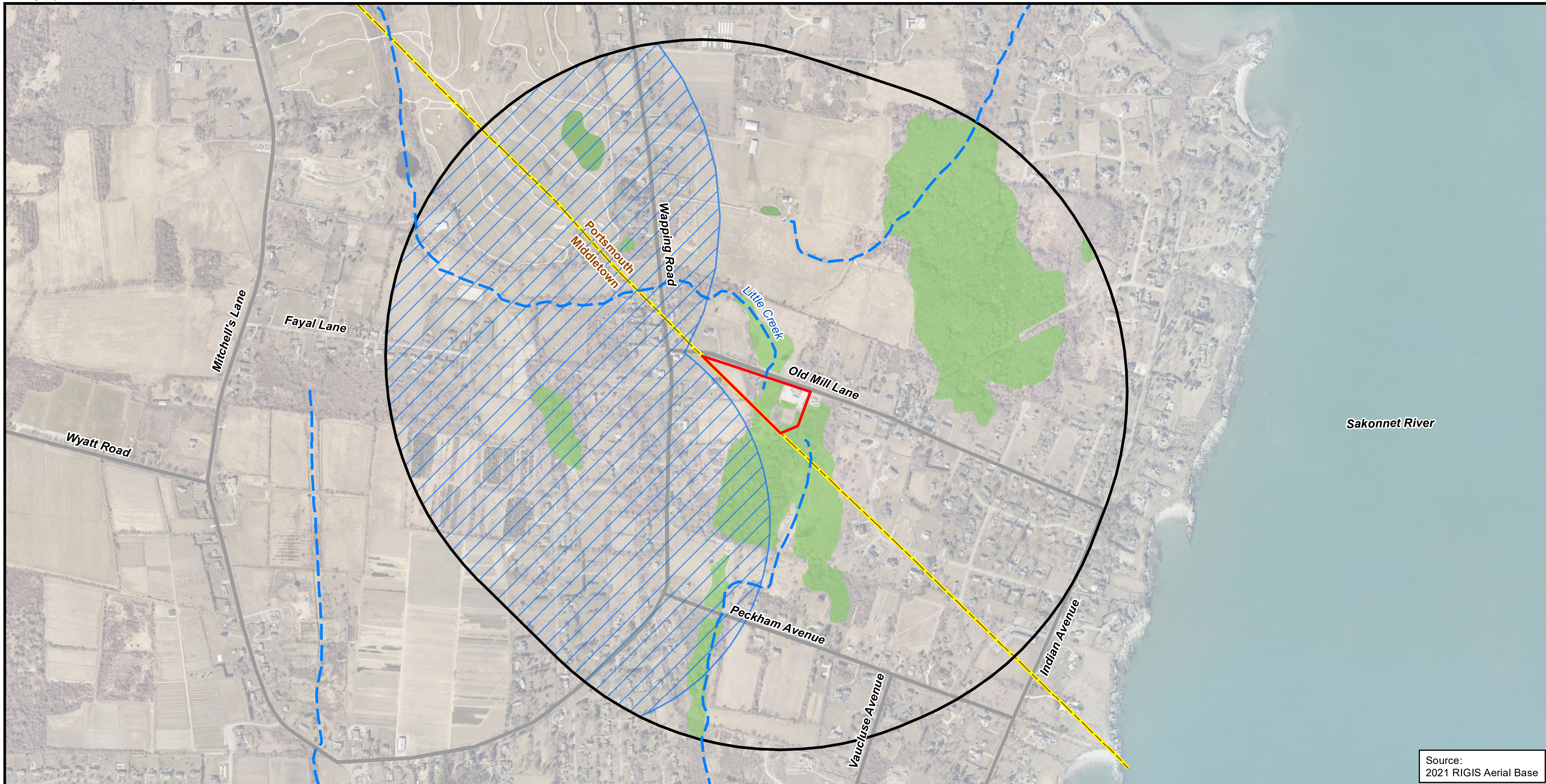
\\vhb.com\gis\proj\Providence\73195.00\Project\EFSB\FIG 5-4 Wetlands.mxd



Key Map

Site Property
Limits of Study Area
Town Line
Wetlands
Rivers/Streams
Non-Community Well Head Protection Area

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Wetlands Map
Figure 5-3

0 400 800
Feet

nationalgrid
vhb

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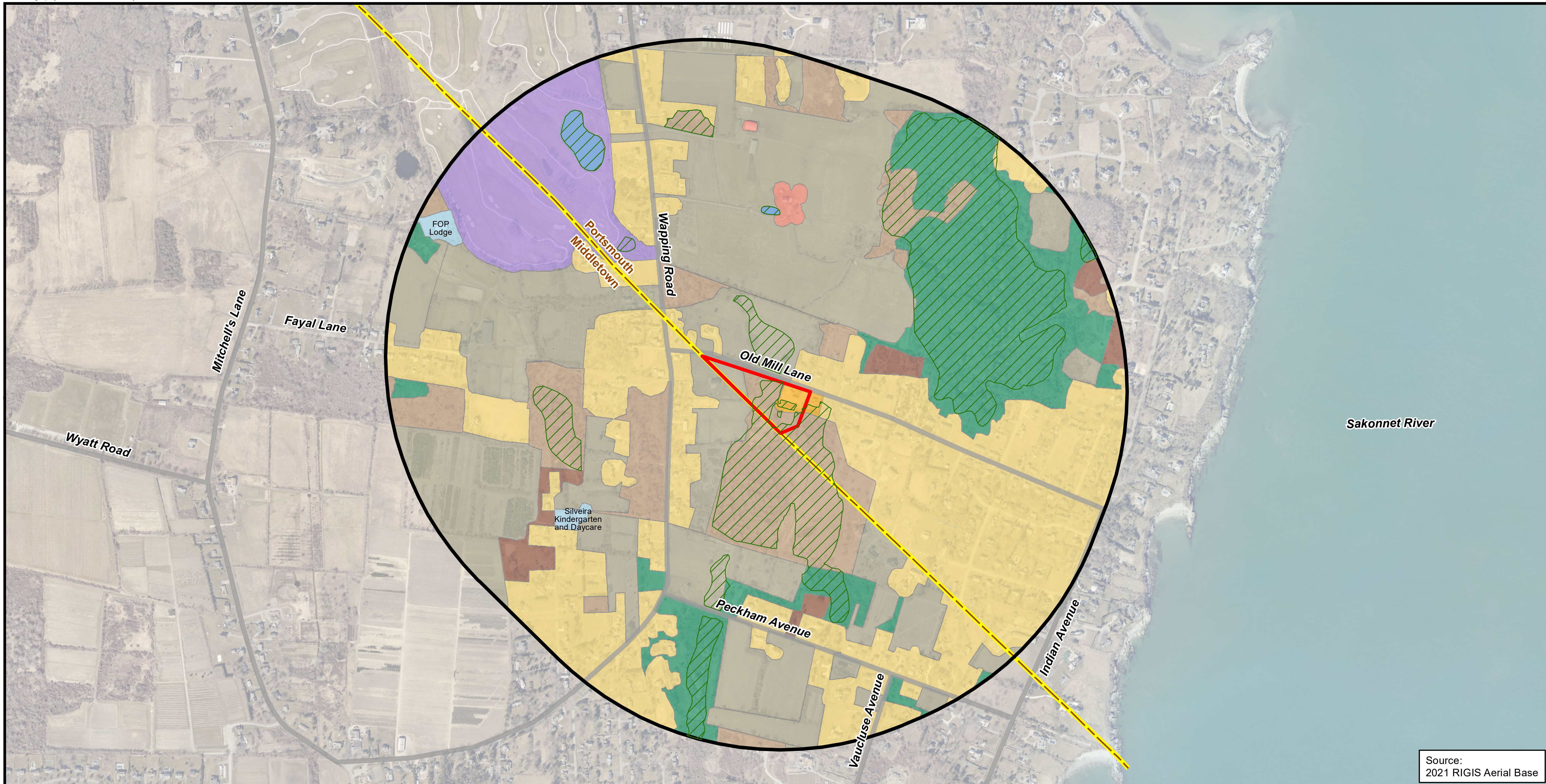
\\vhb.com\gis\proj\Providence\73195.00\Project\EFSB\FIG 6-1 Land Use Plan.mxd



Key Map

Site Property
Limits of Study Area

Land Use Categories

- Utility Use
- Commercial
- Agricultural
- Brushland
- Forest
- Institutional
- Open Space
- Recreation
- Residential
- Water
- Wetland

Aquidneck Island Gas Reliability Project
Old Mill Lane
Portsmouth, Rhode Island

Land Use Map
Figure 6-1

0 400 800
Feet

nationalgrid
vhb

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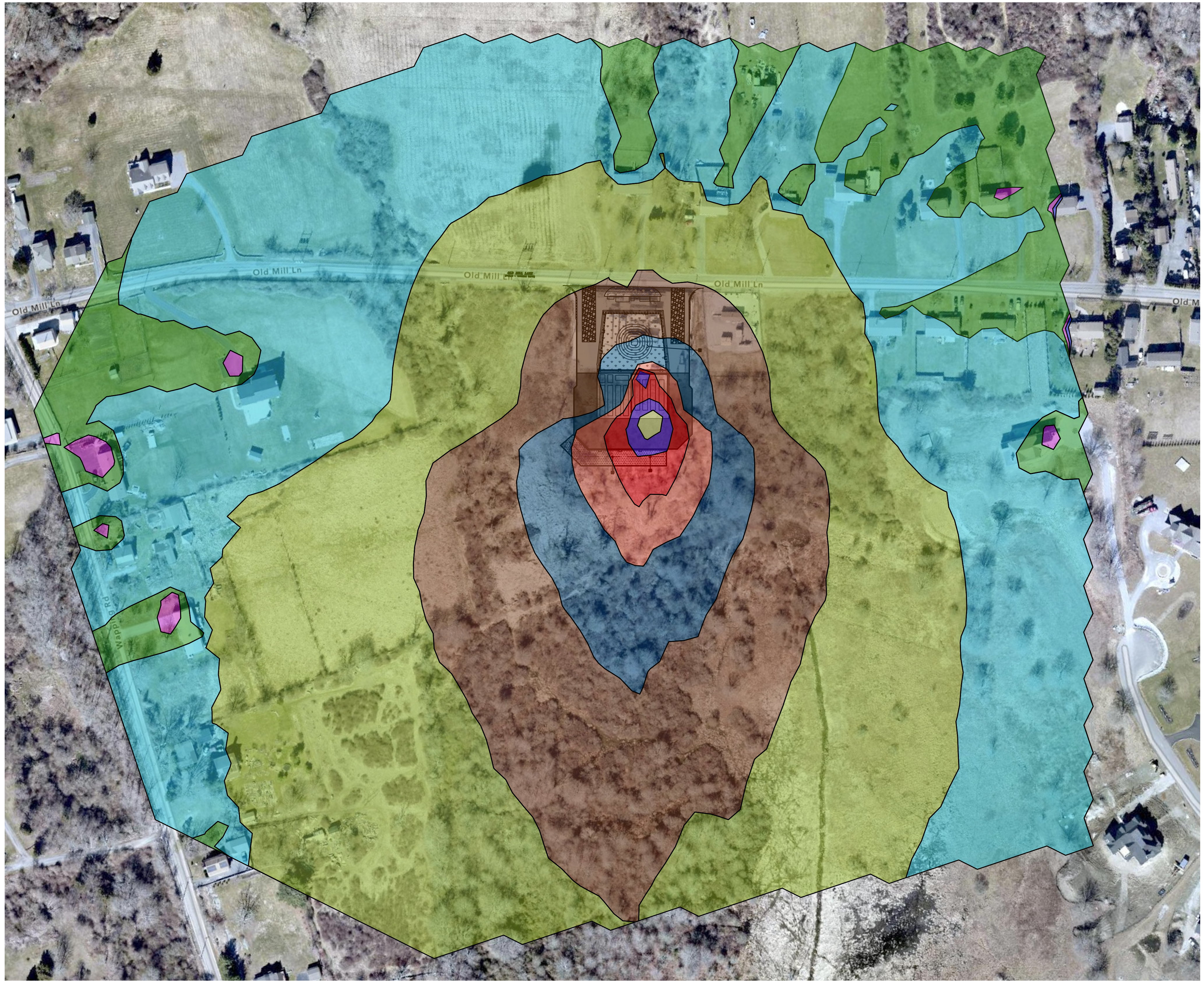

N

NOTES:

1. AERIAL IMAGE TAKEN FROM RIDEM GIS - RI MAPS & AERIAL PHOTOS AND NOT TO SCALE.

LEGEND

LMAX (dBA)

<35	45-50	60-65	75-80
35-40	50-55	65-70	>80
40-45	55-60	70-75	

PROJECT TITLE
AQUIDNECK ISLAND GAS RELIABILITY PROJECT

PROJECT NUMBER
10328992

SHEET TITLE
FIGURE 8-1

PROJECT MANAGER
ANKIT DHAR

SCALE
1" = 200'

DATE
03/28/2022

Appendix A:

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Raquel J. Webster
Senior Counsel

June 30, 2021

BY ELECTRONIC MAIL

Luly E. Massaro, Clerk
Rhode Island Division of Public Utilities and Carriers
-and-
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 5043 – Gas Long-Range Resource and Requirements Plan for the Forecast Period 2021/22 to 2025/26
Informational Filing

Dear Ms. Massaro:

Enclosed are ten (10) copies of National Grid's[1] recently completed Long-Range Gas Supply Plan (LRP) for the forecast period 2021/22 to 2025/26. Pursuant to Rhode Island General Laws § 39-24-2, the Company files its LRPs with the Rhode Island Public Utilities Commission (PUC) on a biennial basis. The Company filed its last LRP with the PUC on June 30, 2020 in Docket 5043; therefore, this LRP is not statutorily required.

Rather, the Company is submitting this LRP to the Division of Public Utilities and Carriers (Division) in order to fulfill the purposes of the proposal contained in the February 20, 2019 Joint Memorandum of National Grid and the Division in Docket No. 4816 and is simultaneously filing it in Docket 5043 as an informational filing for the benefit of the PUC.

This LRP is based upon the Company's most recent June 2021 forecasts that, absent unanticipated modification, will also be used in the Company's Gas Cost Recovery filing this year. This LRP is designed to demonstrate that the Company's gas-resource planning process has resulted in a reliable resource portfolio to meet the combined forecasted needs of the Company's Rhode Island customers at least-cost.

The Long-Range Plan includes confidential gas cost pricing information and contract terms, which are provided in Exhibits 18, 19, 20, and 21. Therefore, the Company has provided a redacted and confidential version of the Long-Range Plan and has requested confidential treatment of Exhibits 18, 19, 20, and 21 pursuant to R.I. Gen. Laws § 38-2-2(4)(B) and Rule 810-RICR-00-00-1.3(H) of the PUC's Rules of Practice and Procedure. The confidential version of the LRP is also being provided to the Division pursuant to its non-disclosure agreement with the Company that is applicable to this docket.

---

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,

Raquel J. Webster

Enclosures

cc: Docket 5043 Service List
Leo Wold, Esq., Division

STATE OF RHODE ISLAND
RHODE ISLAND PUBLIC UTILITIES COMMISSION

Gas Long-Range Resource and Requirements Plan for the Forecast Period 2020/21 to 2024/25	)	Docket No. 5043

NATIONAL GRID'S MOTON FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION

National Grid[1] respectfully requests that the Rhode Island Public Utilities Commission (PUC) grant protection from public disclosure certain confidential, competitively sensitive, and proprietary information submitted in this proceeding, as permitted by Rule 810-RICR-00-00-1.3(H) of the PUC's Rules of Practice and Procedure (Rule 1.3(H)) and R.I. Gen. Laws § 38-22(4)(B). The Company also requests that, pending entry of that finding, the PUC preliminarily grant the Company's request for confidential treatment pursuant to Rule 1.3(H)(2).

I. BACKGROUND

On June 30, 2020, the Company submitted its Gas Long-Range Resource and Requirements Plan for the Forecast Period 2020/21 to 2024/25 (2020 LRP) in the above-captioned docket. The 2020 LRP included confidential gas cost pricing information and contract terms, which were provided in Exhibits 18, 19, 20, and 21. In accordance with Rule 1.3(H)(3), National Grid provided a redacted public version and confidential version of the 2020 LRP and requested that, pursuant to Rule 1.3(H), the PUC afford confidential treatment to the gas cost pricing information and contract terms contained in Exhibits 18, 19, 20, and 21. To fulfill the

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

purposes of the February 20, 2019 Joint Memorandum of the Company and the Division of Public Utilities and Carriers in Docket 4816, National Grid has prepared a Gas Long-Range Resource and Requirements Plan for the Forecast Period 2021/22 to 2025/26 (2021 LRP). The 2021 LRP is not required to be filed with the PUC pursuant to R.I. Gen. Laws § 39-24-2 given that such plans are only required to be filed biennially. However, the Company is submitting the 2021 LRP for informational purposes in this docket which was established for the review of the 2020 LRP.

Like the 2020 LRP, the 2021 LRP contains pricing information and contract terms in Exhibits 18, 19, 20 and 21. In accordance with Rule 1.3(H)(3), National Grid has provided a redacted public version and confidential version of the 2021 LRP and requests that, pursuant to Rule 1.3(H), the PUC afford confidential treatment to the gas cost pricing information and contract terms contained in Exhibits 18, 19, 20, and 21 of the 2021 LRP.

II. LEGAL STANDARD

Rule 1.3(H) provides that access to public records shall be granted in accordance with the Access to Public Records Act (APRA), R.I. Gen. Laws § 38-2-1, *et seq.* Under the APRA, all documents and materials submitted in connection with the transaction of official business by an agency is deemed to be a "public record," unless the information contained in such documents and materials falls within one of the exceptions specifically identified in R.I. Gen. Laws § 38-2-2(4). To the extent that information provided to the PUC falls within one of the designated exceptions to the public records law, the PUC has the authority under the terms of APRA to deem such information as confidential and to protect that information from public disclosure.

In that regard, R.I. Gen. Laws § 38-2-2(4)(B) provides that the following types of records shall not be deemed public:

> Trade secrets and commercial or financial information obtained from a person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information exemption applies where the disclosure of information would be likely either (1) to impair the government's ability to obtain necessary information in the future; or (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. *Providence Journal*, 774 A.2d 40 (R.I. 2001).

The first prong of the test is satisfied when information is provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. *Providence Journal*, 774 A.2d at 47.

III. BASIS FOR CONFIDENTIALITY

The gas cost pricing information and confidential contract terms – which are provided in Exhibits 18, 19, 20 and 21 to the 2021 LRP – are confidential and privileged information of the type that National Grid would not ordinarily make public. As such, the information should be protected from public disclosure. Public disclosure of such information could impair National Grid's ability to obtain advantageous pricing or other terms in the future, thereby causing substantial competitive harm. Accordingly, National Grid is providing the information on a voluntary basis to assist the PUC with its decision-making in this proceeding, but respectfully requests that the PUC provide confidential treatment to the information.

IV. CONCLUSION

For the foregoing reasons, National Grid respectfully requests that the PUC grant its Motion for Protective Treatment of Confidential Information.

Respectfully submitted,

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID

By its attorney,

Raquel J. Webster, Esq. (Bar #9064)
40 Sylvan Road
Waltham, MA 02451
Tel. 781-472-0531
Raquel.Webster@nationalgrid.com

Dated: June 30, 2021

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.

___________________________________ June 30, 2021
Joanne M. Scanlon Date

Docket No. 5043 – National Grid's Gas Long-Range Resource Plan
Service List as of 7/23/2020

Name/Address	E-mail	Phone
Raquel Webster, Esq. National Grid 280 Melrose St. Providence, RI 02907	Raquel.webster@nationalgrid.com;	781-907-2121
	Celia.obrien@nationalgrid.com;	
	Jennifer.Hutchinson@nationalgrid.com;	
	Joanne.scanlon@nationalgrid.com;	
Elizabeth D. Arangio Theodore Poe MaryBeth Carroll National Grid 40 Sylvan Road Waltham, MA 02541	Theodore.poe@nationalgrid.com;	
	Elizabeth.Arangio@nationalgrid.com;	
	MaryBeth.Carroll@nationalgrid.com;	
Leo Wold, Esq. Division of Public Utilities & Carriers	Leo.Wold@dpuc.ri.gov;	401-780-2177
	John.bell@dpuc.ri.gov;	
	dmacrae@riag.ri.gov;	
	Al.mancini@dpuc.ri.gov;	
	MFolcarelli@riag.ri.gov ;	
Jerome Mierzwa Exeter Associates	jmierzwa@exeterassociates.com;	
File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel	Luly.massaro@puc.ri.gov;	401-780-2107
	Alan.nault@puc.ri.gov;	
	Patricia.lucarelli@puc.ri.gov;	

Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	Todd.bianco@puc.ri.gov;	
James Crowley, CLF	jcrowley@clf.org;	
Office of Energy Resources Christopher Kearns Nicholas Ucci	Christopher.Kearns@energy.ri.gov; Nicholas.ucci@energy.ri.gov; Carrie.Gill@energy.ri.gov;	

National Grid

The Narragansett Electric Company

Gas Long-Range Resource and Requirements Plan for the Forecast Period 2021/22 to 2025/26

Informational Filing

June 30, 2021

Docket No. 5043

Submitted to:
Rhode Island Division of Public Utilities and Carriers
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

I. Introduction

This filing presents the Long-Range Resource and Requirements Plan (Long-Range Plan) for The Narragansett Electric Company d/b/a National Grid (Company) for the gas supply forecast period November 1, 2021 through October 31, 2026. The Company is a public utility under the provisions of R.I. Gen. Laws § 39-1-2 and provides natural gas sales and transportation service to approximately 277,500 residential and commercial customers in 33 cities and towns in Rhode Island. The Company is submitting this Long-Range Plan to the Rhode Island Public Utilities Commission (PUC) pursuant to R.I. Gen. Laws § 39-24-2, which requires that the Company file the Long-Range Plan on a bi-annual basis. The Company submitted its last statutorily required Long-Range Plan on June 30, 2020 in Docket 5043. This Long-Range Plan is not statutorily required, but is being submitted to the Rhode Island Division of Public Utilities and Carriers (Division) to fulfill the purposes of the proposal contained in the February 20, 2019 Joint Memorandum of the Company and the Division in Docket No. 4816 (Joint Memorandum) and to the PUC for informational purposes.[1]

This Long-Range Plan consists of a long-range energy plan for the five-year period subsequent to the date of this filing and includes all assumptions and methodologies that the Company used in formulating the plan. In addition, Section V of this Long-Range Plan contains a description of the information to be included in the Long-Range Plan, pursuant to the Joint Memorandum, together with a reference to the specific section of the Long-Range Plan or Exhibit where such information can be found. This plan is designed to demonstrate that the Company's gas-resource planning process has resulted in a reliable resource portfolio to meet the combined forecasted needs of the Company's Rhode Island customers at least-cost. To make this demonstration, this Long-Range Plan includes the following information: (i) a description of the methodology the Company uses to forecast demand on its system; (ii) a discussion of the process and assumptions the Company uses to develop its resource portfolio to meet customer requirements under design-weather conditions; (iii) a complete inventory of the expected available resources in the Company's portfolio, and (iv) a demonstration of the adequacy of the portfolio to meet customer demands under a range of weather.

II. Overview of Planning Results

As described in detail in this filing, the Company's planning process is based on a comprehensive methodology for forecasting customer load requirements using a series of econometric models to determine the annual growth expected for Residential Heating, Residential Non-Heating, Commercial, and Industrial markets. To determine the projected growth over the forecast period, the econometric models used historical economic, demographic,

[1] On October 30, 2018 in the Company's 2018 Gas Cost Recovery (GCR) proceeding in Docket No. 4872, the PUC ordered that the Company and the Division to submit the Joint Memorandum in Docket No. 4816 outlining each of their recommendations for improving the Long-Range Plan as it relates to the annual GCR filing. On February 20, 2019, the Parties submitted the Joint Memorandum in compliance with the PUC's October 30, 2018 order in Docket No. 4872. The Joint Memorandum provided that the annual Long-Range Plan filings would be submitted in June, as soon as practical, following the release of the Company's annual forecast, permitting the Company to base its annual forecast on the most recent customer usage data, and prior to the Company's annual GCR filing. It also stated that the annual Long-Range Plan filings will include certain information, which is summarized in more detail in Section V, *infra*.

and energy price data, and weather data to determine total energy demand. The Company then analyzed load reductions it expects to achieve through the implementation of its revised energy-efficiency programs because such reductions are exogenous to the demand forecast generated by the econometric models. The Company's forecast is based on the March 2021 economic forecast from Moody's Analytics, Inc. that includes estimates of the impact that COVID-19 will have on the Rhode Island economy.

The results of the Company's Base Case retail demand forecast (see Exhibit 1) indicates that, over the five-year forecast period Planning Year 2022 through Planning Year 2026, the residential heating market is projected to increase by an average of 259,000 dekatherms per year, the Residential Non-Heating market is projected to decrease by an average of 17,000 dekatherms per year, and the Commercial and Industrial Sales markets are projected to grow by 102,000 dekatherms per year. The Company projects that growth opportunities in non-traditional markets over the forecast period are reflected in the results of the econometric models. The Company is not projecting any incremental growth in these markets beyond what it experienced in the historical period upon which the models are based.

As explained below, the Company's demand forecast is then converted to supply requirements at the Company's city gates. The result of the forecasting process is that projected sendout requirements increase over the five-year forecast period, averaging 427 MDth (approximately 1.2 percent) per year under normal weather conditions (see Section III.D.2.).

To ensure that the Company maintains adequate supplies in its portfolio to meet the projected customer load requirements, the next step in the planning process involves an analysis to define the planning standards for the coldest planning year, known as the "design year", and the coldest planning day, known as the "design day". This Long-Range Plan relies on the planning standards as defined in the Company's 2018 Long-Range Plan. The Company's design year is defined as 6,250 heating degree days (HDD) with a probability of occurrence of 1 in 37.47 years, and its design day is defined as 68 HDD with a probability of occurrence of 1 in 58.92 years. The Company has also included its design hour planning standard, which represents a 5% peak-hour factor (i.e. the peak hour requirement represents 1/20th of the peak day requirement). Combining the results of the design planning standards definition and the load forecasting process, the Company is projecting its Base Case design year sendout requirements to increase over the five-year forecast period by an average of 489 MDth, or approximately 1.2 percent, per year (see Section III.F.), and design day sendout to increase by an average of 4,913 Dth, or 1.3 percent, per year. The design hour is also expected to increase over the forecast period (see Exhibit 2).

After the forecast of customer requirements are determined, the next step in the Company's planning process is to design a resource portfolio to meet those requirements in the most reliable and least-cost manner possible. To that end, the Company uses the SENDOUT® Model (a proprietary linear programming model) to determine the adequacy of the existing portfolio in meeting the forecasted requirements and to identify any shortfalls during the forecast period. SENDOUT® allows the Company to determine the least- cost, economic dispatch of its existing resources, subject to contractual and operating constraints, and identifies the need for and type of additional resources during the forecast period, if any. To evaluate the flexibility and adequacy of the resource portfolio under a range of reasonably foreseeable conditions, the portfolio is assessed under design and normal weather conditions and a cold snap weather scenario. For the cold-snap weather scenario, the Company used a 14-day cold snap occurring in the coldest 14-day period of the Company's normal year (January 8 - January 21) by evaluating January weather data from 1977/78 to 2016/17. The Company uses the results of the cold snap scenario to test the adequacy of inventories and refill requirements. The Company also applies the peak-hour requirement to its Synergi Gas® network analysis modeling software. To meet design requirements throughout the forecast period, incremental resources are needed.

Communications regarding this Long-Range Plan should be directed as follows:

Raquel J. Webster, Esq.
The Narragansett Electric Company
d/b/a National Grid
40 Sylvan Road
Waltham, MA 02451
781-472-0531
Raquel.Webster@nationalgrid.com

With a copy to:

Elizabeth C. Arangio
Director, Gas Supply Planning
The Narragansett Electric Company
d/b/a National Grid
40 Sylvan Road
Waltham, MA 02451
(781) 907-1639
Elizabeth.Arangio@nationalgrid.com

III. Forecast Methodology

III.A. Introduction

The Company's forecast methodology supports its supply planning goal to ensure that it maintains sufficient supplies in its resource portfolio to meet customers' requirements on the design day and that it maintains sufficient supply under contract and in storage (underground storage and LNG) to meet customers' requirements over the design year. Each year, the Company employs the same process of preparing a multi-year forecast to ensure that the portfolio has sufficient resources for the upcoming winter period and sufficient time to contract for additional resources should they be required. The term "customer" as used herein means those customers for whom the Company must make capacity planning decisions.[2]

The Company develops its underlying demand forecast from econometric models of its customer billing data. This data is available by month and by rate class. The Company developed the retail forecast in this Long-Range Plan in mid-2021 and, absent unanticipated modifications, it will be the same forecast that will be used in the Company's 2021 Gas Cost Recovery filing.

The Company models its daily resources and requirements with its SENDOUT® linear programming software modeling package and, therefore, a forecast of daily customer requirements as inputs for the model.

Accordingly, the Company developed five-year forecast of customer requirements under design-weather planning conditions using the following process:

(1) <u>Forecast Retail Demand Requirements</u>

Retail demand requirements are based on customer billing data, which is available by rate class and by month. The Company uses a series of econometric models to develop a forecast of retail demand requirements for traditional markets (i.e., Residential Heating, Residential Non-Heating, Commercial, and Industrial customers). The forecast of retail demand requirements for traditional markets is summed to determine the total retail demand requirements over the forecast period. This forecast of retail demand is disaggregated into monthly billed and unbilled volumes and, hence, can be calendarized for supply planning purposes.

(2) <u>Develop Reference Year Sendout Using Regression Equations</u>

The daily values of the Company's wholesale sendout in the reference year (April 2020 – March 2021) serves as the basis of allocating the monthly retail demand forecast to the daily level. Because actual sendout data for the reference year is a function of the weather conditions experienced in that year, the Company develops this allocator for sendout using regression equations to normalize the sendout in the reference year based on normalized weather data.

---

[2] The Company makes capacity planning decisions for its Sales and non-Capacity Exempt Transportation (Customer Choice) customers.

(3) Normalize Forecast of Customer Requirements

The Company's monthly retail demand forecast is allocated to the daily level based on the use of its daily wholesale sendout regression equation and its normal daily heating degree day data. This step sets the Company's total normalized forecast of customer requirements over the forecast period.

(4) Determine Design Weather Planning Standards

The Company performs a determination of the appropriate design day and design year planning standards for the development of a least-cost reliable supply portfolio over the forecast period.

(5) Determine Customer Requirements Under Design Weather Conditions

Using the applicable design day and design year weather planning standards, the Company determines the design year sendout requirements and the design day sendout requirements. These design sendout requirements establish the Company's resource requirements over the forecast period.

(6) Spatial (zip code) Peak Volume Forecast

For each zip code, customer monthly billing data is used to build monthly meter count and volume models for the major rate codes. Then, an optimization process is employed to convert this zip code level monthly volume forecast into daily values. The Company then ensures that this design weather zip code level forecast sums to the Company-level forecast to provide a zip code level view of design day customer requirements for system planning purposes.

Based on the forecast, the Company projects Base Case growth in customer requirements for its Sales and Customer Choice customers of 2,137 MDth over the five-year period, or 427 MDth per year (assuming normal weather) (see Section III.D.2.). Overall, this growth in firm sales represents a 5.9 percent total increase in sendout requirements over the forecast period, or 1.2 percent per year on average.

The development of the Company's five-year forecast of customer sendout requirements, based on the steps set forth above, is described in the following sections.

III.B. Retail Demand Forecast

The first step in the Company's forecasting methodology is the generation of its retail demand forecast, which is prepared through econometric and statistical modeling.

III.B.1. Demand Forecast for Traditional Markets

III.B.1.a. Service Territory Specific Data Availability

The Company used its monthly customer billing data (volume and number of customers) for the period September 2010 through February 2021 to define the dependent variables in its econometric models. The billing data was modeled at the level of four major classes of customers (Residential Heating, Residential Non-Heating, Commercial, Industrial). Each of these four classes included the Sales customer sub-class, the Customer Choice customer sub-class, and the "capacity-exempt" (i.e., grandfathered Transportation) customer sub-class. The table below lists the relevant major groups and the Company's internal rate codes used in the Company's analysis.

	Internal Rate Codes
Residential Heating	400, 402
Residential Non-Heating	401, 403
Commercial	404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 425, 433, 434, 439, 440, 443, 444, Z407, Z411, Z415
Industrial	417, 418, 419, 420, 421, 422, 423, 424, 428, 437, 438, 441, 442, Z419, Z423

III.B.1.b. Econometric Models

With volume and customer data as identified above, the Company developed econometric models for the number of customers and use-per-customer (the quotient of the division of volume and number of customers) for each rate code. The Company's econometric modeling effort was to regress each of the two dependent variables against an array of possible independent variables and select the equation with the best fit.

By using historical economic, demographic, and energy price data listed in Exhibit 3 as the independent variables, the Company estimated statistically valid econometric equations for each customer class. The Company obtained the economic and demographic data from Moody's Analytics, Inc. (Moody's), using forecasts from March 2021.

Additionally, the Company tested time variables, actual Heating Degree Days, actual Billing Degree Days, and natural gas and oil prices from the U.S. Department of Energy, Energy Information Administration.

The Company then reduced the results of its statistical forecast models to account for the incremental impact of the energy efficiency programs sponsored by the Company. The energy efficiency programs that the Company analyzed for this forecast were those submitted by the Company in Docket No. 5076 in its 2021 Energy Efficiency Program Plan, dated October 15, 2020, which was the most recent data available when the Company prepared the forecast. The Company subtracted the incremental savings from the programs that are not embedded in the historical data used to derive the statistical models because such savings are exogenous to the modeling effort.

III.B.2. Final econometric models for the Company's demand forecast

The Company develops its retail demand forecast from econometric models of its customer billing data. The Company developed the retail forecast presented in this Long-Range Plan in mid-2021, which is the same forecast that will be used in the Company's 2021 Gas Cost Recovery filing. Summary charts and tables comparing this forecast with the Company's 2020 forecast are presented in Exhibits 1 and 4 through 6.

III.B.3. The Impact of the Energy Efficiency Programs

On October 15, 2020, the Company filed its three-year Energy Efficiency Plan for the period 2021-2023. The primary goal of the Energy Efficiency plan is to create energy (both gas and electric) and economic cost savings for Rhode Island consumers as required by the least cost procurement law, R.I. Gen. Laws § 39-1-27.7. The goal of the natural gas energy efficiency programs is annual reduction in usage; there are no programs that are specifically targeted toward peak reduction.

Because the Company's econometric forecast is based on historical data, which does not fully incorporate the increasing penetration of the Company's energy efficiency programs in the Residential and Commercial and Industrial sectors, the Company reviewed its historical energy efficiency efforts to determine whether its retail demand forecast required any adjustment to reflect the increases in energy efficiency efforts. Analysis of the Company's historical energy efficiency programs shows that historical data should have embedded within annual savings of 422 MDth. These figures are based on the three-year average of 2018 through 2020 actual persistent and non-persistent energy efficiency savings. The Company uses a three-year average in lieu of the most recent year to smooth out the year-to-year fluctuations that may occur. The Company's analysis indicated that a further incremental reduction averaging 35 MDth/year were required from 2021 to 2026 to reflect the projected energy efficiency impacts.

III.C. Translation of Retail Forecast into Customer Requirements

In the second step of the Company's forecasting methodology, the Company uses linear regression equations of total daily sendout versus daily temperature for the most recent 12 months to calculate a reference-year by division. This serves as the most accurate way for the Company to allocate its monthly demand forecast into its future daily customer requirements. This step is used to determine the Company's normal year forecast of customer requirements over the forecast period for gas cost recovery purposes and to determine the Company design year forecast of customer requirements over the forecast period for resource planning purposes. To perform its regression analysis, the Company used version 4.0.3 of the "R" statistical software package.[3]

III.C.1. Wholesale Volume by Division

To establish normal-year springboard sendout requirements, the Company developed a linear-regression equation for each of its four divisions (formerly Providence Gas, Westerly Gas, Bristol and Warren Gas, and Valley Gas) using data for the reference-year period April 1, 2020 through March 31, 2021. The Company's regression equation uses sendout as its dependent variable and temperature as its independent variable.[4]

Through the use of the linear-regression equation, the Company is able to normalize total daily sendout. Specifically, the actual daily firm sendout is regressed against: (1) HDD data as provided by its weather service vendor Weather Services International, (2) HDD data lagged over two days, and (3) a weekend dummy variable. These data elements were selected for the regression analysis since these elements have been, and continue to be, the major explanatory variables underlying the Company's daily sendout requirements.

The Company selected the T.F. Green International Airport weather station (KPVD or T.F. Green) as the source of the weather data used as the principal explanatory variable in its regression equations. The Company selected the T.F. Green weather station because it is close to the center of the Company's service territory, on a load-weighted basis, and it is highly correlated with surrounding weather stations. Specifically, the Company used the HDD value for each 24-hour period of 10:00 a.m. to 10:00 a.m., which constitutes the gas day and, therefore, corresponds to the same daily time period of observation of the sendout data.

Based on its observations of the historical relationship between total sendout and HDD, the Company chose to develop its regression equation as a segmented model, i.e., a "regression model where the relationships between the response and one or more explanatory variables are piecewise linear, namely represented by two or more straight lines connected at unknown values:

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3 "R is a language and environment for statistical computing and graphics. It is a GNU project, which is similar to the S language and environment, which was developed at Bell Laboratories (formerly AT&T, now Lucent Technologies). R can be considered as a different implementation of S. There are some important differences, but much code written for S runs unaltered under R. . . . R is available as Free Software under the terms of the Free Software Foundation's GNU General Public License in source code form. It compiles and runs on a wide variety of UNIX platforms and similar systems (including FreeBSD and Linux), Windows and MacOS." Source: https://www.r-project.org/about.html (The R Project for Statistical Computing).

4 Sendout includes both Sales and supplier service (Customer Choice) customer requirements and the Company's Capacity Exempt customers.

these values are usually referred as breakpoints".[5]

Since a significant portion of the Company's sendout is due to space heating usage, and space heating only occurs when average air temperatures fall below a certain level, the segmented model serves as an excellent starting point for modeling the relationship between sendout and HDD. Linear modeling of sendout is appropriate since the Company has not observed any non-linear characteristics in sendout at cold temperatures.

The Company's segmented model equation includes variables the following variables: Intercept is the MMBtu sendout predicted at HDD=0, Slope1 is the MMBtu/HDD usage below the Breakpoint HDD level, Slope2 is the incremental MMBtu/HDD usage above the Breakpoint HDD level, the Standard Error is expressed in MMBtus, and the Breakpoint HDD is the HDD value at which space heating equipment is observed to turn on. The signs of the Slope1 and Slope2 coefficients (positive) imply that as temperatures get colder and HDD increases in value, the sendout will increase, which agrees with what the Company typically observes.

Based on observations of daily sendout, the Company has observed that weekday and weekend sendout requirements are different at similar HDD levels. The Company's regression equations include a second independent variable, a weekday/weekend dummy variable, set to 0 for Mondays through Thursdays, 1 on Fridays and Sundays, and 2 on Saturdays. The sign of the coefficient (negative) implies that for a given HDD level, loads will be lower on Friday through Sunday as compared to Monday through Thursday (i.e., weekend compared to the workweek).

Finally, the Company has observed a correlation between lagged temperature and the residuals of the above equation, so the Company has added a third independent variable: the difference between HDD on day *t* and mean of the HDD on day *t-1* and day *t-2*. The differences were used in lieu of the actual lagged values to avoid correlation among the independent variables. The underlying theory of this analysis is that heating requirements increase as two consecutive days of cold weather occur, which cools down structures to a greater degree than would be experienced on a single day. The introduction of the third independent variable added another incremental improvement in the adjusted R^2 of the equations. The sign of the coefficient (negative) implies that if a day is colder than the average of the previous two days, the increase in sendout will be somewhat lower than what would be forecast without the coefficient, and vice versa.

The functional form of the equation, in pseudo code, is:

```
Sendout = Intercept Coefficient +
          Weekend Dummy Coefficient * Weekend Dummy Variable +
          Slope1 Coefficient * min(HDDt, Breakpoint HDD) +
          if(HDDt<=Breakpoint HDD) {0} else {(Slope1 Coefficient
            + Slope2 Coefficient) *
            (HDDt - Breakpoint HDD)} +
          Lagged Delta HDD Coefficient * (HDDt - average(HDDt-1, HDDt-2)
```

5 Source: "Segmented: an R package to fit regression models with broken-line relationships," R News, Volume 8/1, May 2008, at page 20.

These regression equations capture the observed characteristics of the Company's sendout requirements by gas division. The observed characteristics include the following: (1) sendout requirements are directly related to HDD; (2) sendout requirements are affected by HDDs that occur over a multi-day period; and (3) sendout requirements differ by day of the week. Thus, the Company has developed a set of reliable regression equations to describe wholesale gas sendout by division. Using a series of daily normal HDDs, these equations allow the Company to calculate its history of normalized wholesale gas sendout for each of its four gas divisions.

Exhibit 7, provided in Microsoft Excel format, contains the wholesale volume forecast by rate group for normal and design weather and SENDOUT forecasts (normal and design weather) for capacity planning purposes for volumes and costs.

III.C.2. Wholesale Volume by End-Use

In addition to its segmented regression equations for each gas division, the Company runs similar regression equations for the sum of its four divisions for its capacity-eligible FT-1, capacity-exempt, and non-firm sales customers to best characterize the daily usage patterns of each of these customer groups. Subtracting the daily actual volumes for each of these groups from total daily wholesale sendout, the Company can also characterize the daily usage patterns of its remaining customers: Sales and FT-2. The Sales and FT-2 data are combined since they are not daily-metered customers and their volumes can only be inferred.

These regression equations capture the observed characteristics of the Company's sendout requirements by end-use. The observed characteristics include the following: (1) sendout requirements are directly related to HDDs; (2) sendout requirements are affected by HDDs that occur over a multi-day period; and (3) sendout requirements differ by day of the week. Thus, the Company has developed reliable regression equations to establish the basis upon which future sendout requirements can be forecast. Moreover, the Company has further developed a set of reliable regression equations to describe wholesale gas sendout by end-use. Using a series of daily normal HDDs, these equations allow the Company to calculate its history of normalized wholesale gas sendout by end-use.

Using its forecast of retail demand and an appropriate set of daily HDD values for a design year, the Company can successfully plan its operational requirements to provide a low-cost, adequate, and reliable supply of natural gas to its customers.

III.C.3. Comparison of Historical Retail and Wholesale Volumes to Determine Unaccounted For Gas

To align its historical and forecasted retail volumes to its wholesale data, the Company calculates its unaccounted-for-gas ('UFG') percentage by which the retail data will be inflated to wholesale levels. For the most recent (September 2019 – August 2020) period, the Company's monthly retail volumes match the wholesale volumes to within 2.9 percent, a value that both agrees with expected UFG and indicates that the Company has adequately captured all customer volumes.

III.D. Normalized Forecast of Customer Requirements

The third step in the Company's forecasting methodology is to develop a forecast of customer requirements under normal weather conditions for its demand forecast.

III.D.1. Defining Normal Year for Ratemaking Purposes

To establish the normal year's daily HDD data for ratemaking purposes, the Company calculated the average annual number of HDDs for the T.F. Green (KPVD) weather station for the 10-year period from April 2007 through March 2017, with an average of 5,422 HDD, as documented in its 2017 rate case (RIPUC Docket No. 4770).

The Company then prepared a "Typical Meteorological Year" by selecting, for each calendar month, the month in the T.F. Green weather database that most closely approximated the 10-year average HDD and standard deviation for each month. A summary of the monthly averages for the T.F. Green weather site is listed in the chart below.

Month	HDD	Standard Deviation
Jan	1,083	8.7
Feb	946	7.8
Mar	812	7.6
Apr	464	6.9
May	191	5.4
Jun	41	2.4
Jul	0	0
Aug	2	0.2
Sep	65	3.0
Oct	316	6.8
Nov	610	7.5
Dec	892	7.9
Total	5,422	

Average Monthly HDD and Average of Monthly Standard Deviations for the T.F. Green International Airport Weather Station

III.D.2. Defining Load Attributed to Customers Using Utility Capacity

For the third step of the Company's forecasting methodology set forth in Section III.A, above, the Company allocated the monthly retail volumes to the daily level based on the 2020/2021 reference-year regression equations, using normal year HDD, to yield the forecast of Sales, FT-2 (Customer Choice), and FT-1 (pipeline) customer requirements under normal weather conditions for its demand forecast, based on a 365-day year.

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
Heating Season	25,906	26,011	26,463	26,964	27,151	27,411
Non-Heating Season	10,273	10,459	10,654	10,724	10,820	10,906
Total	36,180	36,470	37,118	37,688	37,972	38,317
Per-Annum Growth		290	648	570	284	345
Per-Annum Growth (%)		0.8%	1.8%	1.5%	0.8%	0.9%

Base Case Normal Year Customer Requirements for Capacity Planning (MDth)

III.E. Design Planning Standards

In the fourth step of the Company's forecasting methodology, the Company determines the appropriate design day and design year planning standards to develop a least-cost, reliable supply portfolio over the forecast period.

III.E.2. Design Year and Design Day Planning Standards

The Company's planning standards represent the defined weather conditions and consequent sendout requirement that must be met by the Company's resource portfolio. The Company's instant Long-Range Plan relies on the planning standards as defined in its 2018 Long-Range Plan. The Company's design year and design day standards are listed in the chart below.

Element	Value
Design Year HDD	6,250
Frequency of Occurrence	1 / 37.47 years
Design Day HDD	68
Frequency of Occurrence	1 / 58.92 years

Design Year and Design Day Criteria

As described below, the Company's analysis of the design year and design day standards demonstrate that these standards are appropriate.

III.E.2.a. Design Day Standard

The purpose of a design day standard is to establish the amount of system-wide throughput (interstate pipeline and underground-storage capacity plus local supplemental capacity) that is required to maintain the integrity of the distribution system. In this filing, the Company defines its design day standard at 68 HDD with a probability of occurrence of once in 58.92 years as a result of its ongoing review of planning standards.

The Company established its design day standard using a three-step process. First, the Company performed a statistical analysis of the coldest days recorded over a historical period. Second, the Company conducted a cost-benefit analysis to evaluate the cost of maintaining the resources necessary to meet design day demand versus the cost to customers of experiencing service curtailments. Third, the Company identified a design day standard that would maintain reliability at the lowest cost.

To perform the statistical analysis necessary to identify the appropriate design day standard, the Company used recorded daily HDD values based on 6,040 observations at the T.F. Green weather site for the November through March periods of 1977/78 through 2016/17. In previous long-range supply plan submissions, the Company had selected the coldest day of each of the most recent 40 heating seasons reflected in the T.F. Green weather data. The change to evaluating a larger data set was necessitated because the distribution of coldest days in the earlier methodology is trending away from a normal distribution. Using its new methodology, the Company found that these 6,040 data points fell within a normal distribution with an average of 55.00 HDD and a standard deviation of 6.13 HDD.

In its design day standard, the Company examined the cost of potential customer curtailments through a cost-benefit analysis. In the event of a service disruption, there are several types of damages that customers could experience. For example, the Company's residential customers would potentially incur re-light costs and freeze-up damages. The Company's Commercial and Industrial customers would potentially incur economic damages associated with the loss of production on the day of the event.

In the Company's design day cost-benefit analysis, the cost of maintaining adequate throughput capacity and the benefit of avoiding damage costs that would be incurred in relation to customer premises are compared. The intersection of the curves set a range for design day planning purposes from approximately 64.3 to 71.0 HDD, with a midpoint of 67.3 HDD. Thus, the Company's design day standard of 68 HDD is within the range of values based on cost and benefit. The Company's analysis indicates that the frequency of occurrence of the Company's design day standard is once in 58.92 years.

III.E.2.b. Design Year Standard

In this filing, the Company defines its design year standard as 6,250 HDD, with a probability of occurrence of once in 37.47 years.

The Company maintains a design year standard for planning purposes to identify the amount of seasonal supplies of natural gas that will be required to provide continuous service under all reasonable weather conditions. If the Company were to have a shortfall in supply during the winter season, the amount of supply in deficit can be translated into an equivalent number of customers whose service would be disrupted for more than one day. For a supply disruption of a multi-day duration, service would be curtailed on a priority basis and would likely fall on Commercial and Industrial establishments before affecting the Residential sector, since supply to the Residential sector is more likely to involve health and personal safety. To establish an estimated annual level of HDDs for which the Company should plan, the Company compared the benefit of maintaining an adequate quantity of natural gas supply under all reasonable weather conditions to the probability-weighted cost of losses that might occur if supplies are not adequate.

The Company has established its design year standard using a three-step process. First, the Company performed a statistical analysis of annual HDD data recorded over a historical period. Second, the Company conducted a cost-benefit analysis to evaluate the cost of maintaining the resources necessary to meet design year demand versus the cost to customers of experiencing service curtailments. Third, the Company identified a design year standard that would maintain reliability at the lowest cost.

As a result of this analysis, the Company has determined that a design year standard of 6,250 HDD is an appropriate level. The Company's analysis indicates that the frequency of occurrence of the Company's design year standard is once in 37.47 years.

III.E.2.c. Specification of Daily Design Year HDD

To generate the daily HDD values for its design year, the Company scaled the daily values for its normal year by the ratio of the annual normal year total to the annual design year total, making any minor adjustment necessary to ensure the peak day of the design year equaled the Company's design day standard.

III.F. Forecast of Base Case Design Year Customer Requirements

In the fifth, and final, step of the Company's forecasting methodology set forth in Section III.A., above, the Company uses the applicable design day and design year planning standards to determine the design day and design year sendout requirements. To accomplish this, the Company combines the springboard equations, which are derived from the sendout regression analysis, with its normal year daily HDD pattern and its design year daily HDD pattern to yield two springboard year estimates of normal year and design year daily customer requirements. Below are the resulting design year requirements for the demand forecast.

	2020/21	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**2025/26**
Heating Season	30,007	30,149	30,671	31,252	31,470	31,773
Non-Heating Season	11,059	11,258	11,468	11,543	11,648	11,741
Total	41,066	41,406	42,139	42,795	43,118	43,513
Per-Annum Growth		340	733	656	323	395
Per-Annum Growth (%)		0.8%	1.8%	1.6%	0.8%	0.9%

Base Case Design Year Customer Requirements for Capacity Planning (MDth)

III.G. Spatial (Zip-code) Design Day Forecast

III.G.1. Purpose

The purpose of the spatial design day forecast is to provide the peak volume on the design day of each zip code for next five years.

III.G.2. Data

The data for this forecast includes: (1) customer history monthly billing data of each rate code for each zip code; (2) historic weather data; (3) history economic data; (4) normalized weather data for future prediction; (5) forecast economic data; (6) zip code based saturation values; and (7) zip code moratorium/engineering constrains (if applicable).

III.G.3. Modeling and Forecasting Process

The entire modeling and forecasting process consists of the following major steps:

- Customer monthly billing data calendarization and monthly aggregation for each major rate code;
- Zip code-based weather data processing and heating degree day (HDD) calculation;
- Meter count number correction to remove outliers and adjust the shifts (big jump or drop) caused by rate code re-definition or some other issues;
- Building meter count monthly model of each major rate code for each zip code;
- Trimming meter count number with the saturation result and moratorium constrains;
- Building volume monthly model of each major rate code for each zip code;
- Monthly volume bill/unbill split;
- Estimate the peak volume on the design data by using an optimization process to provide a best allocation from monthly volume to daily volume. This is a key step for the entire peak volume forecast; and
- From this year (2020), the spatial design day forecast has been extended to a more granular level (Residential vs. Non-Residential) through a separate optimization problem which doubles variables.

III.H. Design Hour Requirements

Once the design day sendout requirement is established, the Company converts this sendout to a design hour based on a 5% peak-hour factor (i.e. the design hour requirement represents 1/20th of the design day requirement). The Company then applies the design hour requirement to its Synergi network analysis modeling software by means of growth factors generated from the spatial (i.e., zip code) forecast. The resulting design hour Synergi models are used to perform various analyses necessary for distribution system operations (e.g., regulator pressure settings, LNG requirements) and capital planning.

On January 29, 2019, Algonquin Gas Transmission, LLC (AGT), one of the interstate pipeline companies that serves the Company, notified the Company (and all AGT customers served by AGT's G Lateral pipeline) that, during peak periods, it may issue orders under its tariff requiring local distribution companies, including the Company, to limit their hourly takes to calculated hourly flow limits at each take station. Under the Company's contracts with AGT, those calculated hourly flow limits are either 1/24th or 6% of the daily MDQ under each contract (see Exhibit 8 for the Company's daily and hourly contract quantities). The total calculated hourly flow limits for each take station are then equal to the combined calculated hourly flow limit for all contracts providing deliveries to each take station. Historically, AGT has not imposed any requirements that its customers manage hourly takes to fall within the calculated hourly flow limits, nor has AGT restricted the Company's ability to balance its overall takes across all take stations.

The January 29, 2019 notice expired on April 1, 2019, and, due to the overall mild winters of 2019/20 and 2020/21, it was not reissued. However, it is possible that AGT could issue a similar notice in the future. AGT could even issue the types of orders described in the January 29, 2019 notice without first issuing another warning should extreme cold temperatures or system issues arise. Accordingly, the Company is making planning decisions so that it can comply with any such future orders. Because the Company's design hour is greater than the daily 1/24th and 6% combination, the Company will ensure that it has sufficient deliverability to meet the design hour requirements of all its customers.[6]

III.I. Capacity Exempt Customer Requirements

Capacity Exempt customers are firm transporters on the Company's distribution system; however, the Company does not plan for their upstream resources. Supply for capacity exempt customers is provided by third-party marketers. Additionally, the Company's capacity eligible FT-1 customers do not receive the storage and supplemental portion of their supplies from the Company's resource portfolio. These storage and supplemental volumes must also be provided by third-party marketers. The Company's forecasting process does include a forecast of these capacity exempt and FT-1 loads for distribution system planning purposes (see table below).

[6] The Company is also served by Tennessee Gas Pipeline (Tennessee). The Company's Tennessee contracts provide for 1/24th hourly flows.

Capacity Exempt and FT-1 Storage/Supplementals Load Summary (Dth)
Base Case Forecast

Normal Year

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
HS	2,765,352	2,679,979	2,813,373	2,917,170	2,911,649	2,891,102
NHS	2,444,224	2,566,287	2,661,450	2,656,404	2,637,523	2,617,551
Total	5,209,576	5,246,266	5,474,823	5,573,573	5,549,172	5,508,653
PA Growth		36,690	228,557	98,751	-24,401	-40,519
Pct Growth		0.7%	4.2%	1.8%	-0.4%	-0.7%

Design Year

	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26
HS	3,050,801	2,951,177	3,096,765	3,209,458	3,203,413	3,181,242
NHS	2,486,598	2,610,777	2,707,589	2,702,456	2,683,248	2,662,930
Total	5,537,399	5,561,954	5,804,354	5,911,914	5,886,661	5,844,172
PA Growth		24,554	242,401	107,559	-25,253	-42,489
Pct Growth		0.4%	4.2%	1.8%	-0.4%	-0.7%
Peak Day	37,178	35,486	37,121	38,335	38,265	38,039

Capacity Exempt and FT.-1 Non-Pipeline Customer Requirements (Dth)

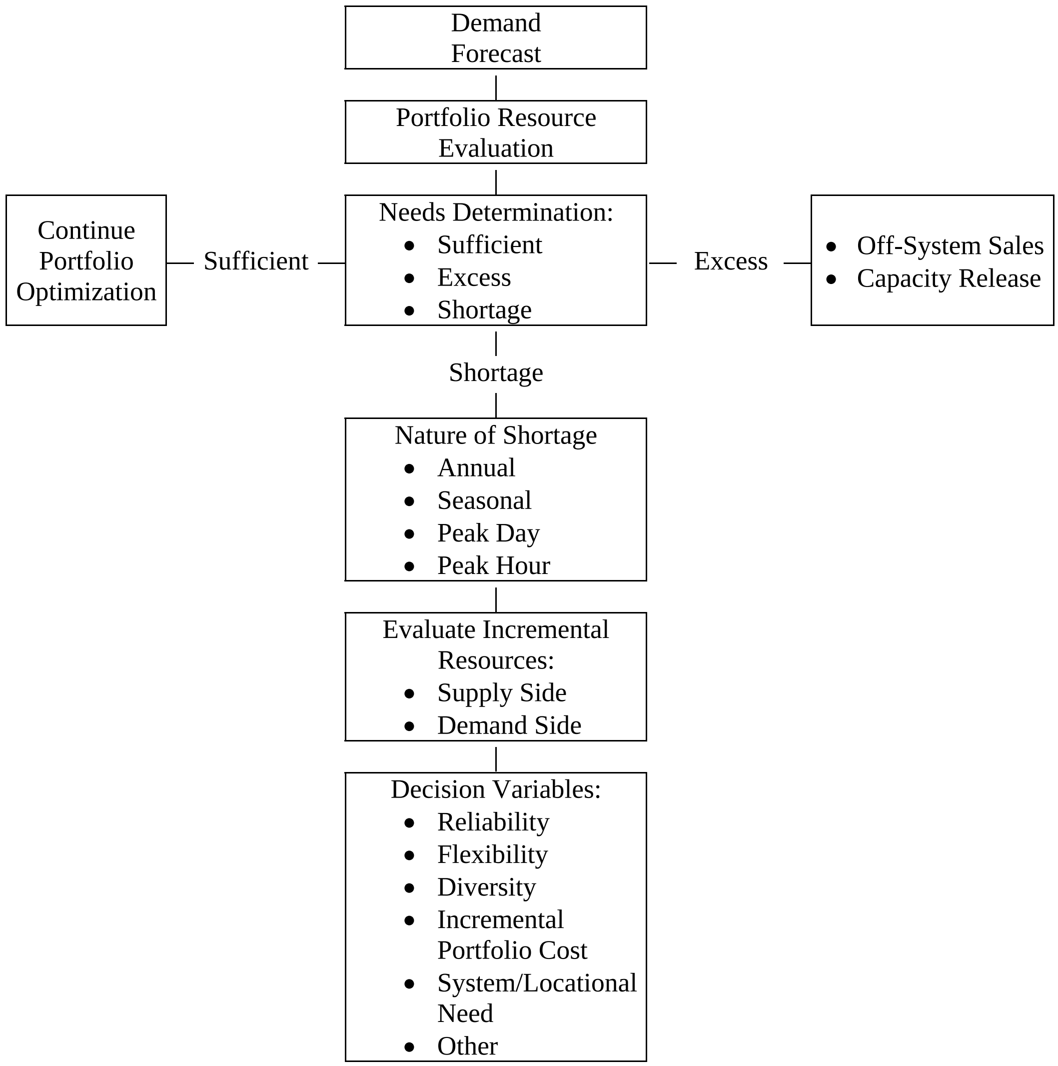
The load duration curves for FT-1 Customers, Capacity exempt Customers and Non-Firm Customers are presented in Exhibits 9 through 11. The Company is providing the back up for this data in Microsoft Excel format.

IV. Design of the Resource Portfolio

IV.A. Gas Resource Portfolio

The Company maintains a resource portfolio that includes pipeline transportation, underground storage, and peaking resources to meet customer requirements on the forecasted design hour, design day, design year, and normal year including a mid-winter cold snap. To meet this obligation, the Company employs an established and reliable approach to demand forecasting and resource procurement. To this end, the Company identifies, evaluates, and acquires a mix of supplies and capacity that minimizes cost while ensuring the reliability of service to firm customers. The following figure is a schematic representation of the Company's resource evaluation and planning process.

19



IV.B. Analytical Process and Assumptions

To evaluate the adequacy of its portfolio relative to forecasted design day and design year customer requirements, the Company performs several analyses. The primary analysis is conducted utilizing the SENDOUT® model. The SENDOUT® model is a linear-programming optimization software tool used to assist in evaluating, selecting, and explaining long-term portfolio strategies. SENDOUT® allows the Company to model its resources in detail and to assess the adequacy and cost of its portfolio. SENDOUT® also aids the Company in evaluating options for incremental resources based on customer requirements and cost. Using the SENDOUT® model, the Company can (1) determine the least-cost portfolio that will meet forecasted customer demand, and (2) test the sensitivity of the portfolio to key inputs and assumptions, as well as its ability to meet the Company's design day and design year planning standards and contingencies. Based on the results of this analysis, the Company can make preliminary decisions on the adequacy of the resource portfolio and its ability to meet system requirements in the near term and over the longer term.

20

The Company also utilizes load duration curve analysis to assess the adequacy of its supply portfolio. Load duration curve analysis allows for a visual comparison of each day's forecasted requirements for the design year with the supplies and resources available to meet those requirements. This type of analysis, coupled with SENDOUT® studies, is helpful in identifying a design heating season shortfall in the supply portfolio.

In recent years, the Company has focused on design hour planning in addition to normal, design, and cold-snap scenarios. The Company maintains Operational Balancing Agreements (OBA) with AGT and Tennessee that allow the Company to balance receipts and deliveries across all gate stations on each of the respective pipelines. In January 2019, AGT issued a notice on its system warning that it might issue future orders that would limit the operational and planning flexibilities the Company historically has exercised pursuant to its contracts with AGT, AGT's Tariff and the OBAs, by requiring AGT customers served by the G Lateral to balance receipts and deliveries by gate station by hour[7]. In response to AGT's warning, the Company adjusted its planning to incorporate design hour distribution system planning as a compliment to design day planning.

The Company identifies the expected design hour requirements at each take station utilizing its Synergi Gas® network analysis modeling software. Synergi Gas® modeling software is used to simulate natural gas transmission and distribution systems. This hydraulic modeling software identifies, predicts, and helps the Company address its operational challenges, enabling day-to-day efficiency of gas distribution and transmission networks. Synergi Gas® software provides the results needed to make design, planning, and operating decisions using robust equations. The identified take station requirements are used to assess the adequacy of the gas supply portfolio, including expected deliveries by marketers, to identify any design hour shortfall. The Company compares the forecasted flows with the supply resources delivered to the take stations which include; contractual hourly entitlements of the Company's existing transportation contracts, on-system peaking assets, and expected deliveries by marketers.

For the purpose of preparing this Long-Range Plan, the Company focused its analysis on design year forecast demand. However, the Company has also analyzed normal year forecasted demand and a cold-snap scenario using the Company's existing resource portfolio and proposed resources necessary to meet requirements. For the design year and normal year analyses, the Company compared resources and requirements for all firm planning load (i.e. firm sales and Customer Choice requirements) and also looked at resources and requirements applicable to firm sales customers only. The examination of these various scenarios enables the Company to test the adequacy and flexibility of the resource portfolio as described previously.

To perform the analysis of these scenarios, the Company incorporated several key assumptions. The Company used the NYMEX Henry Hub and basis forward curves dated June 8, 2021 as key pricing inputs to evaluate these scenarios. To model fixed and variable pipeline and storage costs, the Company relied on tariff rates effective in June 2021. However, the Company is aware of several potential tariff rate changes that may impact costs during the LRP time period:

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7 All of the Company's Tennessee contracts allow for 1/24th hourly deliveries, while the Company's Algonquin contracts allow for a combination of 1/24th and 6% hourly deliveries.

1) On July 31, 2020, Columbia Gas Transmission (TCO) filed a rate case with the FERC proposing a substantial increase in storage and transmission costs starting February 1, 2021. The proposal was the pipeline's first rate case filing at the FERC; the Company intervened in the docket and filed a protest to the proposed rate increase. At this time, a settlement between TCO and the intervening parties to the case has not been reached.

2) On May 26, 2021, Texas Eastern Transmission, LP (Tetco) held an information session on the company's preparations for filing a general Section 4 rate case with the Federal Energy Regulatory Commission in 2021. At that session, Tetco informed participants that the need to file is being driven by a growth in system rate base including capital investments in safety and an expanded pipeline integrity management and modernization program, an increase in its cost of service and increased regulatory risk. Until such time as Tetco makes its Section 4 filing with FERC requesting the rate increase, the impact of the rate filing will not be known; for this reason, the Company has used the currently effective rates in its filing.

Throughout all these scenarios, the Company has assumed that there are no significant changes to the Customer Choice Program since the redesigned program was implemented in November 2020. The Company has also assumed that, throughout the forecast period, there is no change in the Company's service obligation to plan for the capacity requirements of firm, non-Capacity Exempt customers. Therefore, for the purposes of this filing, the Company has included both Firm Sales and Firm Transportation customers that utilize the Company's firm capacity in the SENDOUT® model (i.e. planning load). The Company's analysis assumes that all transportation and storage contracts expiring during the forecast period are renewed at the same cost, the same volume, and with the same operating characteristics except where explicitly discussed. Finally, the Company assumed that its LNG supply contracts and its city gate supply arrangements, will expire on the contract termination date, and are not assumed to be available after the respective date[8]. Where solutions to resolve supply shortfalls have been identified, the Company has modeled the capabilities and costs of incremental assets required to meet design hour, design day, and design year requirements utilizing the best information available as of June 2021.

As previously stated, the Company has also examined its remaining supply portfolio after expected capacity releases to retail marketers and compared that portfolio to forecast requirements for sales customers. While the primary purpose of this analysis is to produce a forecast of gas costs for sales customers, this analysis is also useful to help the Company understand the optimal way to dispatch the assets it is likely to manage on behalf of sales customers.

IV.C. Available Resources

This section describes the Company's current resource portfolio, the Company's expected resource portfolio given certain portfolio decisions the Company has made, and decisions the Company is considering. This section also discusses any modifications that the Company

[8] In order to facilitate feasible solutions in the SENDOUT model, the Company has included a minimal amount of 2022 summer LNG to account for boil-off volumes.

anticipates making to the portfolio during the forecast period to meet sendout requirements. As discussed in more detail below, to meet design hour, design day, and design year sendout requirements, the Company's resource portfolio is composed of the following categories of available resources: (1) transportation contracts; (2) underground storage contracts; and (3) peaking resources. In addition, a discussion of the Company's Natural Gas Portfolio Management Plan is included.

The following Exhibits detail the assets in the Company's supply portfolio:

- Exhibit 8 is a table showing the daily and the hourly contract quantities at each city gate for each transportation contract that delivers to the Company's city gates in Rhode Island on both Tennessee and Algonquin, in the Company's resource portfolio as of November 1, 2021.
- Exhibit 12 is a schematic of the Company's transportation and underground storage contracts effective as of November 1, 2021.
- Exhibit 13 is a table listing and description of each transportation and storage contract in the Company's resource portfolio as of November 1, 2021.
- Exhibit 14 is a listing of portfolio assets with the corresponding path as identified by the Company to which each asset is assigned.

IV.C.1. Transportation Contracts

The Company has capacity entitlements on multiple upstream pipelines that allow for the delivery of gas to its city gates in Rhode Island. The Company has four city gate interconnects with Tennessee: Pawtucket/Cumberland, Lincoln, Smithfield and Cranston. Additionally, the Company has ten city gate interconnects with Algonquin; Dey Street, Westerly, East Providence, Portsmouth, Tiverton, Burrillville, Barrington, Bristol/Warren, Cumberland and Crary Street. The Company's transportation contracts provide access to domestic production fields, as well as liquid trading points that afford the Company a level of operational flexibility to ensure the least-cost dispatch and reliable delivery of gas supplies. The Company's transportation contracts are summarized on pages 1 through 3 of Exhibit 13.

IV.C.2. Underground Storage Services

The Company's underground storage assets are critical to allowing the Company to meet winter-season customer requirements. By using long-haul capacity to fill storage, the Company can use its transportation resources at a higher load factor. Underground storage supplies also allow the Company to serve peak-period requirements with off-peak priced gas supplies. Additionally, underground storage greatly enhances the flexibility of the Company's portfolio, allowing the Company to manage fluctuations in weather from day to day as well as to provide balancing service to transportation customers.

One underground storage service of note within the Company's portfolio is its storage swing service under Rate Schedule Firm Storage Market Area (FS-MA) on the Tennessee pipeline. This storage swing option is designed to allow a daily imbalance tolerance that is equal to the Maximum Daily Withdrawal Quantity (MDWQ), as stated in the Company's storage contract (10,920 Dth per day). The imbalance is treated as an automatic storage injection or withdrawal under the specific contract and assessed applicable charges under the FS-MA contract. The Company has elected its firm storage contract, FS-MA #501, as a storage swing option. This swing option provides vital flexibility to the Company's portfolio in order to manage daily fluctuations in load and avoid imbalance charges and/or penalties.

A summary of the Company's storage services is provided on page 4 of Exhibit 13.

IV.C.3. Peaking Resources

In addition to interstate pipeline and underground storage resources, the Company utilizes peaking resources to meet its design requirements. Peaking supplies are a critical component of the resource mix in that these supplies provide the Company with the ability to respond to fluctuations in weather, economics, and other factors driving the Company's sendout requirements on the coldest days.

IV.C.3.a. LNG Facilities

The Company maintains two permanent on-system LNG storage and vaporization facilities. These facilities enhance reliability and provide a source of supply for the distribution system. Because these resources can be brought on line quickly, these plants can be used to meet hourly fluctuations in demand, maintain deliveries to customers, and balance pressures across portions of the distribution system during periods of high demand. These supplies must be available throughout the heating season to ensure service to customers when the Company has exhausted its available pipeline supplies. It is the Company's practice to have its storage facilities full as of December 1 of each year.

The Company's LNG storage and vaporization capacities are summarized in the table below:

Location	Facility Type	Maximum Vaporization (Dth per day)	Gross Storage Capacity (Dth)
Providence	LNG	95,000	600,000
Exeter	LNG	24,000	202,000
Total	**LNG**	**119,000**	**802,000**

IV.C.3.b. LNG Supply Contracts

Please see the table below for a listing of the LNG supply agreement(s) that are currently part of the Company's portfolio.

Supplier	Maximum Daily Quantity (Dth)	Annual Contract Quantity (Dth)	Term
Constellation	6,000	263,112	Apr 1, 2021 – Nov. 30, 2021
NextEra	2,100	36,928	Apr 1, 2021 – Nov. 30, 2021

The Company contracts for trucking arrangements to guarantee the availability of trailers and drivers to truck LNG from the source point to the Company's LNG facilities throughout the year. The Company has contracted with Transgas and LP Transportation, Inc. to provide LNG trucking services to refill both NG LNG and Exeter for the 2021 off-peak season.

The Company plans to contract for the following in the coming months; (1) liquid refill for the 2021/22 peak season; (2) trucking arrangements for the 2021/22 peak season; (3) liquid refill for the 2022 off-peak season and (4) trucking arrangements for the 2022 off-peak season. As discussed below, the Company is also planning for NGLNG liquefaction service to be available for a portion of the 2022 off-peak season.

IV.C.3.c. Portable LNG Vaporization Contracts

In addition to the Company's LNG storage facilities at Providence and Exeter, the Company also stages portable LNG storage equipment in Cumberland, RI to support design hour system pressures and supply needs in the immediate area by utilizing the on-site vaporization capability. The Company has renewed its agreement for LNG storage services at Cumberland for the 2021/22 heating season, with the option of to an additional heating season. The Company discusses its long-term plans for the Cumberland facility in Section IV.C.10.

The Company has also mobilized temporary portable LNG vaporization equipment in Portsmouth to support its system on Aquidneck Island. This portable equipment provides critical pressure and supply support to Aquidneck Island should near-design day conditions arise. The Company's agreement for equipment rental continues through March 2022 with renewal rights through March 2023[9].

IV.C.3.c.i. 45 HDD Planning Requirement for Aquidneck Island

The Company has agreed to temporarily utilize portable LNG operations on Aquidneck Island as a contingency in the event of Company or non-Company upstream issues that affect pipeline deliveries into Portsmouth. Specifically, the Company plans to have portable LNG operations fully staffed and available for vaporization at 45 HDD conditions or colder with a vaporization capacity of 650 mcfh. The vaporization capacity of 650 mcfh provides approximately 75% of the hourly customer demand on Aquidneck Island at 45 HDD conditions and approximately 50% of the hourly customer demand at 68 HDD conditions. Demand-side initiatives are also being leveraged on Aquidneck Island to offset customer load including

9 While the Company plans to use the Portsmouth equipment during the 2021/22 heating season, it is currently evaluating options to support Aquidneck Island in subsequent years.

community initiatives to increase customer participation in energy efficiency programs and the use of gas demand response pilots.

IV.C.4. Long-Term Supply Agreements

Please see the table below for a listing of the Company's long-term supply agreements that are currently part of the Company's portfolio.

Contract	Description	Maximum Daily Quantity (Dth)	Annual Contract Quantity (Dth)	Term
Constellation	Firm Supply @ Everett, MA into Tennessee	20,000	Dec19 – Mar20: 632,000 Dec20 – Mar21: 651,000 Dec21 – Mar22: 651,000	December 1, 2019 – March 31, 2022
Constellation	Firm Supply RI AGT City gates	14,100	507,600	December 1, 2019 – March 31, 2024

IV.C.5. Citygate Delivered Supply

From time to time, the Company can also contract for city gate delivered supplies to meet customer requirements during the peak season. These supplies represent additional resources that are needed over and above the available assets in the Company's portfolio. These resources allow for a certain volume to be called upon on a daily basis, coupled with a seasonal delivery limitation, and are delivered to the Company's city gates by a third party. The purchasing of city gate delivered supplies can minimize the cost of the resource portfolio because the Company may have the opportunity to avoid annual demand charges for capacity. However, the level at which the Company can depend on such resources varies due to several factors, including, but not limited to; current market conditions, capacity availability, supply availability and overall reliability of the portfolio.

Based on the Company's current forecast requirements, it has not identified a need for additional city gate delivered supplies for the 2021/22 heating season. The Company will explore the need for these supplies when it prepares the next update to its forecast.

IV.C.6. Asset Management Arrangements

At times, the Company may seek to enter into an asset management arrangement (AMA) for certain of the Company's assets. An AMA affords the Company the opportunity to place firm pipeline capacity into the control of a third party that is better able to manage the asset(s) without compromising access to liquid and reliable resources to firm gas customers. Currently, there are multiple assets being managed under AMAs. The Company issues a Request for Proposals (RFP) for AMAs for its Canadian transportation contracts on Union and TransCanada each year. The third parties managing these assets are more active in the Canadian markets than the Company and are therefore able to provide value to the Company's firm customers for the opportunity to manage the assets. During the 2020/21 heating season, the Company awarded AMAs pursuant to a competitive RFP process for a portion of its Columbia pipeline capacity and its Tennessee pipeline capacity from Dracut that is not supplied from the PNGTS path. The Company will continue to assess the portfolio to determine those assets that are well positioned to be managed by a third party.

For the upcoming winter season, the Company is preparing to issue RFPs for the management of its: (1) Canadian assets, including the paths feeding Tennessee via PNGTS and Iroquois, with an option to include its domestic PNGTS and Tennessee capacity, (2) a portion of its Columbia capacity, (3) its Millennium capacity, and (4) its Tennessee Dracut capacity.

IV.C.7. Net Need Analysis

Exhibit 15 contains a comparison of current resources and forecast requirements. Exhibit 16 contains a comparison of current <u>and proposed</u> resources and forecast requirements. Each Exhibit contains summaries for the design day, the design heating season, the design non-heating season, and the design year. These tables show that the Company's proposed portfolio is sufficient to meet forecast customer requirements for the 2021/22 and 2022/23 gas years, but in subsequent years, there is a need for incremental resources driven primarily by the expiration of the Company's long-term supply contracts for city gate delivered supplies and supplies received at Everett. Please see section IV.C.8 in which assumptions about supply at Everett from Constellation are discussed.

The results of the Company's load duration curve analysis, in which it plots design year sales and transportation customer requirements against the supply portfolio, are provided in Exhibit 17. This analysis supports the conclusion above; beginning with the 2023/24 load duration curve and continuing through 2025/26, the unserved area beneath the Customer Requirement line exceeds any surplus above the line indicating a need for incremental resources.

With respect to the design hour, the Company's Synergi analysis was completed using the Company's 2020 models with the design peak hour customer requirements adjusted to meet the 2021 forecast for the three firm customer requirement categories; Sales and FT-2, FT-1 and Capacity Exempt. Exhibit 2 shows the hourly imbalance at each take station for the five-year forecast period. This analysis indicates an overall portfolio deficit in the 2024/25 gas year, requiring incremental resources on both AGT and Tennessee.

IV.C.8. Changes and Proposed Additions to the Company's Resource Portfolio

There have been several changes and several proposed changes to the Company's gas supply portfolio since its last Long-Range Plan filing in June 2020.

27

(1) *National Grid LNG (NGLNG)*

The Company has entered into a Precedent Agreement for liquefaction services for up to 2,616 Dth per day and 507,504 Dth per refill season for a term of 20 years, commencing upon completion of facilities to expand NGLNG's currently existing storage facilities located in Providence, Rhode Island. Based on the most current information from NGLNG on the construction schedule, the liquefaction facilities are now expected to be available for refill in the latter half of the 2022 off-peak season. For SENDOUT model analysis purposes, the Company is using September 2022 as the in-service date. The NGLNG facilities will allow the Company to utilize its existing Algonquin capacity to transport volumes to the proposed liquefaction facility. Currently, the Company has a storage agreement with NGLNG for LNG storage at the Providence site pursuant to an agreement dated November 30, 1998. This agreement is not expected to change.

(2) *Northeast Energy Center, LLC (Northeast Energy)*

The Company has entered into a Precedent Agreement for up to 1,780 Dth per day and 380,920 Dth per refill season for a term of 15 years, commencing upon completion of the necessary facilities. The Northeast Energy project is located in central Massachusetts and is expected to be in-service by the start of the 2023 off-peak season in April. The Northeast Energy project will allow the Company to utilize its existing Tennessee capacity to transport volumes from the Zone 4 production region to the proposed liquefaction facility located in Zone 6. The LNG will be trucked from the facility to the Company's LNG facilities in Rhode Island.

(3) *PNGTS Capacity*

This capacity was fully phased in effective November 1, 2020, allowing the Company to reduce its exposure at Dracut and allows the Company to access up to 29,000 Dth per day from Dawn, Ontario by way of agreements with Union, TransCanada, and PNGTS to deliver firm supplies into Dracut. The PNGTS Agreement feeds into the Company's existing Dracut capacity (29,000 Dth per day).

(4) *Incremental Winter Liquid Volumes (LNG)*

To support the portable LNG storage operations at Cumberland and Portsmouth, the Company will need to pursue a supplemental winter-only LNG purchase agreement.

As was contracted for last year, the Company also plans to purchase 125,000 Dth of additional winter-only liquid for the Exeter and NGLNG/Providence LNG facilities to accommodate balancing on an intraday and hourly basis throughout the 2021/22 winter season.

(5) *Constellation LNG LLC (fka Domac, fka Distrigas)*

At this time, it remains unclear if Constellation LNG LLC will continue to operate its LNG import terminal at Everett, MA beyond 2024. Closure of the facility would impact the New England region's ability to supply winter vapor and summer liquid to firm gas customers. For SENDOUT purposes and for discussion, the Company has assumed that the facility will no longer be operational after the 2023/24 winter.

IV.C.9. Future Portfolio Renewal Decisions

During the forecast period, the Company will be faced with critical decisions regarding the expiration of various transportation, underground storage, and peaking contracts in the supply portfolio. These decisions will be made based on the wholesale demand forecast, which incorporates the impact of the Company's energy efficiency as well as any future demand side management programs.

The Company will employ a two-step analysis to reach decisions on contract renewals, as well as the addition of new resources. First, depending on the type of need, the Company will canvas the marketplace to determine the availability of a replacement or new resource. Where appropriate, the Company will solicit competitive bids to determine the lowest-cost available resource.

The Company will evaluate non-price factors associated with the available replacement or new resource option. The Company will consider the flexibility, diversity, reliability, and contract term to determine the least-cost, most reliable option to meet the Company's resource need.

Absent the development of new incremental capacity projects or upgrades to on-system facilities that present cost-effective alternatives to the existing resource portfolio, the Company expects to renew its existing contracts for an extended time period to maintain flexibility, diversity, and reliability consistent with least-cost principles. As discussed above, pipeline rates for legacy capacity[10] are advantaged by the significant depreciation of plant and rate base associated with legacy capacity, as well as by revenue requirement recovery at average cost-based rates. Moreover, the respective interstate pipelines flow natural gas at higher load factors (with greater billing determinants), which helps to maintain the low rates associated with these pipelines.

IV.C.10. Long-Term Cumberland Solution

For the past several winters, the Company's interim solution to meet customer requirements in northern Rhode Island and manage system pressures has depended upon portable LNG operations at the former LNG plant on Scott Road in Cumberland, RI. The Company will continue to rely on the interim solution until a permanent solution is in service.

[10] "Legacy capacity" is defined herein as firm interstate pipeline transportation and storage service provided to the Company and other local distribution companies under FERC-approved rate schedules that were in effect upon, or soon after, the unbundling of the U.S. interstate pipeline system resulting from FERC Order No. 636.

The Company completed its review of multiple options for a permanent solution to address capacity needs, driven by the peak hour requirements, in northern Rhode Island. Selection of a permanent solution focuses on securing additional infrastructure to the northern Rhode Island region to meet both design day and design peak hour needs. The Company has determined that the permanent solution is to rebuild the Scott Road take station and the Cumberland LNG facility.

The Company needs to rebuild the Scott Road take station to address several existing integrity issues. In addition, the Company will design the rebuild to ensure the flow capacity will meet long-term forecasted customer requirements. The Company started development of this project in April 2020, with a target gas in-service date of November 2023. Once rebuilt, the Company will have the capability to receive incremental volumes from Tennessee should they be available[11].

The Company needs to rebuild the Cumberland LNG facility to meet forecasted design peak hour requirements. The Company will design the LNG facility to ensure the hourly flow capacity will meet the long-term forecasted design peak hour customer requirements. The Company started developing this project in April 2020. The target construction start date is September 2028. Until the LNG facility is in service, the Company will continue to operate portable LNG to meet the design peak hour requirements.

IV.C.11. Natural Gas Portfolio Management Plan (NGPMP)

In 2009, in Docket No. 4038, the PUC approved the Company's NGPMP, which discontinued contracting the natural gas portfolio from an external third-party asset management agreement to a portfolio managed primarily by the Company. In March 2016, also in Docket 4038, the PUC approved modifications to the management of the Company's NGPMP that were designed to provide various financial, regulatory, and risk management benefits over previous asset management arrangements. The Company uses transportation contracts, underground storage contracts, peaking supplies, and supply contracts to purchase gas supplies to economically and reliably serve its sales customers. Additional purchases and sales may be made to generate revenue by extracting value from any assets that are not required to serve customers on any day. The mix of supply, transportation, and storage contracts allows for sales customers to receive natural gas during periods of high-demand, and to optimize the value of an asset when not needed. Opportunities to optimize may be limited and are subject to prevailing market conditions, which may include: the fluctuation in the price of natural gas, the value of temporarily unused assets, the existence of excess transportation and storage capacity, and the opportunity to optimize delivered supplies as storage fill opportunities arise. Unless otherwise directed by the PUC, the Company will continue to manage the natural gas portfolio as specified in the NGPMP.

[11] The Company will work with Tennessee Gas Pipeline as the rebuild progresses to determine the availability of incremental upstream capacity. The Company will endeavor to optimize alignment between the rebuild of the take station and the potential capacity addition.

IV.D. Portfolio Costs

The Company plans its portfolio to meet the forecast design day and design annual requirements of its firm sales, FT-2, and a portion of its FT-1 customers. Detailed information regarding costs of the full portfolio are presented in Exhibits 18 through 21. Cost projections were developed using the New York Mercantile Exchange (NYMEX) Henry Hub forward curve from June 8, 2021 in conjunction with forecasted regional basis from a combination of public and internally developed forward price curves.

In Exhibit 18, the Company has provided a projection of costs for its full supply portfolio assuming design weather. This projection provides a sense of the overall variable and fixed costs for all customers, including transportation customers. By evaluating these costs assuming design weather, the variable costs of all portfolio assets are reflected, including peaking assets, which are unlikely to be needed during normal weather. This Exhibit is formatted similarly to exhibits provided in the Company's Gas Cost Reconciliation (GCR). Total annual fixed costs for the 2021/22 gas year are projected to be approximately $95 million for the Company's transportation, storage, and supply agreements. Of the $95 million, $16 million is attributable to estimated supplier fixed costs. Total annual variable costs for the same period are projected to be approximately $128 million assuming design weather. Combined fixed and variable costs are projected to be $223 million.

In Exhibit 19, the Company has provided a preliminary estimate of the fixed and variable costs that will support the GCR, to be filed in August 2021. The GCR pertains solely to sales customers and assumes normal weather. The fixed costs of pipeline capacity and storage released to marketers are not included in the GCR, nor are the variable costs attributable to transportation customers. Total annual fixed costs for the 2021/22 gas year are projected to be approximately $83 million for the Company's transportation, storage, and supply agreements for sales customers. Total annual variable costs for the same period are projected to be approximately $79 million assuming normal weather. Combined fixed and variable costs are projected to be $162 million. On a unitized basis, as shown on Page 4 of Exhibit 19, the weighted average commodity cost is estimated to be $2.707 per dekatherm. For reference, the straight average NYMEX Henry Hub forward curve for the 2021/22 gas year is $2.988 per dekatherm.

Exhibit 20 provides the projected unitized costs by path for all customers and sales-only customers accounting for normal and design weather. Pages 1 through 4 of Exhibit 20 show the unitized 100% load factor cost of each path dispatched to meet customer requirements, which includes fixed costs, variable pipeline and storage costs, and commodity costs of gas supplies. Pages 5 through 8 of Exhibit 20 show the effective cost of each path at the expected load factor. These pages also include variable costs but differ from the prior pages in that the annual fixed costs for each path are unitized by the volume projected to be dispatched on each path. For paths with high load factors, the costs projected on pages 1 through 4 and on pages 5 through 8 will be relatively close; for paths with lower load factors, there will be a greater relative difference.

Exhibit 21 is an estimate of fixed costs by contract in the Company's portfolio including transportation contracts, storage contracts, and supply contracts. Pages 1 through 4 of Exhibit 21 show the unitized 100% load factor cost of each contract, which does not vary between normal and design weather. Pages 5 through 12 show the effective cost of each contract accounting for projected load factor.

IV.E. Customer Choice Program

IV.E.1 Overview of the Company's Customer Choice Program

The Company's Customer Choice Program is an optional supplier choice program that allows the Company's Small, Medium, Large, and Extra Large Commercial and Industrial (C&I) customers to purchase gas supplies from sources other than the Company for transportation service by the Company. The Company continues to provide distribution and related services to all of its customers, including those that receive gas supply from a third party. Service is classified as either Firm Transportation Service FT-1 or Firm Transportation Service FT-2.

FT-1 service is available only to Large and Extra Large C&I customers. This service provides firm transportation of customer-purchased gas supplies to customers who elect to have their gas usage recorded on a daily basis at the customer's point of delivery. This service requires daily balancing of deliveries and usage by the Marketer, which includes meeting the impact of unanticipated swings in weather and/or demand. The Company plans only for pipeline assets required to serve FT-1 customer requirements and does not plan for any storage and peaking assets required to serve these customers.

FT-2 service is available to all C&I customers. FT-2 service does not require the recording of daily gas usage at the customer's point of delivery, and as such, requires the Company to assume substantial responsibility for balancing the customer's deliveries and usage on a daily basis. Under FT-2 service, the Company informs the Marketer of the required deliveries for the upcoming gas day and is responsible for meeting any difference between the forecast and actual quantities as a result of weather or other factors, through storage and peaking services. For this reason, the Company plans for pipeline, storage, and peaking assets to meet the peak day requirements of FT-2 service.

The impact of the Customer Choice Program on portfolio planning coupled with the capacity constraints that exist on the interstate pipelines serving New England, specifically Algonquin and Tennessee, impelled the Company to re-examine its Customer Choice Program. In the Company's 2019 Long-Range Plan filing, the Company committed to considering the overall framework of the program and where appropriate seek to implement modifications to better align the program to support portfolio planning needs. Further, the review would consider several aspects of the Customer Choice Program including but not limited to; impact of customer load for which the Company is not responsible to plan for[12], capacity exempt eligibility criteria, alignment of mandatory capacity release with customer location, nomination and pooling flexibilities and balancing and cashouts. The Company committed to presenting its recommendations once the review was completed. Further, the Company's 2019/20 GCR Docket No. 4963 approved the Division's recommendation for the Company to work with the Division to evaluate the Company's cost allocation procedures for interstate pipeline firm transportation capacity assigned to firm transportation customers and to reflect modifications to the prior approach, which addressed the allocation of fixed gas supply reservation charges. In the

[12] This load includes Capacity Exempt Customers as well as the storage and peaking load of the capacity eligible FT-1 Customers.

Company's 2020 LRP filing Docket No 5043 the proposed plans were discussed and in Docket 5067 the Commission approved the change for implementation.

In November 2020, the Company successfully implemented the program changes which allowed the Company to release a pro rata share of each significant capacity path based on the Company's portfolio, thereby eliminating the previous "pick a path" approach to capacity release. Furthermore, since Marketers have access to largely the same assets as the Company, the commodity adjustment related to the "pick a path" methodology was also eliminated. Customers taking either FT-1 or FT-2 service are assigned certain pipeline assets. As discussed above, FT-2 customers are also allocated a portion of storage and peaking resources needed to meet peak day requirements. The storage and peaking resources are not physically released to customers, but are instead managed by the Company and provided to customers at the city gate. Mandatory capacity assignment enables the Company to ensure that there is adequate capacity upstream of its city gates and to maintain the operational integrity of the distribution system. It also prevents certain customers from avoiding responsibility for the cost of the Company's long-term capacity commitments given these customers' ability to avail themselves of competitive options. The Company has listed projected releases for the upcoming gas year in Exhibit 22.

Not all customers under the Company's Customer Choice Program are assigned capacity. Pursuant to the Settlement Agreement dated October 7, 1999, approved by the PUC in Docket No. 2902 (1999 Settlement Agreement), new customers who were classified as either Large or Extra-Large C&I customers and who were not previously served on firm sales service were given a one-time option to waive the Company's assignment of pipeline capacity. This one-time election is built into the Company's Tariff today.

In addition, pursuant to the 1999 Settlement Agreement, firm transportation customers transporting prior to November 1, 1997 were also given the one-time option of waiving the Company's mandatory capacity assignment shortly after the PUC's approval of the 1999 Settlement Agreement. For "grandfathered" customers who elected this waiver, those customers were thereafter ineligible to return to the Company's firm sales service.

IV.E.2 Impact of the Customer Choice Program on Portfolio Planning

In the Company's 2018 Long-Range Plan filing (page 40), the Company provided the following high-level summary of the impact of the Customer Choice Program on portfolio planning:

> On September 8, 2014, the Company filed a proposal to make certain changes to its Customer Choice Program in Docket No. 4523. In summary, the Company proposed three specific changes. First, regarding pipeline delivery requirements, the Company proposed to require a certain level of daily pipeline receipts on each of the upstream pipelines, Algonquin and Tennessee. Second, regarding the peaking assets calculation, the Company proposed to modify the FT-2 Demand Rate and associated peaking purchases to include certain pipeline assets and associated supplies in the calculations to more accurately reflect the usage of such assets. Third, regarding daily nominations under operational flow order conditions, the Company proposed to require a certain level of pipeline deliveries before FT-2 storage and peaking assets could be nominated. The

Company proposed such changes to address the overall design of the Company's Customer Choice Program, as well as the impact to the reliability of the overall gas resource portfolio and the appropriate allocation of costs among all customers. The proposed changes were accepted and went into effect on November 1, 2014. Since then, no other substantive changes have been made to the Customer Choice Program. However, as load on the distribution system continues to grow, the disconnect with how customers that have opted for Transportation service are actually served, as compared to how third-party marketers are obligated to serve them under the Customer Choice Program, continues to grow. This disconnect exists for all Transportation customers, including both those eligible for capacity assignment and those that are capacity exempt and, therefore, not eligible for capacity assignment. For example, under the Customer Choice Program, a third-party marketer can elect to take assignment of a capacity path that delivers to the Algonquin-fed side of the distributions system on behalf of a customer that is physically served from the Tennessee-fed portion of the distribution system. Then, on a day-to-day basis, to serve that customer the marketer only has to deliver a minimum of 40 percent of the customer's supply on Tennessee, with the remainder delivered on Algonquin.[13] In these circumstances, the overall portfolio of assets, including on-system peaking, allow for the entire system to remain in-balance with the pipelines at the end of the day. Capacity-eligible customers share in the overall cost of the portfolio through mandatory capacity assignment; Capacity Exempt customers do not. This disconnect between where loads are and how they are served was exacerbated with the decommissioning of the Company's Cumberland LNG plant. The Company no longer has the on-system resource to balance loads in that "pocket" of the distribution system and has to rely on pipeline deliveries from third parties that do not all have primary point capacity to the Company's city gates in Rhode Island. This is not sustainable for the long-term reliability of the distribution system, especially given the capacity constraints that exist on the interstate pipelines serving New England, specifically Algonquin and Tennessee. The Company is in the initial stages of its analysis and will present its findings and recommendations once completed.

In the Company's 2019 Long-Range Plan filing, the Company provided the results of its initial analysis, looking at the total hourly supply/demand balance at each gate station on both Algonquin and Tennessee[14]. As part of total load, the Company included the load associated with all FT-1 customers, whether the Company plans on their behalf or whether or third-party marketer provides deliveries. This FT-1 load was mapped to the gate station each of the customers is served from and the total volumes third-party marketers are expected to deliver was mapped to the gate stations to which they deliver. The results of this analysis showed an hourly imbalance at several of the Company's gate stations on both Algonquin and Tennessee. To meet the forecasted peak hour requirements for 2020/21 winter season, the Company contracted for additional resources. The results of the analysis using updated forecasted information are presented in Exhibit 2.

[13] Marketers are required to deliver a minimum of 40 percent on each pipeline and the remaining 20 percent on either or both pipelines.

[14] The analysis was performed using the June 2018 forecast for the 2019/20 through 2023/24 gas years.

In Docket No. 5066, the Company, in coordination with the Division, began allocating the fixed costs of assets used to specifically meet the hourly requirements of the distribution system to all customers. The fixed costs of several supply and transportation contracts that provide critical peak hour support are included in the DAC System Pressure factor and excluded from the GCR. Due to generally mild weather experienced during the 2020/21 winter, these assets were not dispatched to meet hourly distribution system needs. Therefore, the Company is not proposing to include any variable costs associated with these assets in the System Pressure Factor. The Company will assess the need to reconcile variable costs for these assets annually in its GCR and DAC filings.

IV.E.3. Future Changes to the Customer Choice Program

As part of its review of the Customer Choice Program over the past several years, the Company considered changes to the Capacity Exempt criteria currently contained in the tariff, specifically the ability of Capacity Exempt customer to become Capacity Eligible. Because of the complexities, including operational feasibility, of such changes, the Company bifurcated this issue from the modifications to the Capacity Eligible program implemented in November 2020. The Company committed to communicating and collaborating with third-party marketers throughout the entire transition process of the Company's Customer Choice Program. At this time, the Company has not initiated further discussions with stakeholders regarding additional changes to the Customer Choice Program, including changes to the Capacity Exempt criteria.

V. Fulfilment of the Joint Memorandum of the Company and the Division Regarding the Long-Range Plan

The Joint Memorandum between the Company and the Division states that the annual Long-Range Plan filings will include certain information[15]. A listing of this information is provided in the table below along with the referenced exhibit providing such information in this filing.

[15] Pursuant to discussions with the Division, the Company and the Division have refined the list of information to be provided pursuant to the Joint Memorandum as part of the annual Long-Range Plan filings.

Item	Description	Reference
1	Retail volume forecast by rate group for normal weather	Exhibit 1 Exhibit 4
2	Retail meter count forecast by rate group for normal weather	Exhibit 5 Exhibit 6
3	Rhode Island Economic Forecast variables for normal weather	Exhibit 3
4	Wholesale volume forecast by rate group for normal and design weather	Exhibit 7
5	SENDOUT forecasts (normal and design weather) for capacity planning purposes for volumes and costs.	Exhibit 7
6	Updated portfolio information showing all changes to the portfolio (capacity/supply/LNG), including: • Updated Exhibit 12 (schematic) if any changes have occurred; • Updated Exhibit 13 (a description of the contracts within the portfolio, including expiration date and evergreen provisions); • Updated Exhibit 8 (table showing the daily and the hourly contract quantities at each city gate for each transportation contract that delivers to the Company's city gates in Rhode Island on both Tennessee and Algonquin, in the Company's resource portfolio)	Exhibit 8 Exhibit 12 Exhibit 13
7	Detailed information on needs for upcoming winter season, including SENDOUT analysis showing derivation of need.	Exhibit 15
8	Discussion of subsequent four-years and associated need and what the Company is pursuing with potential suppliers and pipelines to meet customer requirements, as well as expected costs of options.	Exhibit 15 Exhibit 16
9	Provide historic (5-10 years) and projected (out 5 years) annual wholesale load duration curves showing the following: • Stack existing supply resources (by path) against the daily wholesale load duration curve for historic period; • Stack proposed supply resources (by path) against the daily wholesale load duration curves for the projected periods; • Stack existing supply resources (by path) against the daily wholesale load duration curves for the historic November-March period; • Stack proposed supply resources (by path) against the wholesale load duration curves for the projected November-March periods; and • The Company will endeavor to develop equivalent hourly wholesale load duration curves	Exhibit 17
10	For individually metered high load factor Transportation customers, the Company will develop aggregated annual historic (5-10 years) and projected (out 5 years) load duration curves. For those customers with hourly metering, the Company will endeavor to provide the historic (5 years) aggregated hourly load duration curve	Exhibit 9 Exhibit 10 Exhibit 11
11	The Company will provide fixed cost of existing and proposed supply resources on a dollar per dekatherm (Dth) per day basis (annualized). Once individualized, then the Company will provide the same annualized information by path.	Exhibit 20 Exhibit 21
12	For each existing and proposed supply resource (by path), the Company will provide an estimated <u>effective</u> Fixed Cost (on a Dth per day basis) (i.e., taking into account load factor utilization) for the current period and forecasted time periods for both its normal and design weather scenario, which is the basis of the Company's decision-making.	Exhibit 20 Exhibit 21

VI. Exhibits

2021 National Grid RI Volume Forecast (Dth)
Planning Year (Nov-Oct)

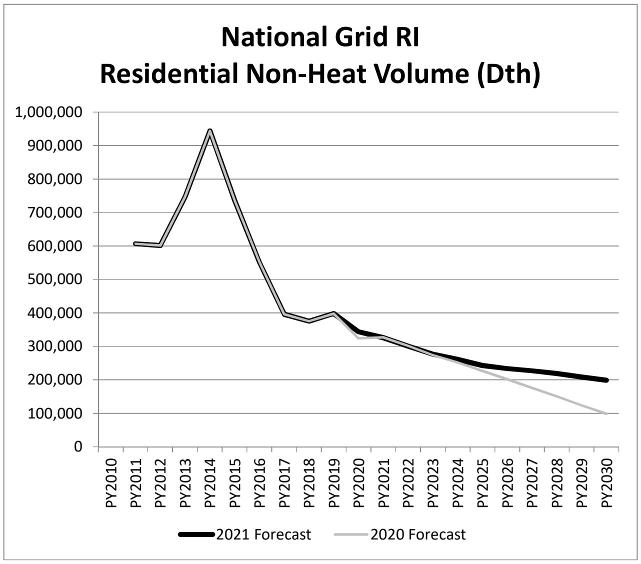
Chart III-B-1
Page 1 of 2

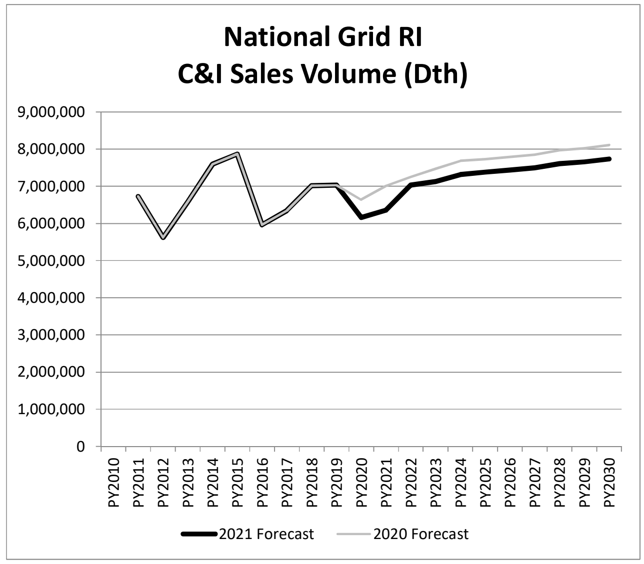
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,350	17,738,289	6,726,982	7,680,544	2,569,158	35,321,323	2,267,651	37,588,973
PY2012	601,399	14,783,757	5,621,832	7,610,425	2,333,884	30,951,297	2,195,914	33,147,211
PY2013	746,890	17,315,788	6,583,721	8,278,483	3,049,869	35,974,752	2,014,144	37,988,895
PY2014	944,174	19,573,872	7,599,237	8,563,673	3,548,382	40,229,338	1,793,702	42,023,040
PY2015	736,952	20,389,772	7,870,336	9,416,525	3,680,836	42,094,420	1,828,764	43,923,185
PY2016	551,336	16,675,372	5,959,428	8,656,943	3,569,930	35,413,008	1,865,144	37,278,152
PY2017	395,749	18,594,274	6,348,282	8,698,747	3,950,370	37,987,422	1,860,594	39,848,016
PY2018	375,502	19,943,709	7,021,050	9,022,578	4,205,501	40,568,340	1,938,339	42,506,679
PY2019	397,877	20,381,718	7,033,149	8,768,235	4,469,173	41,050,152	2,012,027	43,062,179
PY2020	343,560	19,204,168	6,161,983	8,208,510	4,313,144	38,231,365	2,067,717	40,299,082
PY2021	325,747	18,874,655	6,358,826	7,907,310	4,334,777	37,801,316	2,045,839	39,847,155
PY2022	300,785	20,203,541	7,034,186	7,779,116	4,766,925	40,084,553	2,459,542	42,544,095
PY2023	276,392	20,488,801	7,126,983	8,050,746	4,832,976	40,775,897	2,499,722	43,275,619
PY2024	260,581	20,878,142	7,319,546	8,134,775	4,898,558	41,491,601	2,511,128	44,002,729
PY2025	242,867	21,008,058	7,382,548	8,080,974	4,908,508	41,622,955	2,495,241	44,118,195
PY2026	233,703	21,239,154	7,443,635	8,034,205	4,934,251	41,884,947	2,482,684	44,367,632
PY2027	226,965	21,467,738	7,503,053	7,989,121	4,959,688	42,146,566	2,470,607	44,617,173
PY2028	218,461	21,828,142	7,607,716	7,958,767	5,010,890	42,623,977	2,463,942	45,087,919
PY2029	208,599	21,934,358	7,656,121	7,914,767	5,031,032	42,744,877	2,451,954	45,196,830
PY2030	198,661	22,170,600	7,736,384	7,885,606	5,070,235	43,061,486	2,445,121	45,506,607
PY26/PY21	-6.4%	2.4%	3.2%	0.3%	2.6%	2.1%	3.9%	2.2%

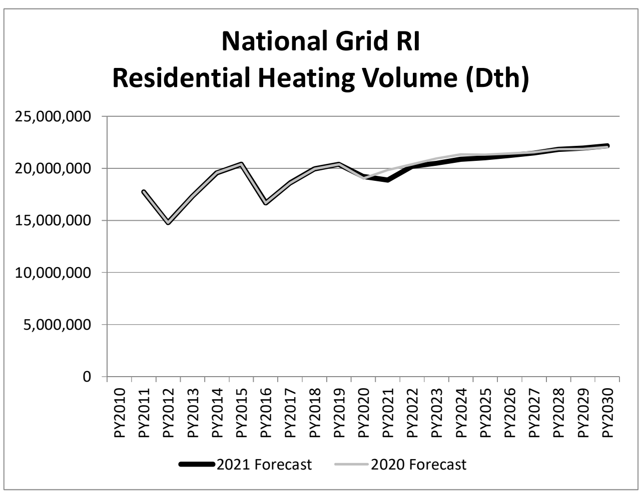
2020 National Grid RI Volume Forecast (Dth)
Planning Year (Nov-Oct)

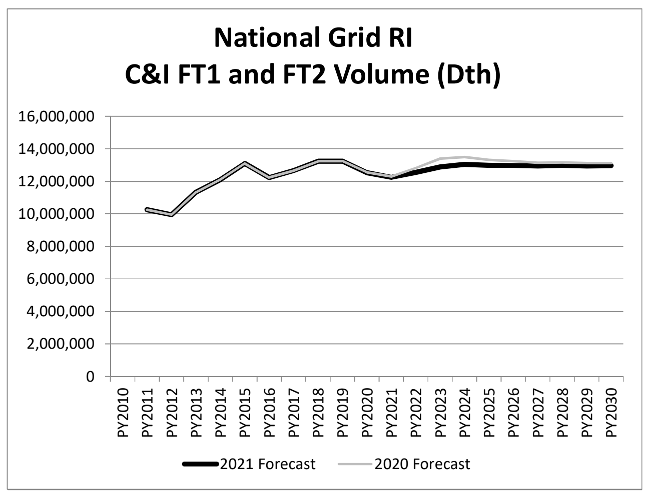
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,350	17,738,289	6,726,982	7,680,544	2,569,158	35,321,323	2,267,651	37,588,973
PY2012	601,399	14,783,757	5,621,832	7,610,425	2,333,884	30,951,297	2,195,914	33,147,211
PY2013	746,890	17,315,788	6,583,721	8,278,483	3,049,869	35,974,752	2,014,144	37,988,895
PY2014	944,174	19,573,872	7,599,237	8,563,673	3,548,382	40,229,338	1,793,702	42,023,040
PY2015	736,952	20,389,772	7,870,336	9,416,525	3,680,836	42,094,420	1,828,764	43,923,185
PY2016	551,336	16,675,372	5,959,428	8,656,943	3,569,930	35,413,008	1,865,144	37,278,152
PY2017	395,749	18,594,264	6,348,282	8,698,747	3,950,370	37,987,412	1,860,594	39,848,006
PY2018	375,500	19,943,386	7,021,056	9,022,578	4,205,501	40,568,021	1,938,339	42,506,360
PY2019	397,642	20,381,686	7,030,001	8,770,816	4,479,693	41,059,838	2,012,039	43,071,878
PY2020	323,837	19,039,603	6,639,392	8,251,676	4,300,551	38,555,058	1,890,633	40,445,691
PY2021	327,328	19,842,428	7,014,708	8,051,014	4,235,312	39,470,789	1,799,964	41,270,753
PY2022	301,598	20,377,128	7,254,018	8,426,323	4,388,407	40,747,475	1,880,060	42,627,535
PY2023	274,203	20,948,766	7,472,223	8,866,659	4,529,798	42,091,649	1,941,674	44,033,323
PY2024	251,856	21,339,906	7,686,813	8,908,249	4,589,397	42,776,222	1,936,813	44,713,035
PY2025	226,569	21,313,493	7,731,019	8,749,950	4,573,365	42,594,397	1,904,790	44,499,187
PY2026	201,699	21,431,465	7,791,207	8,647,306	4,584,956	42,656,633	1,884,881	44,541,514
PY2027	176,056	21,553,988	7,849,419	8,550,507	4,596,793	42,726,763	1,866,108	44,592,871
PY2028	150,402	21,841,445	7,974,627	8,517,749	4,646,435	43,130,657	1,861,753	44,992,409
PY2029	123,602	21,862,099	8,022,933	8,458,272	4,660,570	43,127,475	1,851,302	44,978,778
PY2030	98,317	22,039,250	8,113,332	8,430,431	4,697,161	43,378,491	1,847,671	45,226,162
PY26/PY21	-9.2%	1.6%	2.1%	1.4%	1.6%	1.6%	0.9%	1.5%

Chart III-B-1
Page 2 of 2









RESULTS FOR WINTER 2021/22 THROUGH 2025/26
Design Peak Hour Table

				2021/22		
Pipeline/LNG	Lateral	Take Station	Meter No.	Total Supply Deliveries Company & Marketers (Dth/hr)	Total Firm Peak Hour Model Flow (DTH/hr)	Total Firm Peak Hour Balance (-) = Shortfall (+) = Surplus (DTH/hr)
AGT	G	Barrington	00064	0	0	0
AGT	G	Warren	00012	811	759	52
AGT		Burrillville	00044	0	28	-28
AGT	G	Crary St	00842	0	3,931	-3,931
AGT	G	Dey St	00004	5,331	2,088	3,243
AGT	G	Cumberland	00083	42	24	18
AGT	G	Portsmouth	00013	1,045	1,045	0
AGT	G	Tiverton	00033	56	64	-9
AGT	G	E Providence	00010	1,698	1,050	647
AGT	E	Westerly	00008	144	120	23
AGT		Montville	00059	208	213	-5
TGP	Cranston	Cranston	420750	3,315	1,959	1,355
TGP	Cranston	Lincoln	420758	1,283	1,371	-87
TGP	Cranston	Smithfield	420910	450	1,566	-1,116
TGP		Cumberland	420135	1,343	1,343	0
PORTABLE LNG		Portsmouth		650	158	492
LNG		Exeter		1,000	1,000	0
LNG (incl. NGLNG)		Providence		3,958	3,958	0
PORTABLE LNG		Cumberland		750	750	0
			Total:	22,084	21,428	656
AGT	G-6 Only (Feed Prov Area)			7,840	7,828	12
AGT	G-2 (Feed Tiv & AI)			1,101	1,109	-9
AGT	E			352	334	18
TGP	Cranston			5,048	4,896	152

Notes

1) Flows reflect a managed system for Northern Rhode Island.
2) Flows reflect 2020 hydraulic model with a global adjustment to have demand match sendout for Capacity Exempt, FT-1 and rest of customers (SFT2) for the June 2021 forecast for Rhode Island and the region focused June 2021 forecast for Aquidneck Island.

RESULTS FOR WINTER 2021/22 THROUGH 2025/26
Design Peak Hour Table

				2022/23		
Pipeline/LNG	Lateral	Take Station	Meter No.	Total Supply Deliveries Company & Marketers (Dth/hr)	Total Firm Peak Hour Model Flow (DTH/hr)	Total Firm Peak Hour Balance (-) = Shortfall (+) = Surplus (DTH/hr)
AGT	G	Barrington	00064	0	0	0
AGT	G	Warren	00012	811	765	46
AGT		Burrillville	00044	0	28	-28
AGT	G	Crary St	00842	0	3,984	-3,984
AGT	G	Dey St	00004	5,363	2,127	3,236
AGT	G	Cumberland	00083	42	24	17
AGT	G	Portsmouth	00013	1,045	1,044	1
AGT	G	Tiverton	00033	56	65	-10
AGT	G	E Providence	00010	1,698	1,136	561
AGT	E	Westerly	00008	144	122	22
AGT		Montville	00059	208	219	-11
TGP	Cranston	Cranston	420750	3,362	2,132	1,230
TGP	Cranston	Lincoln	420758	1,283	1,379	-95
TGP	Cranston	Smithfield	420910	450	1,586	-1,136
TGP		Cumberland	420135	1,343	1,343	0
PORTABLE LNG		Portsmouth		650	181	469
LNG		Exeter		1,000	1,000	0
LNG (incl. NGLNG)		Providence		3,958	3,959	-1
PORTABLE LNG		Cumberland		750	750	0
			Total:	22,163	21,846	317
AGT	G-6 Only (Feed Prov Area)			7,872	8,013	-141
AGT	G-2 (Feed Tiv & AI)			1,101	1,110	-9
AGT	E			352	341	11
TGP	Cranston			5,095	5,096	-1

Notes

1) Flows reflect a managed system for Northern Rhode Island.
2) Flows reflect 2020 hydraulic model with a global adjustment to have demand match sendout for Capacity Exempt, FT-1 and rest of customers (SFT2) for the June 2021 forecast for Rhode Island and the region focused June 2021 forecast for Aquidneck Island.

RESULTS FOR WINTER 2021/22 THROUGH 2025/26
Design Peak Hour Table

				2023/24		
Pipeline/LNG	**Lateral**	**Take Station**	**Meter No.**	**Total Supply Deliveries Company & Marketers (Dth/hr)**	**Total Firm Peak Hour Model Flow (DTH/hr)**	**Total Firm Peak Hour Balance (-) = Shortfall (+) = Surplus (DTH/hr)**
AGT	G	Barrington	00064	0	0	0
AGT	G	Warren	00012	770	782	-12
AGT		Burrillville	00044	0	29	-29
AGT	G	Crary St	00842	0	4,157	-4,157
AGT	G	Dey St	00004	5,388	2,141	3,247
AGT	G	Cumberland	00083	42	24	17
AGT	G	Portsmouth	00013	1,045	1,045	1
AGT	G	Tiverton	00033	56	67	-11
AGT	G	E Providence	00010	1,698	1,171	527
AGT	E	Westerly	00008	144	124	20
AGT		Montville	00059	208	225	-17
TGP	Cranston	Cranston	420750	3,608	2,275	1,334
TGP	Cranston	Lincoln	420758	1,283	1,418	-135
TGP	Cranston	Smithfield	420910	450	1,575	-1,125
TGP		Cumberland	420135	1,343	1,343	0
PORTABLE LNG		Portsmouth		650	205	445
LNG		Exeter		1,000	1,000	0
LNG (incl. NGLNG)		Providence		3,958	3,959	-1
PORTABLE LNG		Cumberland		750	750	0
			Total:	22,393	22,289	105
AGT	G-6 Only (Feed Prov Area)			7,856	8,251	-395
AGT	G-2 (Feed Tiv & Al)			1,101	1,111	-11
AGT	E			352	349	3
TGP	Cranston			5,342	5,267	74

Notes

1) Flows reflect a managed system for Northern Rhode Island.
2) Flows reflect 2020 hydraulic model with a global adjustment to have demand match sendout for Capacity Exempt, FT-1 and rest of customers (SFT2) for the June 2021 forecast for Rhode Island and the region focused June 2021 forecast for Aquidneck Island.

RESULTS FOR WINTER 2021/22 THROUGH 2025/26
Design Peak Hour Table

				2024/25		
Pipeline/LNG	Lateral	Take Station	Meter No.	Total Supply Deliveries Company & Marketers (Dth/hr)	Total Firm Peak Hour Model Flow (DTH/hr)	Total Firm Peak Hour Balance (-) = Shortfall (+) = Surplus (DTH/hr)
AGT	G	Barrington	00064	0	0	0
AGT	G	Warren	00012	770	765	5
AGT		Burrillville	00044	0	29	-29
AGT	G	Crary St	00842	0	4,145	-4,145
AGT	G	Dey St	00004	5,387	2,138	3,249
AGT	G	Cumberland	00083	42	24	17
AGT	G	Portsmouth	00013	1,045	1,045	0
AGT	G	Tiverton	00033	56	67	-11
AGT	G	E Providence	00010	1,698	1,193	505
AGT	E	Westerly	00008	144	124	20
AGT		Montville	00059	208	228	-20
TGP	Cranston	Cranston	420750	3,606	2,417	1,190
TGP	Cranston	Lincoln	420758	1,283	1,419	-136
TGP	Cranston	Smithfield	420910	450	1,575	-1,125
TGP		Cumberland	420135	1,343	1,343	0
PORTABLE LNG		Portsmouth		650	213	437
LNG		Exeter		1,000	1,000	0
LNG (incl. NGLNG)		Providence		3,958	3,959	-1
PORTABLE LNG		Cumberland		750	750	0
			Total:	22,390	22,433	-43
AGT	G-6 Only (Feed Prov Area)			7,854	8,241	-386
AGT	G-2 (Feed Tiv & AI)			1,101	1,112	-11
AGT	E			352	352	0
TGP	Cranston			5,340	5,410	-71

Notes

1) Flows reflect a managed system for Northern Rhode Island.
2) Flows reflect 2020 hydraulic model with a global adjustment to have demand match sendout for Capacity Exempt, FT-1 and rest of customers (SFT2) for the June 2021 forecast for Rhode Island and the region focused June 2021 forecast for Aquidneck Island.

RESULTS FOR WINTER 2021/22 THROUGH 2025/26
Design Peak Hour Table

				2025/26		
Pipeline/LNG	Lateral	Take Station	Meter No.	Total Supply Deliveries Company & Marketers (Dth/hr)	Total Firm Peak Hour Model Flow (DTH/hr)	Total Firm Peak Hour Balance (-) = Shortfall (+) = Surplus (DTH/hr)
AGT	G	Barrington	00064	0	0	0
AGT	G	Warren	00012	770	777	-8
AGT		Burrillville	00044	0	29	-29
AGT	G	Crary St	00842	0	4,178	-4,178
AGT	G	Dey St	00004	5,382	2,158	3,225
AGT	G	Cumberland	00083	42	25	17
AGT	G	Portsmouth	00013	1,045	1,045	1
AGT	G	Tiverton	00033	56	68	-12
AGT	G	E Providence	00010	1,698	1,234	464
AGT	E	Westerly	00008	144	124	20
AGT		Montville	00059	208	231	-22
TGP	Cranston	Cranston	420750	3,599	2,447	1,152
TGP	Cranston	Lincoln	420758	1,283	1,445	-161
TGP	Cranston	Smithfield	420910	450	1,589	-1,139
TGP		Cumberland	420135	1,343	1,343	0
PORTABLE LNG		Portsmouth		650	225	425
LNG		Exeter		1,000	1,000	0
LNG (incl. NGLNG)		Providence		3,958	3,959	-1
PORTABLE LNG		Cumberland		750	750	0
			Total:	22,379	22,626	-247
AGT	G-6 Only (Feed Prov Area)			7,850	8,347	-498
AGT	G-2 (Feed Tiv & AI)			1,101	1,112	-11
AGT	E			352	355	-3
TGP	Cranston			5,333	5,480	-148

Notes

1) Flows reflect a managed system for Northern Rhode Island.
2) Flows reflect 2020 hydraulic model with a global adjustment to have demand match sendout for Capacity Exempt, FT-1 and rest of customers (SFT2) for the June 2021 forecast for Rhode Island and the region focused June 2021 forecast for Aquidneck Island.

2021 National Grid RI Economic Data
(Prices in 2019 $/Dth)

Chart III-B-3
Page 1 of 3

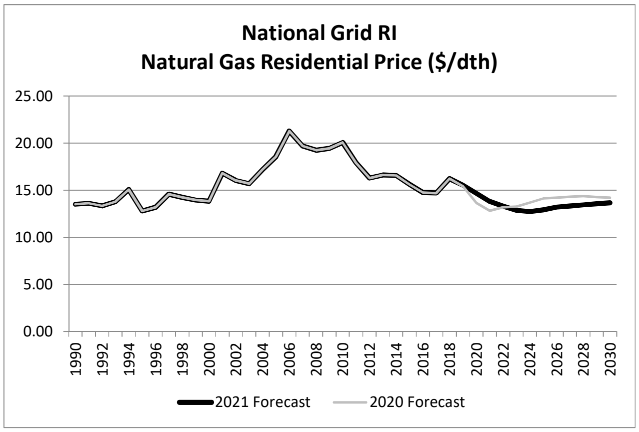
Year	NGPRCR Natural Gas Residential Price	OILPRCR No 2 Distillate Residential Price by All Sellers	*GORR* *Residential Gas-to-Oil Price Ratio*	GDP GDP (2009 Millions of $)	HH Households (thousands)	EMPL Non-Farm Employment (thousands)
1990	*13.50*	*14.60*	*0.92*	*35616*	*377*	*454*
1991	*13.62*	*13.32*	*1.02*	*34372*	*381*	*424*
1992	*13.33*	*11.69*	*1.14*	*35063*	*384*	*424*
1993	*13.77*	*11.20*	*1.23*	*35716*	*387*	*430*
1994	*15.06*	*10.61*	*1.42*	*35826*	*391*	*434*
1995	*12.79*	*10.30*	*1.24*	*36505*	*395*	*439*
1996	*13.18*	*11.25*	*1.17*	*36926*	*401*	*441*
1997	*14.58*	*11.19*	*1.30*	*38989*	*406*	*450*
1998	*14.24*	*9.70*	*1.47*	*40360*	*411*	*458*
1999	*13.96*	*9.05*	*1.54*	*41651*	*411*	*466*
2000	*13.82*	*12.91*	*1.07*	45250	410	480
2001	*16.81*	*12.61*	*1.33*	45903	407	481
2002	*16.03*	*11.17*	*1.43*	47581	410	482
2003	*15.68*	*13.33*	*1.18*	49344	411	487
2004	*17.18*	*14.12*	*1.22*	51552	412	491
2005	*18.56*	*18.01*	*1.03*	52284	411	494
2006	*21.29*	*21.17*	*1.01*	53492	411	496
2007	*19.70*	*22.08*	*0.89*	51999	412	495
2008	*19.25*	*27.64*	*0.70*	50413	414	484
2009	*19.45*	*19.50*	*1.00*	50216	414	463
2010	20.06	25.04	*0.80*	51363	415	462
2011	17.92	31.02	*0.58*	51263	417	464
2012	16.28	33.03	*0.49*	51607	421	469
2013	16.62	32.44	*0.51*	51679	425	475
2014	16.57	31.26	*0.53*	52004	428	482
2015	15.61	21.83	*0.72*	52956	428	489
2016	14.75	17.33	*0.85*	53031	428	494
2017	14.70	19.98	*0.74*	52728	426	497
2018	16.23	22.12	*0.73*	53133	426	500
2019	15.53	21.22	*0.73*	53671	429	504
2020	14.66	16.75	*0.88*	50796	427	465
2021	13.79	19.99	*0.69*	53216	424	476
2022	13.28	20.19	*0.66*	56770	435	490
2023	12.86	22.03	*0.58*	58328	438	498
2024	12.73	23.01	*0.55*	59566	440	502
2025	12.91	23.87	*0.54*	60747	442	504
2026	13.21	24.77	*0.53*	61800	443	506
2027	13.32	25.17	*0.53*	62899	445	507
2028	13.45	25.76	*0.52*	63982	446	509
2029	13.56	26.11	*0.52*	65056	447	510
2030	13.65	26.63	*0.51*	66078	448	512
PY26/PY21	-0.86%	4.39%	-5.03%	3.04%	0.88%	1.22%

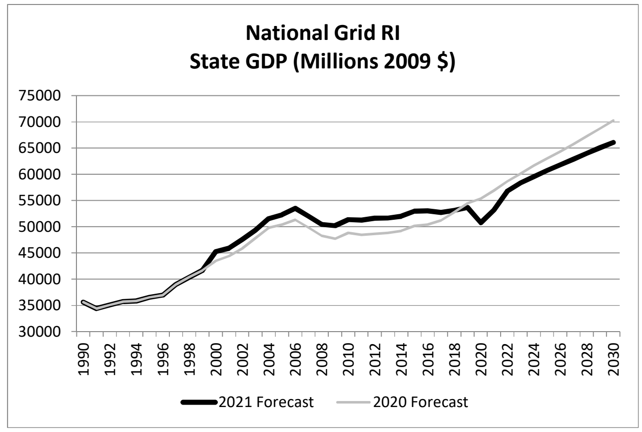
2020 National Grid RI Economic Data
(Prices in 2019 $/Dth)

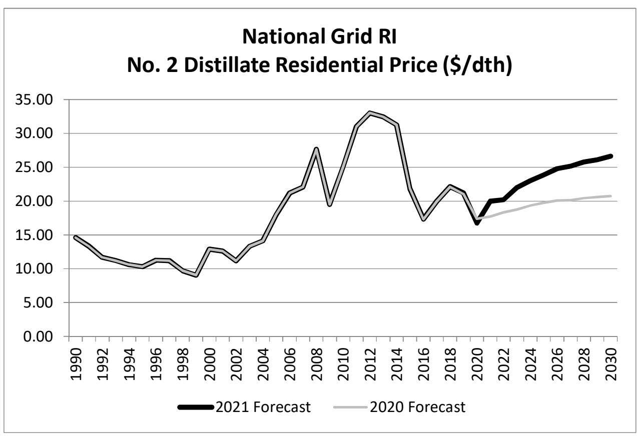
Chart III-B-3
Page 2 of 3

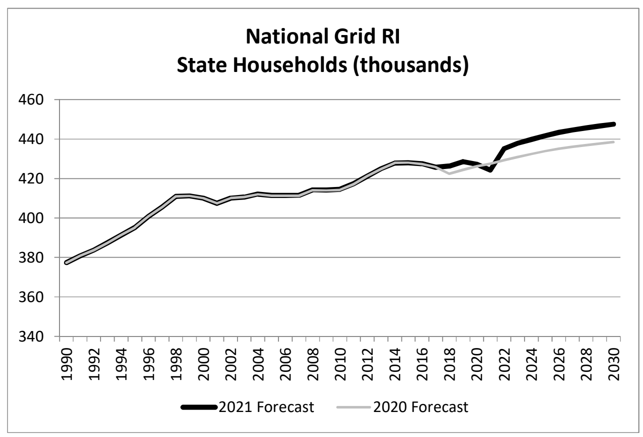
Year	NGPRCR Natural Gas Residential Price	OILPRCR No 2 Distillate Residential Price by All Sellers	*GORR*	GDP (2005 Millions of $)	Households (thousands)	Non-Farm Employment (thousands)
1990	13.50	14.60	*0.92*	35616	377	454
1991	13.62	13.32	*1.02*	34372	381	424
1992	13.33	11.69	*1.14*	35063	384	424
1993	13.77	11.20	*1.23*	35716	387	430
1994	15.06	10.61	*1.42*	35826	391	434
1995	12.79	10.30	*1.24*	36505	395	439
1996	13.18	11.25	*1.17*	36926	401	441
1997	14.58	11.19	*1.30*	38989	406	450
1998	14.24	9.70	*1.47*	40360	411	458
1999	13.96	9.05	*1.54*	41651	411	466
2000	13.82	12.91	*1.07*	43474	410	477
2001	16.81	12.61	*1.33*	44386	407	479
2002	16.03	11.17	*1.43*	45877	410	479
2003	15.68	13.33	*1.18*	47804	411	484
2004	17.18	14.12	*1.22*	49762	412	488
2005	18.56	18.01	*1.03*	50378	411	491
2006	21.29	21.17	*1.01*	51304	411	493
2007	19.70	22.08	*0.89*	49843	411	492
2008	19.25	27.64	*0.70*	48263	414	481
2009	19.45	19.50	*1.00*	47708	414	459
2010	20.06	25.04	*0.80*	48801	414	458
2011	17.92	31.03	*0.58*	48425	417	461
2012	16.28	33.04	*0.49*	48630	421	465
2013	16.62	32.45	*0.51*	48815	425	472
2014	16.57	31.26	*0.53*	49217	428	479
2015	15.61	21.83	*0.72*	50174	428	485
2016	14.74	17.32	*0.85*	50406	427	490
2017	14.69	19.96	*0.74*	51192	426	494
2018	16.23	22.12	*0.73*	52719	422	501
2019	15.42	21.07	*0.73*	54456	424	507
2020	13.64	17.38	*0.78*	55401	426	510
2021	12.82	17.73	*0.72*	56891	428	509
2022	13.19	18.32	*0.72*	58647	429	512
2023	13.26	18.73	*0.71*	60158	431	515
2024	13.68	19.34	*0.71*	61647	432	518
2025	14.13	19.75	*0.72*	63013	434	520
2026	14.19	20.08	*0.71*	64358	435	522
2027	14.30	20.14	*0.71*	65762	436	524
2028	14.35	20.43	*0.70*	67267	437	526
2029	14.27	20.62	*0.69*	68769	438	528
2030	14.19	20.73	*0.68*	70270	438	530
PY26/PY21	2.04%	2.52%	-0.46%	2.50%	0.35%	0.49%

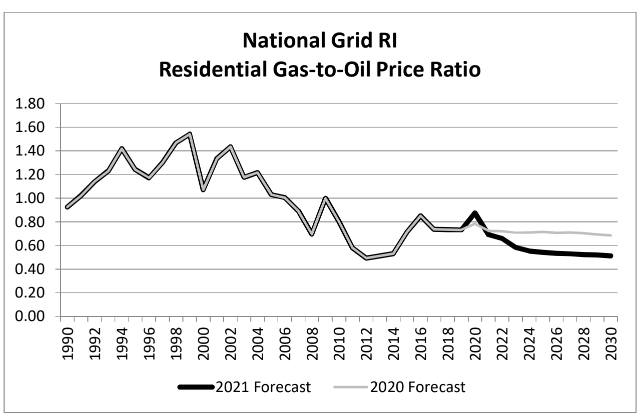
Chart III-B-3
Page 3 of 3

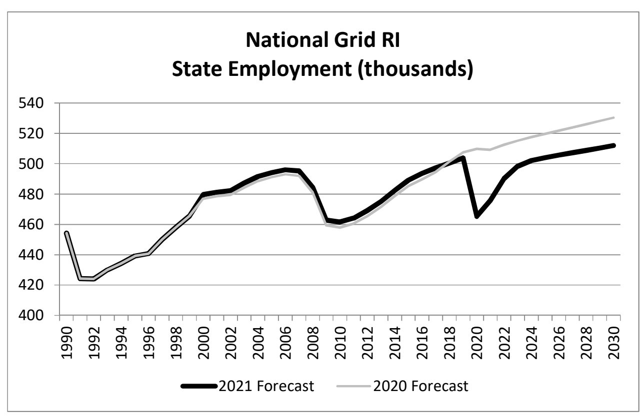




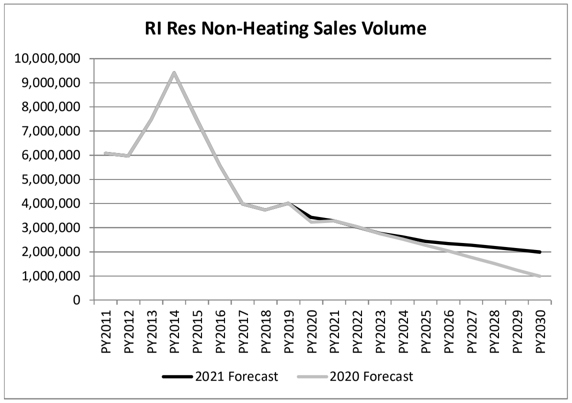


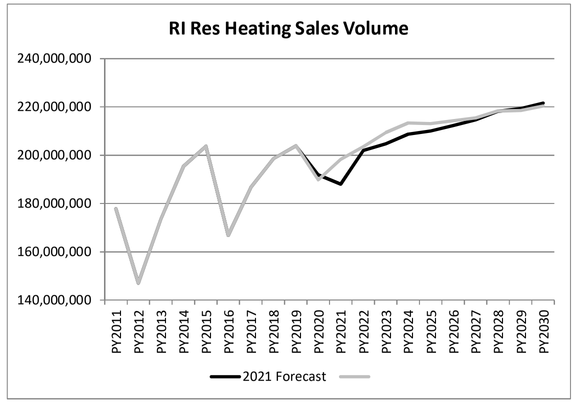


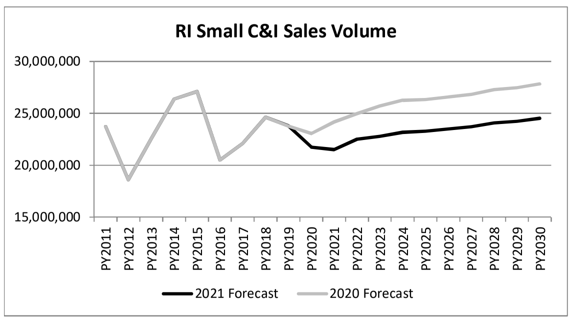


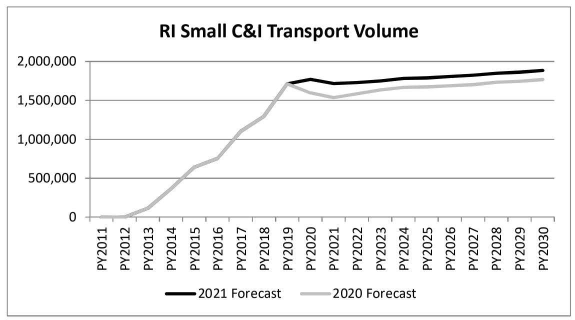


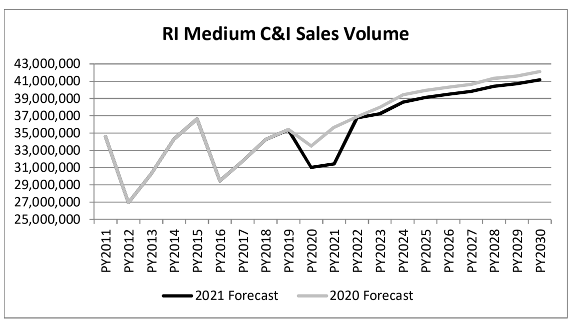
National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)

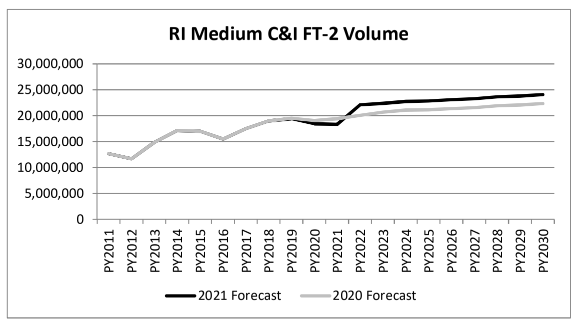












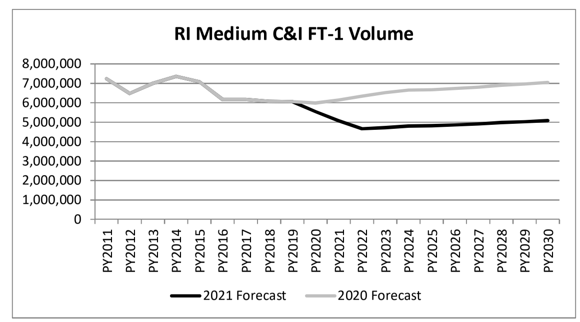
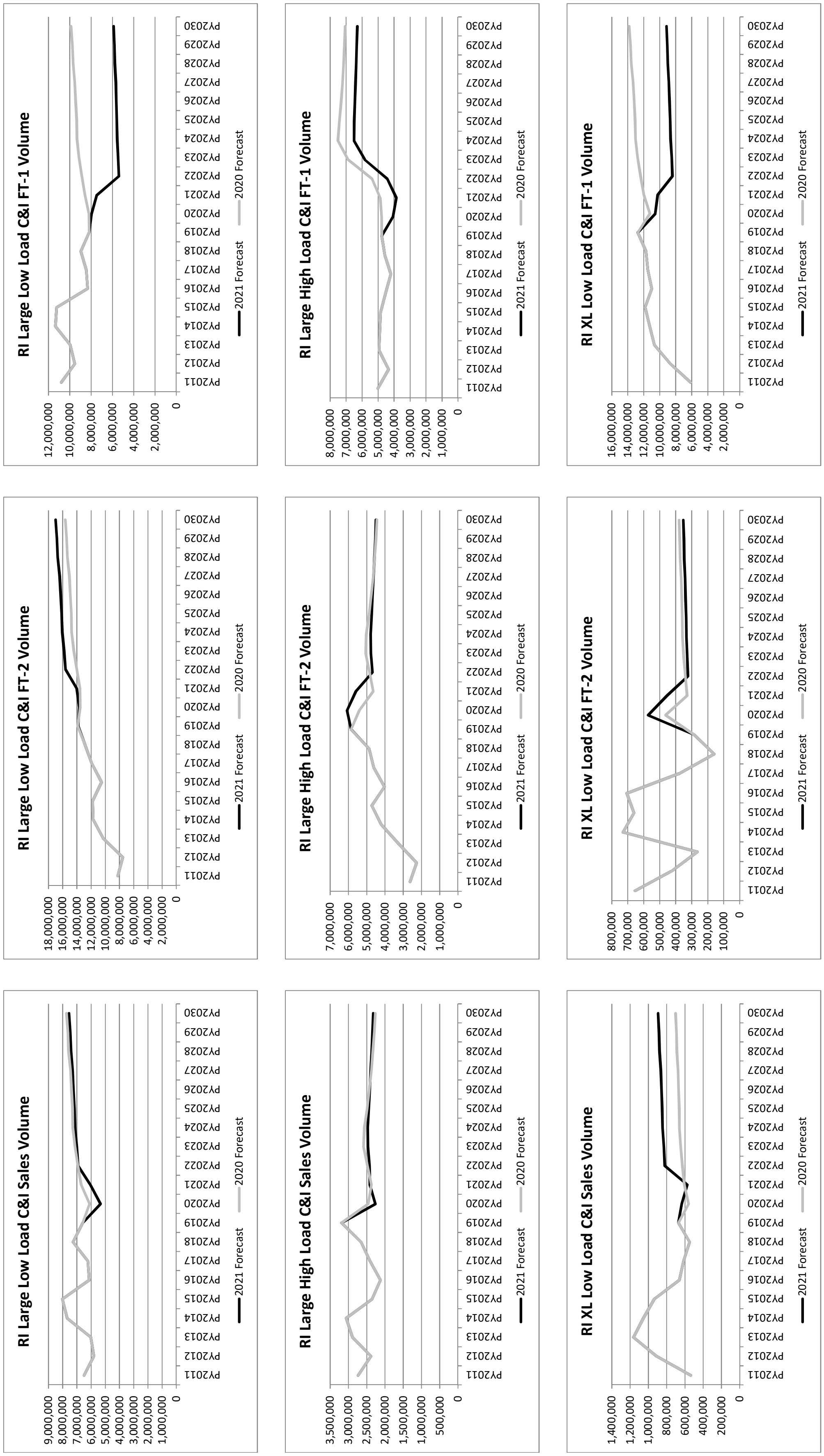
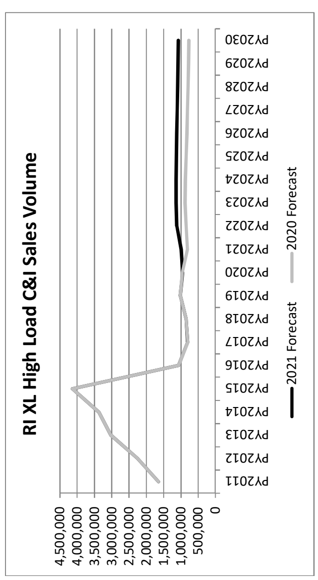


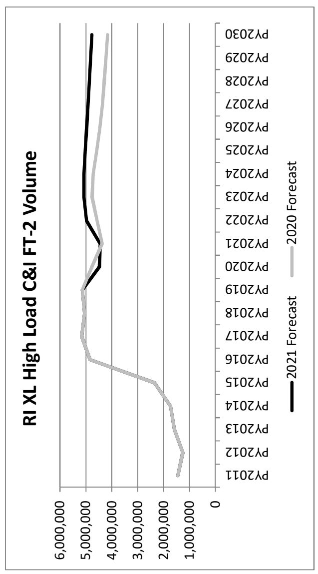
Chart III-B-4
Page 2 of 3

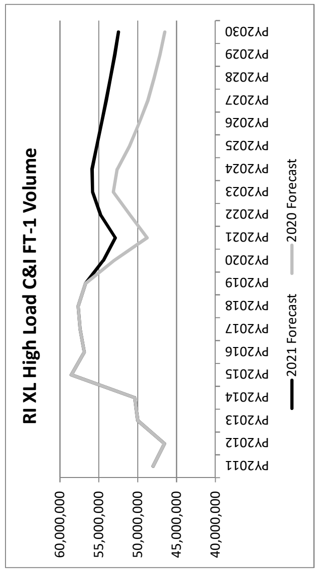
National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)

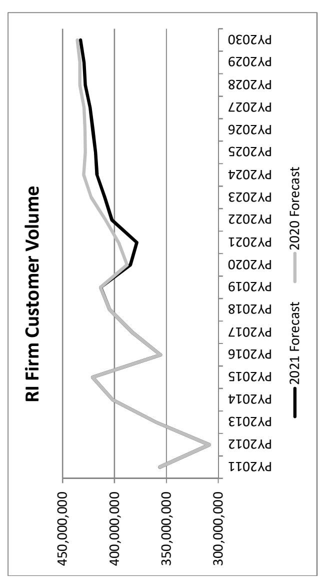


National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)









2021 National Grid RI Meter Count Forecast
End of Planning Year (Nov-Oct)

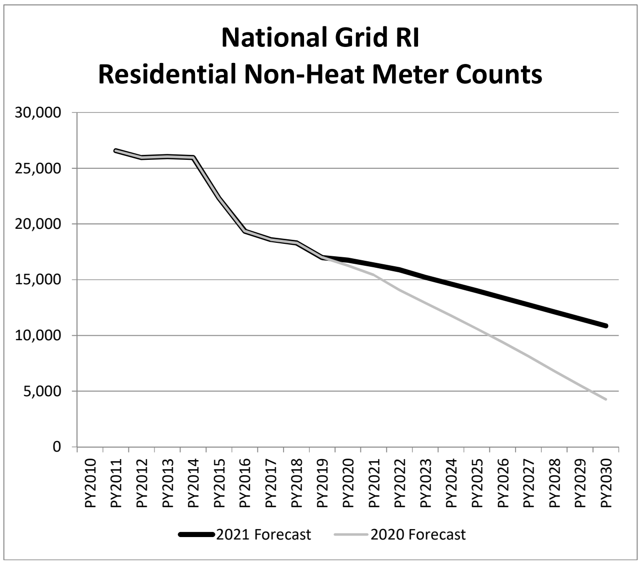
Chart III-B-2
Page 1 of 2

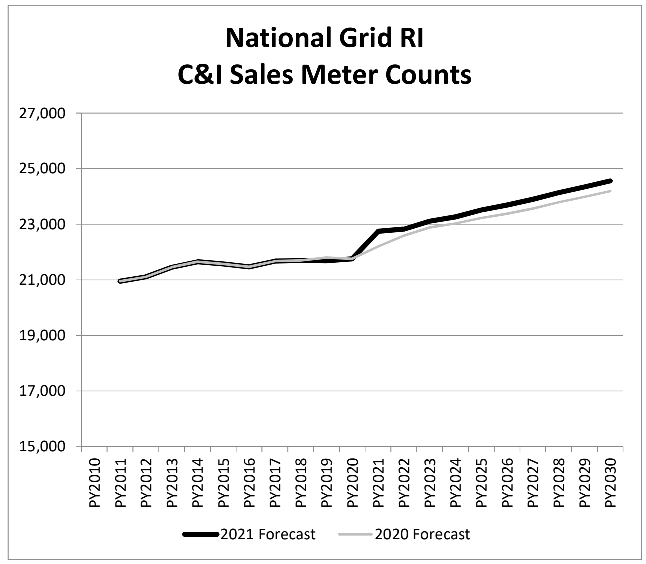
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	26,570	196,414	20,950	747	1,244	245,925	54	245,979
PY2012	25,955	200,463	21,105	734	1,399	249,656	65	249,721
PY2013	26,042	204,521	21,451	721	1,499	254,234	159	254,393
PY2014	25,958	206,568	21,651	699	1,486	256,362	178	256,540
PY2015	22,313	212,900	21,567	684	1,552	259,016	326	259,342
PY2016	19,351	218,314	21,467	674	1,680	261,486	488	261,974
PY2017	18,591	222,124	21,670	636	1,758	264,779	577	265,356
PY2018	18,299	225,211	21,693	624	1,776	267,603	637	268,240
PY2019	16,978	228,468	21,685	609	1,865	269,605	812	270,417
PY2020	16,750	230,384	21,757	595	1,823	271,309	870	272,179
PY2021	16,329	235,062	22,745	614	1,902	276,652	876	277,528
PY2022	15,883	238,872	22,826	619	1,911	280,111	880	280,991
PY2023	15,215	242,148	23,110	628	1,935	283,036	891	283,927
PY2024	14,617	245,378	23,268	634	1,947	285,844	896	286,740
PY2025	13,996	248,385	23,513	640	1,967	288,501	905	289,406
PY2026	13,372	251,226	23,689	645	1,981	290,913	912	291,825
PY2027	12,738	254,023	23,900	650	1,998	293,309	920	294,229
PY2028	12,105	256,778	24,132	655	2,017	295,687	928	296,615
PY2029	11,476	259,550	24,342	660	2,034	298,062	936	298,998
PY2030	10,852	262,321	24,556	664	2,050	300,443	944	301,387
PY26/PY21	-3.9%	1.3%	0.8%	1.0%	0.8%	1.0%	0.8%	1.0%

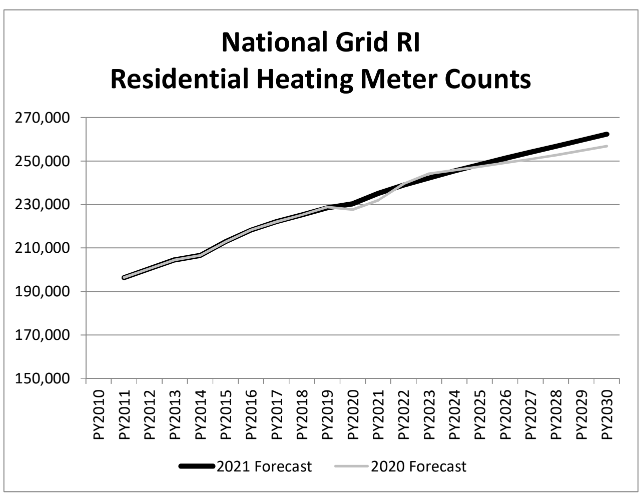
2020 National Grid RI Meter Count Forecast
End of Planning Year (Nov-Oct)

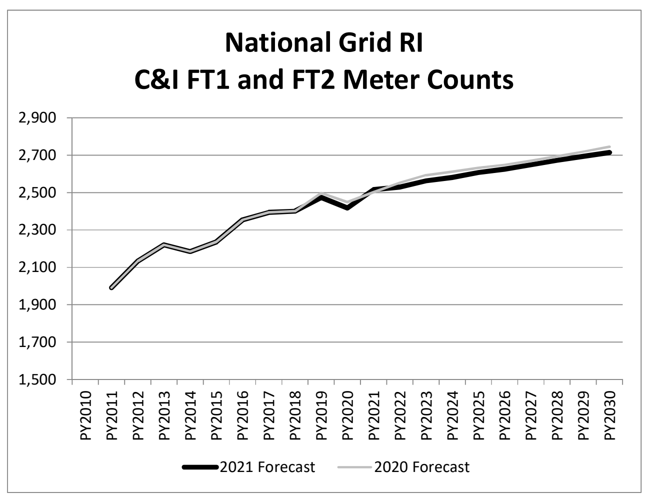
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	26,570	196,414	20,950	747	1,244	245,925	54	245,979
PY2012	25,955	200,463	21,105	734	1,399	249,656	65	249,721
PY2013	26,042	204,521	21,451	721	1,499	254,234	159	254,393
PY2014	25,958	206,568	21,651	699	1,486	256,362	178	256,540
PY2015	22,313	212,900	21,567	684	1,552	259,016	326	259,342
PY2016	19,351	218,313	21,467	674	1,680	261,485	488	261,973
PY2017	18,590	222,122	21,672	636	1,758	264,778	577	265,355
PY2018	18,304	225,228	21,702	624	1,776	267,634	637	268,271
PY2019	17,012	228,896	21,804	609	1,888	270,209	816	271,025
PY2020	16,272	227,624	21,758	588	1,861	268,103	845	268,948
PY2021	15,436	231,871	22,202	603	1,899	272,011	862	272,873
PY2022	14,078	239,512	22,592	616	1,936	278,734	877	279,611
PY2023	12,912	244,122	22,881	629	1,964	282,508	887	283,395
PY2024	11,787	245,713	23,024	636	1,976	283,136	893	284,029
PY2025	10,613	247,442	23,223	641	1,991	283,910	900	284,810
PY2026	9,396	249,132	23,379	643	2,005	284,555	906	285,461
PY2027	8,125	250,853	23,565	649	2,021	285,213	914	286,127
PY2028	6,820	252,737	23,786	655	2,039	286,037	922	286,959
PY2029	5,536	254,751	23,984	661	2,058	286,990	929	287,919
PY2030	4,257	256,858	24,192	669	2,076	288,052	937	288,989
PY26/PY21	-9.5%	1.4%	1.0%	1.3%	1.1%	0.9%	1.0%	0.9%

Chart III-B-2
Page 2 of 2

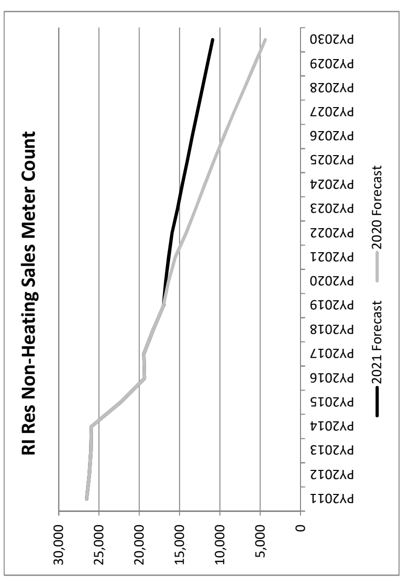


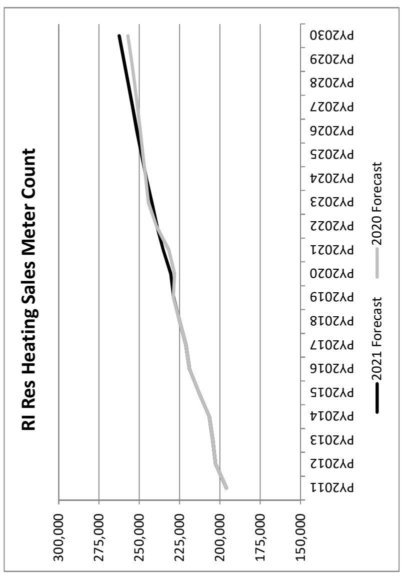


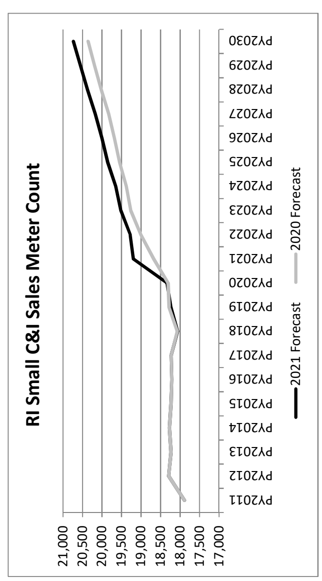


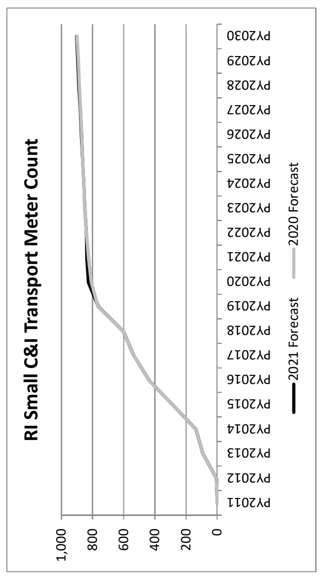


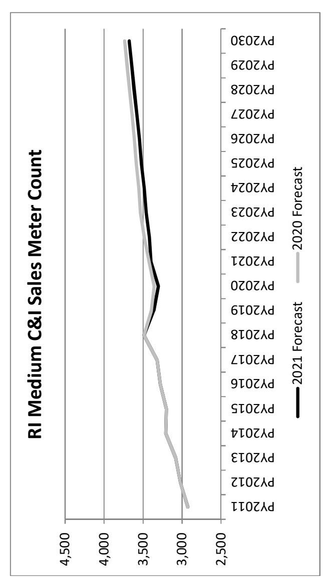
National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)

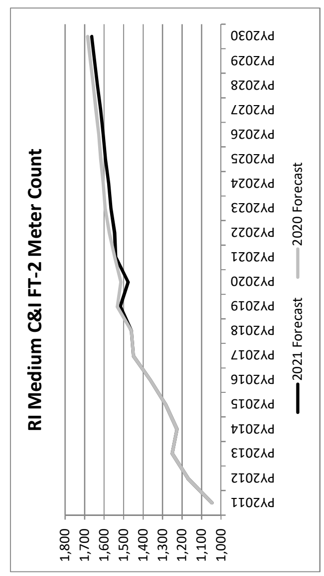












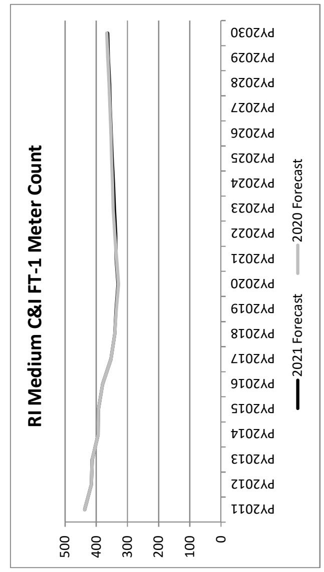
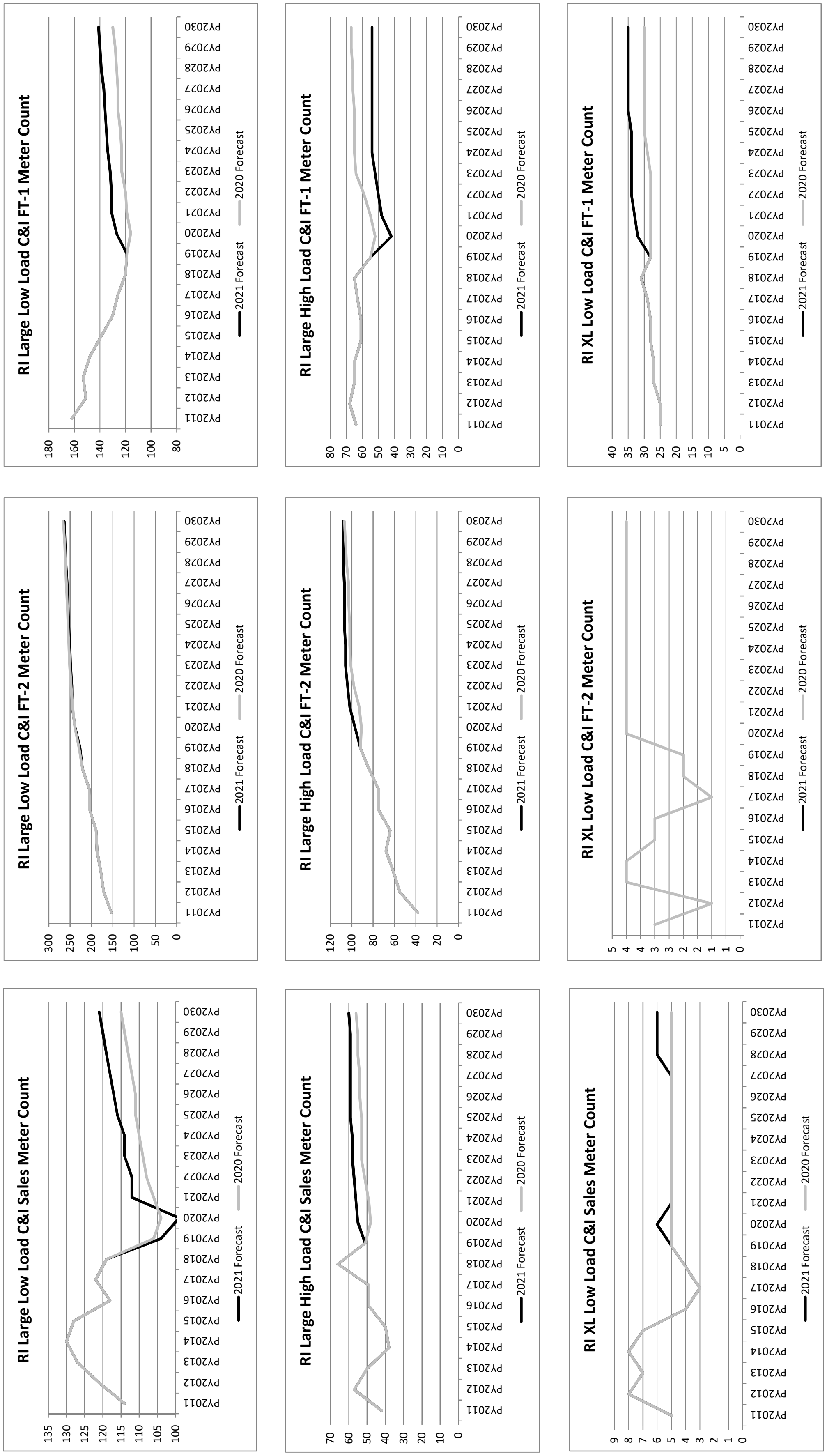
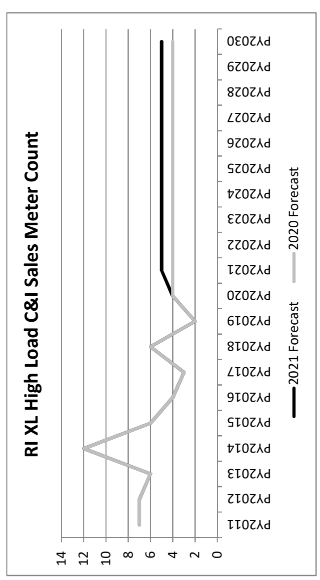


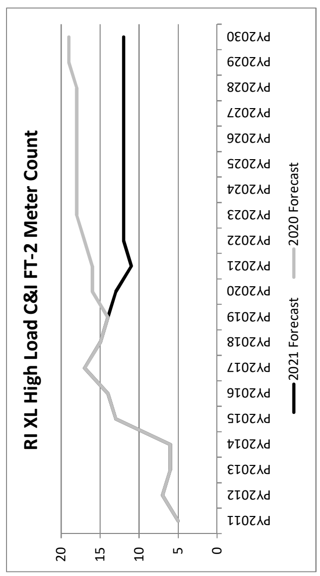
Chart III-B-5
Page 2 of 3

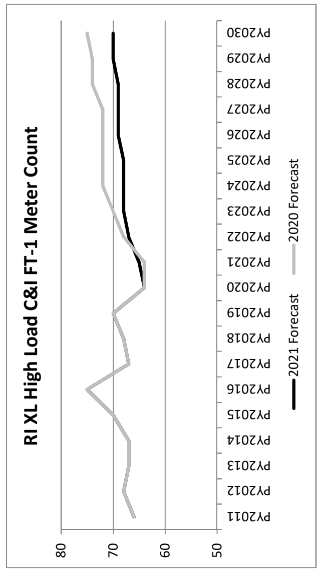
National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)

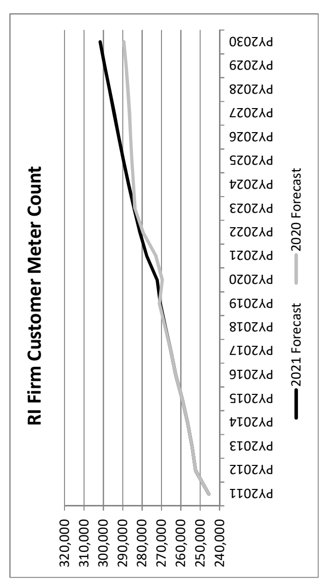


National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)









Please see the attached Excel document (Exhibit 7) for the Company's Wholesale Forecast by Rate.

The Narragansett Electric Company -Take Station Contract Quantities (MMBtu)

* = Peak MDQ
^ = Not incremental city gate capacity

ALGONQUIN DAILY VOLUMES	**9001**	**90106**	* **90107**	**933005**	* **93001ESC**	* **93011E**	**93401S**	**96004SC**	* **9B105**	* **9S100S**	* **9W009E**	**510801**	Constellation CG Supply **NSB19_ 24-42-20**	^ **510985**	**Total**
1/24th or 6% Hourly:	1/24th	1/24th	6%	1/24th	6%	6%	1/24th	1/24th	1/24th	1/24th	6%	1/24th	1/24th	1/24th	
Contract MDTQ:	11,063	19,465	26,129	2,061	2,384	56,035	335	1,695	8,539	187	6,812	18,000	14,100	96,000	166,805
Dey St. (#00004)	11,063	9,223	19,514	---	---	25,137	---	---	4,258	---	6,234	---	13,100	---	88,529
Westerly (#00008)	---	474	---	248	---	1,221	---	---	79	---	273	500	---	---	2,795
Wampanoag Trail [E. Prov] (#00010)	---	4,092	6,615	---	---	*18,837*	---	---	---	---	---	---	---	---	29,544
Portsmouth (#00013)	---	5,078	---	---	---	6,504	---	---	4,202	---	305	6,000	---	---	22,089
Tiverton (#00033)	---	598	---	---	---	163	---	---	---	---	---	500	---	---	1,261
Burrillville (#00044)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0
Barrington (#00064)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0
Bristol/Warren (#00012)	---	---	---	813	2,384	4,173	335	1,695	---	187	---	6,000	1,000	---	16,587
Cumberland (#00083)	---	---	---	1,000	---	---	---	---	---	---	---	---	---	---	1,000
Crary St. (#00842)	---	---	---	---	---	---	---	---	---	---	---	---	---	96,000	96,000
Montville (#00059)[Yankee Gas]	---	---	---	---	---	---	---	---	---	---	---	5,000	---	---	5,000
														Take Station Total:	262,805

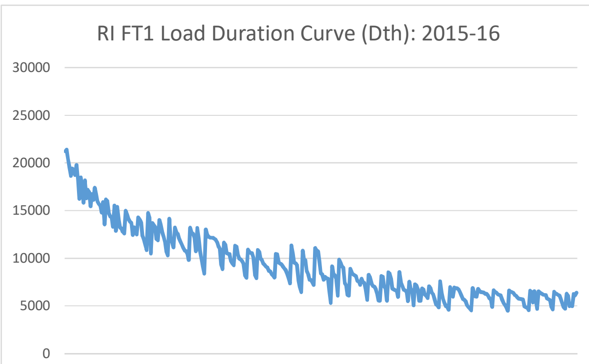
ALGONQUIN HOURLY VOLUMES	**9001**	**90106**	**90107**	**933005**	**93001ESC**	**93011E**	**93401S**	**96004SC**	**9B105**	**9S100S**	**9W009E**	**510801**	Constellation CG Supply **NSB19_ 24-42-20**	**510985**	**Total**
1/24th or 6% Hourly:	1/24th	1/24th	6%	1/24th	6%	6%	1/24th	1/24th	1/24th	1/24th	6%	1/24th	1/24th	1/24th	
Contract MDTQ:	461	811	1,568	86	143	3,362	14	71	356	8	409	750	588	4,000	8,625
Dey St. (#00004)	461	384	1,171	---	---	1,508	---	---	177	---	374	---	546	---	4,622
Westerly (#00008)	---	20	---	10	---	73	---	---	3	---	16	21	---	---	144
Wampanoag Trail [E. Prov] (#00010)	---	171	397	---	---	1,130	---	---	---	---	---	---	---	---	1,698
Portsmouth (#00013)	---	212	---	---	---	390	---	---	175	---	18	250	---	---	1,045
Tiverton (#00033)	---	25	---	---	---	10	---	---	---	---	---	21	---	---	56
Burrillville (#00044)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0
Barrington (#00064)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0
Bristol/Warren (#00012)	---	---	---	34	143	250	14	71	---	8	---	250	42	---	811
Cumberland (#00083)	---	---	---	42	---	---	---	---	---	---	---	---	---	---	42
Crary St. (#00842)	---	---	---	---	---	---	---	---	---	---	---	---	---	4,000	4,000
Montville (#00059)[Yankee Gas]	---	---	---	---	---	---	---	---	---	---	---	208	---	---	208
														Take Station Total:	12,625

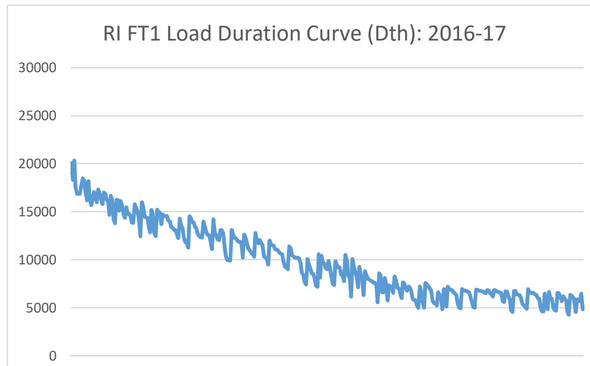
TENNESSEE DAILY VOLUMES	**10807**	**95345**	**39173**	**62930**	**1597**	**64025**	**64026**	**330580**	**330581**	**349449**	**Total**
All 1/24th:	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	
Contract MDTQ:	10,836	1,000	1,067	15,000	29,335	5,220	6,380	24,000	15,000	20,000	127,838
Cranston (#420750)	---	---	---	9,000	10,000	---	---	---	15,000	20,000	54,000
Smithfield (#420910)	---	---	---	---	5,000	2,610	3,190	---	---	---	10,800
Pawtucket (#420135)	10,836	---	1,067	6,000	14,335	---	---	---	---	---	32,238
Lincoln (#420758)	---	1,000	---	---	---	2,610	3,190	24,000	---	---	30,800
										Take Station Total:	127,838

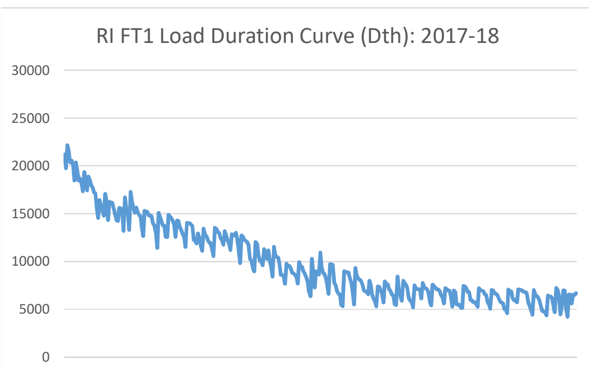
TENNESSEE HOURLY VOLUMES	**10807**	**95345**	**39173**	**62930**	**1597**	**64025**	**64026**	**330580**	**330581**	**349449**	**Total**
All 1/24th:	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	1/24th	
Contract MDTQ:	452	42	44	625	1,222	218	266	1,000	625	833	5,327
Cranston (#420750)	---	---	---	375	417	---	---	---	625	833	2,250
Smithfield (#420910)	---	---	---	---	208	109	133	---	---	---	450
Pawtucket (#420135)	452	---	44	250	597	---	---	---	---	---	1,343
Lincoln (#420758)	---	42	---	---	---	109	133	1,000	---	---	1,283
										Take Station Total:	5,327

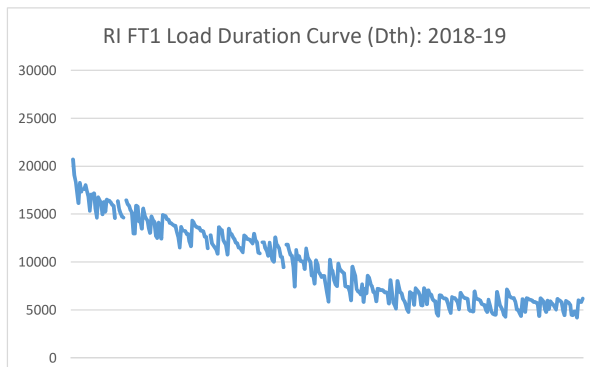
Load Duration Curves for FT1 Customers
Historical Actuals and Forecasted Design Weather

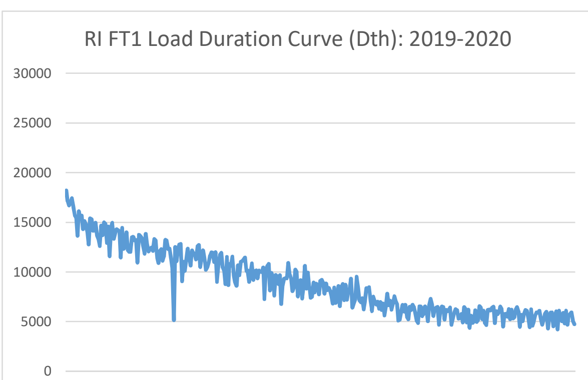
Chart VI-B-1
Page 1 of 2

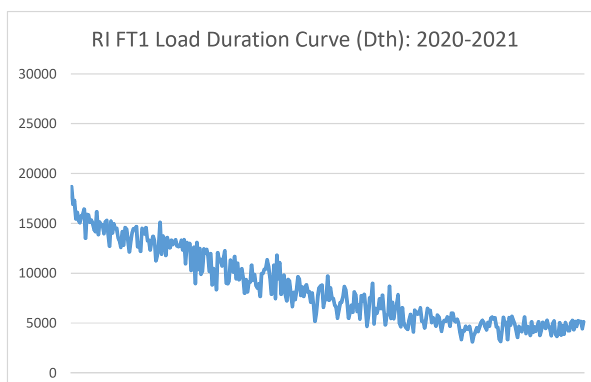






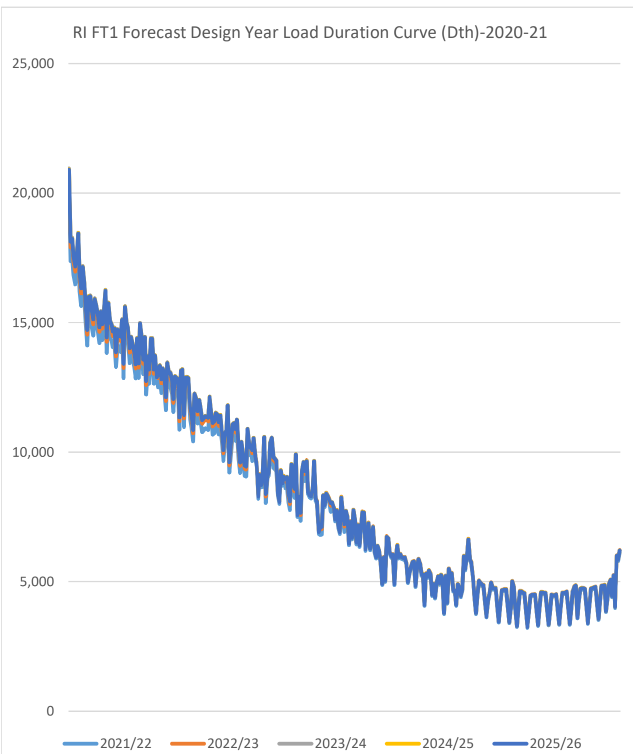






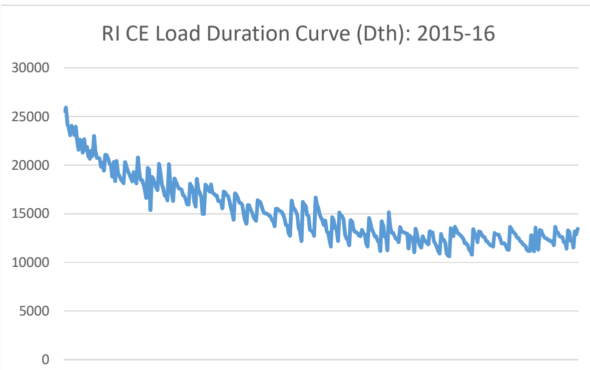
Load Duration Curves for FT1 Customers
Historical Actuals and Forecasted Design Weather

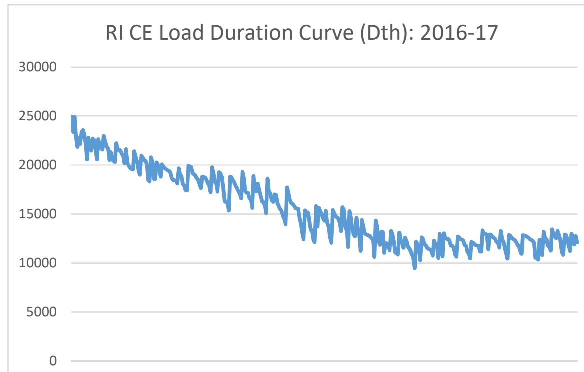
Chart VI-B-1
Page 2 of 2

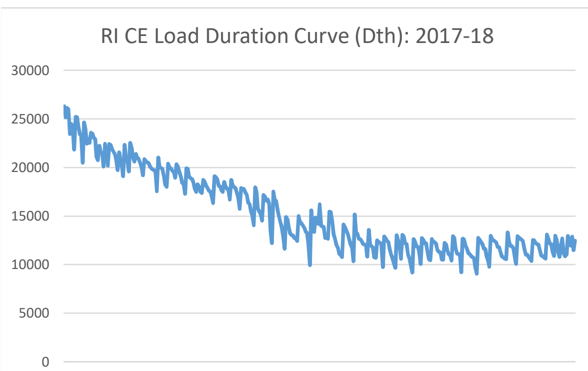


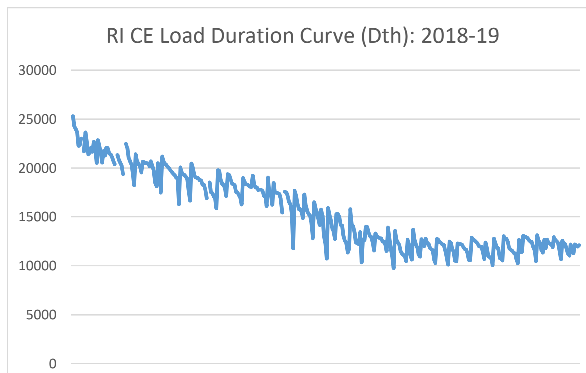
Load Duration Curves for Capacity Exempt Customers
Historical Actuals and Forecasted Design Weather

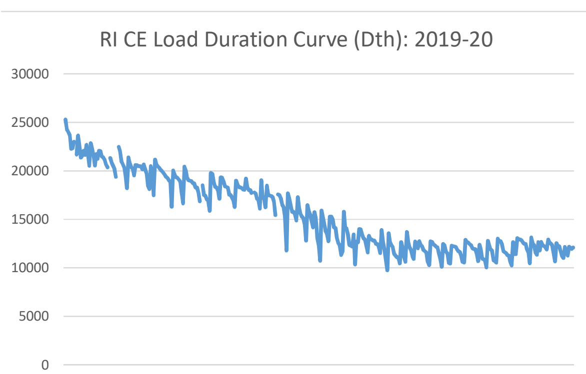
Chart VI-B-2
Page 1 of 2

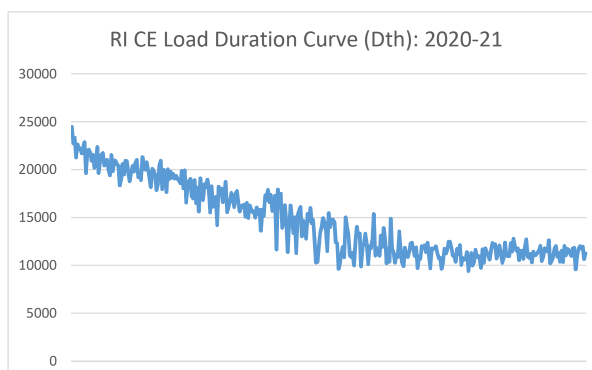






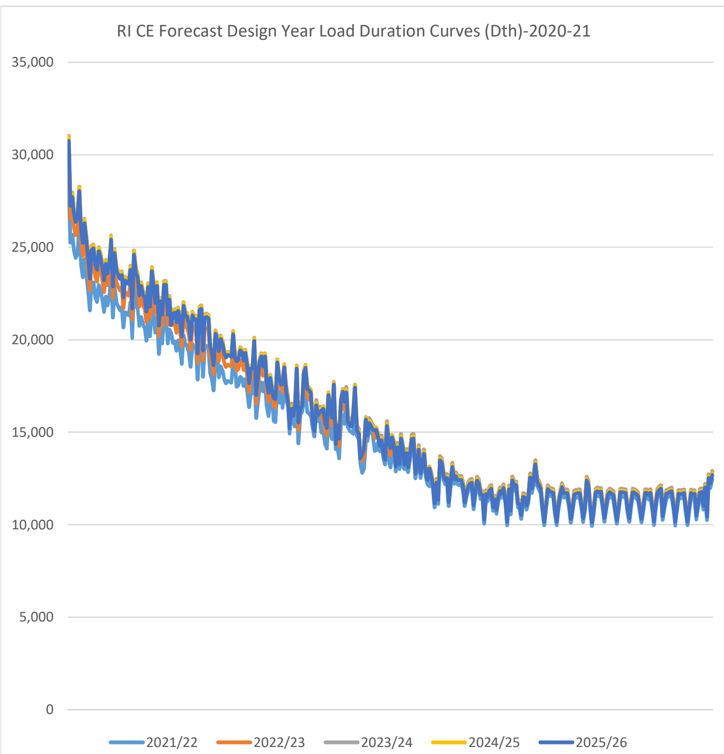






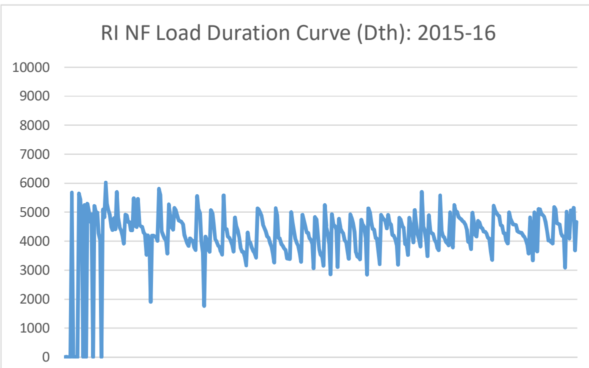
Load Duration Curves for Capacity Exempt Customers
Historical Actuals and Forecasted Design Weather

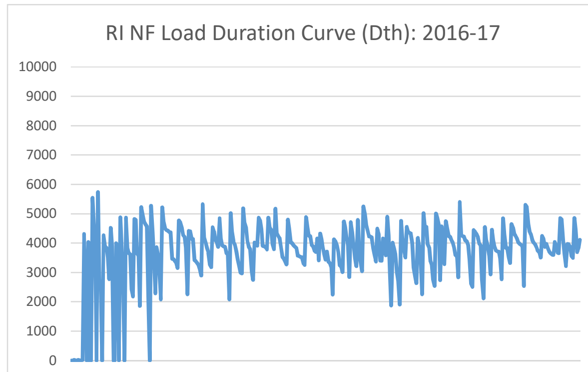
Chart VI-B-2
Page 2 of 2

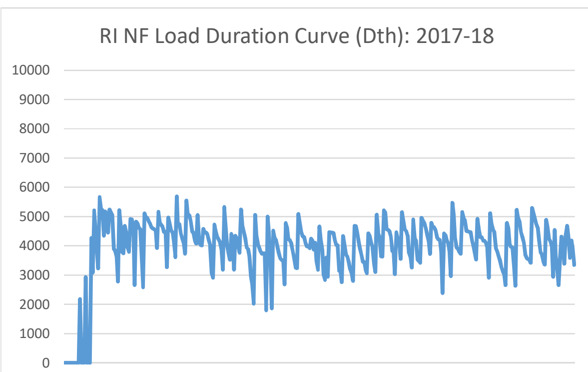


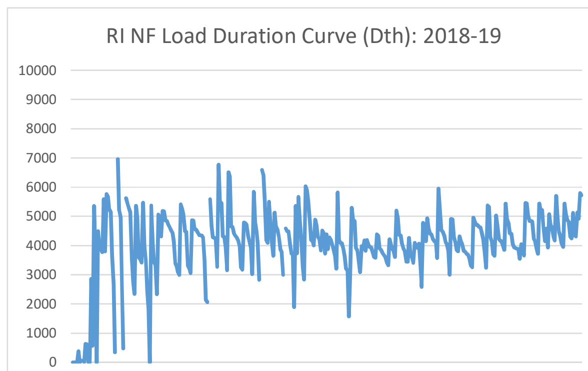
Load Duration Curves for Non-Firm Customers
Historical Actuals and Forecasted Design Weather

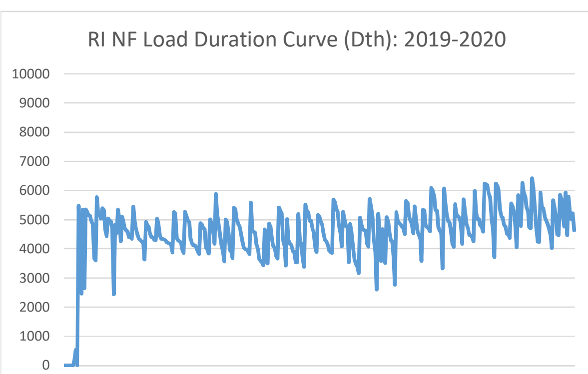
Chart VI-B-3
Page 1 of 2

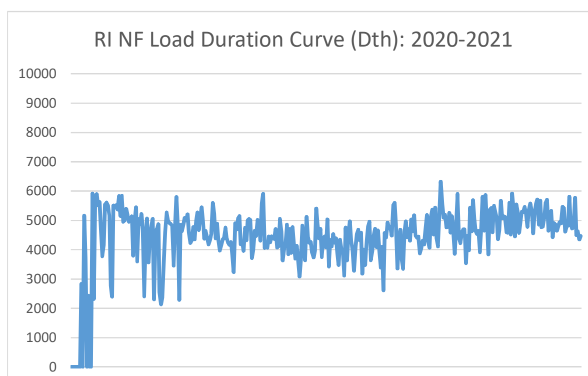












Load Duration Curves for Non-Firm Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-3
Page 2 of 2

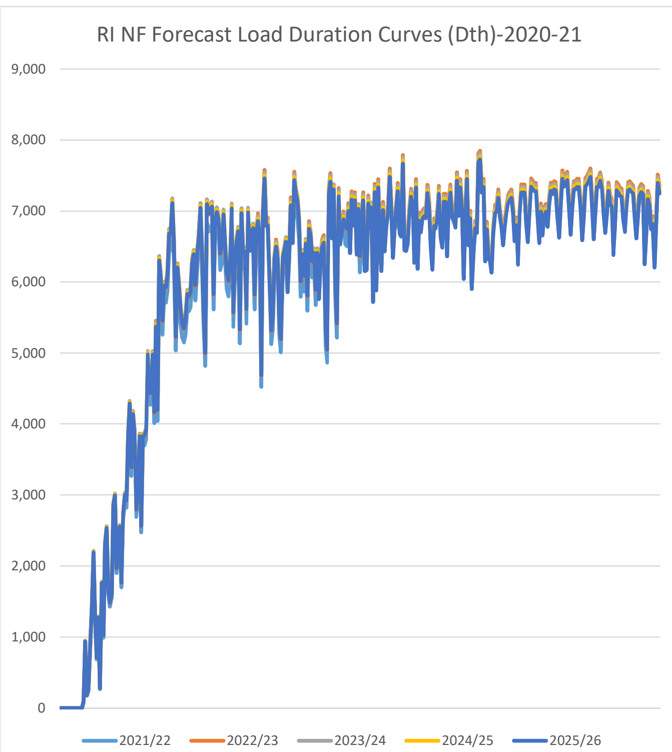
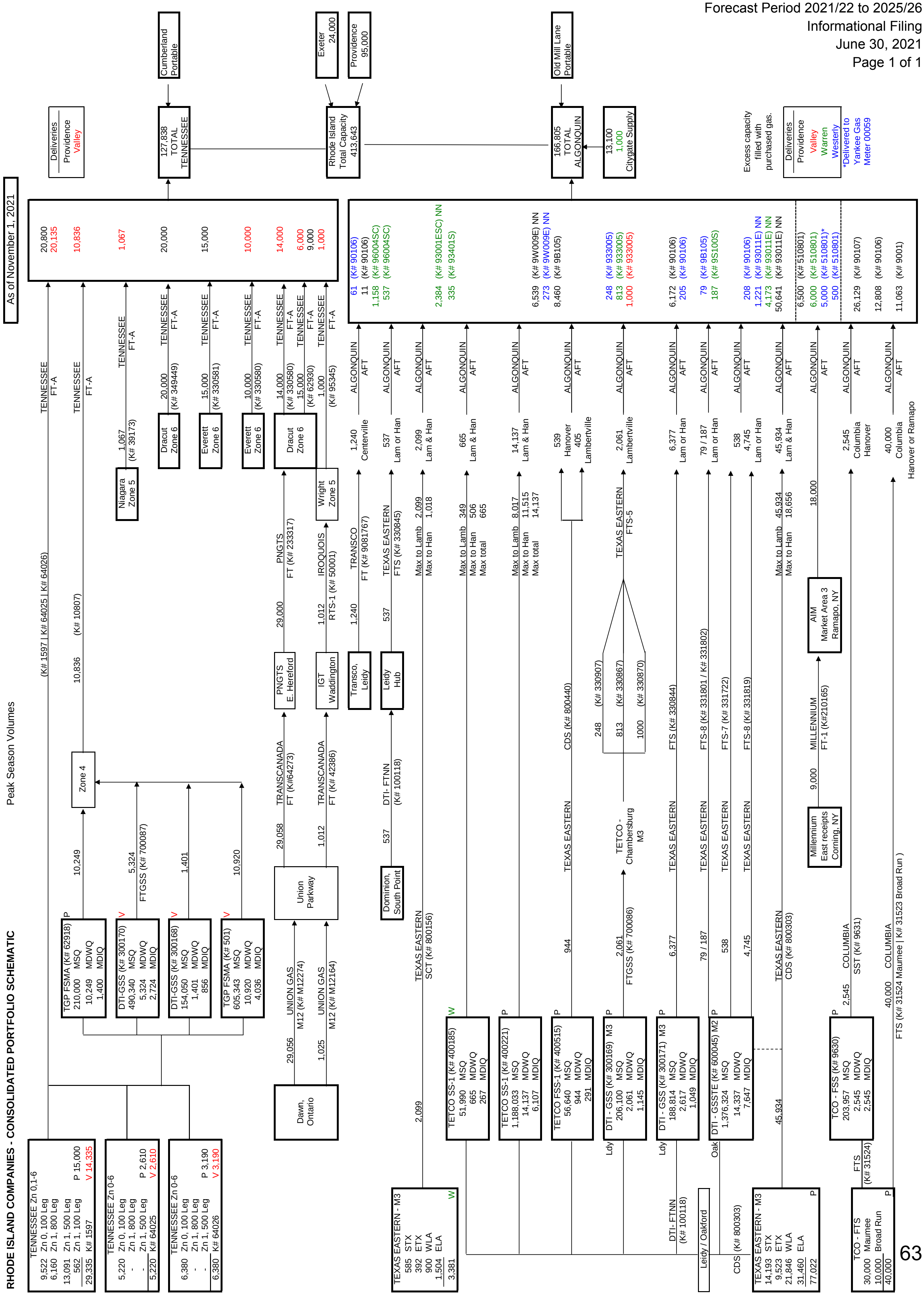


Exhibit 12
Gas Long-Range Supply Plan
Forecast Period 2021/22 to 2025/26
Informational Filing
June 30, 2021
Page 1 of 1



NATIONAL GRID - RHODE ISLAND ASSETS
Transportation Contracts

Shipper	Pipeline Company	Contract No.	Rate Schedule	City Gate MDQ	Annual Quantity	Expiration Date	Currently In Evergreen	Notes
Narragansett Electric Co.	Algonquin	9001	AFT1FT3	11,063	4,037,995	12/31/2022	No	Part-284 transportation service (365-day) used to transport gas from the Columbia interconnect at Hanover, NJ (11,063 MMBtu) to National Grid - Dey St (11,063 MMBtu).
Narragansett Electric Co.	Algonquin	90106	AFT-14	19,465	7,104,725	10/31/2022	Yes	Part-284 transportation service (365-day) used to transport gas from the Columbia interconnect at Hanover, NJ (12,808 MMBtu), TETCO interconnect at Lamberville (6,585 MMBtu) and Transco interconnect at Centerville (72 MMBtu) to National Grid - Dey St (9,223 MMBtu), National Grid - Tiverton (598 MMBtu), National Grid - Westerly (474 MMBtu), National Grid - E. Providence (4,092 Mmbtu), and National Grid - Portsmouth (5,078 MMBtu).
Narragansett Electric Co.	Algonquin	90107	AFT-1W	26,129	3,945,479	10/31/2022	Yes	Part-284 service with a seasonally adjusted MDQ of (26,129 MMBtu), used to transport gas from the Columbia interconnect at Hanover, NJ (18,674 MMBtu) or Ramapo, NY (7,455 MMBtu) to National Grid - Dey St (19,514 MMBtu) and National Grid - E. Providence (6,615 MMBtu).
Narragansett Electric Co.	Algonquin	933005	AFT-1P	2,061	752,265	3/31/2023	Yes	Part-284 transportation service (365-day) used to transport gas from the TETCO interconnect at Lamberville, NJ (2,061 MMBtu) to National Grid - Cumberland (1,000 MMBtu), National Grid - Westerly (248 MMBtu), and National Grid - Warren (813 MMBtu).
Narragansett Electric Co.	Algonquin	93001ESC	AFT-ES1	2,384	771,904	10/31/2022	Yes	Part-284 NO NOTICE service with a seasonally adjusted MDQ of (2,384 MMBtu), used to transport gas from the TETCO interconnect at Lambertville, NJ (1,377 MMBtu) and Hanover, NJ (1,007 MMBtu) to National Grid - Warren (2,384 MMBtu).
Narragansett Electric Co.	Algonquin	93011E	AFT-E1	56,035	19,446,885	10/31/2022	Yes	Part-284 NO NOTICE service with a seasonally adjusted MDQ of (56,035 MMBtu), used to transport gas from the TETCO interconnect at Lambertville, NJ (34,668 MMBtu) and Hanover, NJ (21,367 MMBtu) to National Grid - Dey St (25,137 MMBtu), National Grid - Westerly (1,221 MMBtu), National Grid - E. Providence (48,147 MMBtu), National Grid - Warren (4,173 MMBtu), National Grid - Portsmouth (6,504 MMBtu), and National Grid - Tiverton (163 MMBtu).
Narragansett Electric Co.	Algonquin	93401S	AFT-1S4	335	122,275	10/31/2022	Yes	Part-284 transportation service (365-day) used to transport gas from the TETCO interconnect at Lambertville, NJ (335 MMBtu) to National Grid - Warren (335 MMBtu).
Narragansett Electric Co.	Algonquin	96004SC	AFT-1S3	1,695	618,675	10/31/2022	Yes	Part-284 firm transportation service (365-day) used to transport gas from the TETCO interconnect at Lambertville, NJ (537 MMBtu) and Centerville, NJ (1,158 MMBtu) to National Grid - Warren (1,695 MMBtu).
Narragansett Electric Co.	Algonquin	9B105	AFT-1B	8,539	1,813,145	10/31/2022	Yes	Part-284 service with a seasonally adjusted MDQ of (8,539 MMBtu), used to transport gas from the TETCO interconnect at Lambertville, NJ to National Grid - Dey St (4,258 MMBtu), National Grid - Portsmouth (4,202 MMBtu) and National Grid - Westerly (79 MMBtu).
Narragansett Electric Co.	Algonquin	9S100S	AFT-1SX	187	39,737	10/31/2022	Yes	Part-284 service with a seasonally adjusted MDQ of (187 MMBtu), used to transport gas from the TETCO interconnect at Lambertville, NJ to National Grid - Warren (187 MMBtu).
Narragansett Electric Co.	Algonquin	9W009E	AFT-EW	6,812	1,446,384	10/31/2022	Yes	Part-284 NO NOTICE service with a seasonally adjusted MDQ of (6,812 MMBtu), used to transport gas from the TETCO interconnect at Hanover, NJ (4,222 MMBtu) and Lamberville, NJ (2,590 MMBtu) to National Grid - Dey St (6,234 MMBtu), National Grid - Westerly (273 MMBtu), and National Grid - Portsmouth (305 MMBtu).
Narragansett Electric Co.	Algonquin	510801	AFT1AIM	18,000	6,570,000	1/6/2032	No	Part-284 transportation service used to transport gas from Ramapo, NY (18,000 MMBtu) to National Grid - Westerly (500 MMBtu), National Grid - Warren (6,000 MMBtu), National Grid - Portsmouth (6,000 MMBtu), National Grid - Tiverton (500 MMBtu), and Yankee Gas - Montville (5,000 MMBtu).
Narragansett Electric Co.	Algonquin	510985	AFTCLMS	96,000	35,040,000	7/16/2032	No	Part-284 transportation service used to transport gas from Manchester Street Lateral on the G-12 System (Meter No. 80070) to National Grid - Crary Street-Providence, RI (96,000 MMBtu).
Narragansett Electric Co.	Columbia	31523	FTS	10,000	3,650,000	10/31/2025	No	Part-284 transportation service used to transport gas from Broad Run-19 (10,000 MMBtu) to Columbia interconnect at Hanover, NJ (10,000 MMBtu).
Narragansett Electric Co.	Columbia	31524	FTS	30,000	10,950,000	10/31/2025	No	Part-284 transportation service used to transport gas from Maumee-1 (30,000 MMBtu) to Columbia interconnect at Hanover, NJ (30,000 MMBtu).

Shipper	Pipeline Company	Contract No.	Rate Schedule	City Gate MDQ	Annual Quantity	Expiration Date	Currently In Evergreen	Notes
Narragansett Electric Co.	Columbia	9631	SST	2,545	695,966	4/1/2040	No	Part-284 transportation service used to transport gas from RP Strorage Point TCO-FSS #9630 (2,545 MMBtu) to Columbia interconnect at Hanover, NJ (2,545 MMBtu). MDQ Seasonally adjusted to be 1,272 MDQ from Apr - Sep.
Narragansett Electric Co.	Dominion	100118	FTNN	537	196,005	3/31/2022	No	Part-284 transportation service used to transport gas from the TETCO interconnect at Oakford (537 MMBtu) or Dominion South Point (537 MMBtu) to the Leidy Group Meter (537 MMBtu).
Narragansett Electric Co.	Dominion	700086	FTGSS	2,061	311,211	3/31/2022	No	Transportation contract used to transport gas from DTI-GSS #300169 (2,061MMBtu) to the TETCO interconnect at Chambersburg, PA (2,061 MMBtu).
Narragansett Electric Co.	Dominion	700087	FTGSS	5,324	803,924	3/31/2025	No	Transportation contract used to transport gas from DTI-GSS #300170 (5,324MMBtu) to Ellisburg, PA (5,324 MMBtu).
Narragansett Electric Co.	Iroquois	50001	RTS-1	1,012	369,380	11/1/2022	No	Transportation contract used to transport gas from Waddington (1,012 MMBtu) to the IGTS interconnect with TGP at Wright, NY.
Narragansett Electric Co.	Millennium	210165	FT-1	9,000	3,285,000	3/31/2034	No	Transportation service used to transport gas from Corning, NY to the interconnect with Algonquin Gas Transmission at Ramapo, NY (9,000 MMBtu).
Narragansett Electric Co.	PNGTS	233317	FT	29,000	10,585,000	10/31/2040	No	Transportation service used to transport gas from East Hereford to the interconnect with Tennessee Gas Pipeline at Dracut (29,000 MMBtu).
Narragansett Electric Co.	Tennessee	10807	FT-A	10,836	3,955,140	3/31/2022	No	Transportation service used to transport gas from Ellisburg (6,581 MMBtu) and Nothern Storage (4,255 MMBtu) to National Grid city gates at Pawtucket, RI (10,836 MMBtu).
Narragansett Electric Co.	Tennessee	39173	FT-A	1,067	389,455	10/31/2024	No	Transportation service (365-day) used to transport gas from Niagara River (1,067 MMBtu) to National Grid city gates at Pawtucket, RI (1,067 MMBtu).
Narragansett Electric Co.	Tennessee	1597	FT-A	29,335	10,707,275	10/31/2024	No	Transportation service used to transport gas from Zn1 800 Leg (6,160 MMBtu), Zn1 500 Leg (13,091 MMBtu), Zn0 100 Leg (9,522 MMBtu), and Zn1 100 Leg (562 MMBtu) to National Grid city gates at Pawtucket, RI (14,335 MMBtu), Cranston (10,000 MMBtu), and Smithfield (5,000 MMBtu).
Narragansett Electric Co.	Tennessee	62930	FT-A	15,000	5,475,000	8/31/2022	No	Transportstion service used to transport gas from the interconnect at Dracut (15,000 MMBtu) to National Grid city gate - Cranston (9,000) and National Grid city gate - Pawtucket, RI (6,000 MMBtu).
Narragansett Electric Co.	Tennessee	64025	FT-A	5,220	1,905,300	10/31/2027	No	TGP ConneXion - Transportation service used to transport gas from Tx Zone 0 (5,220 MMBtu) to National Grid city gates at Lincoln, RI (2,610 MMBtu) and Smithfield, RI (2,610). If volumes transported to points other than primary points as listed on the contract, maximum commodity rate per TGP's tariff apply.
Narragansett Electric Co.	Tennessee	64026	FT-A	6,380	2,328,700	10/31/2027	No	TGP ConneXion - Transportation service used to transport gas from Tx Zone 0 (6,380 MMBtu) to National Grid city gates at Lincoln, RI (3,190 MMBtu) and Smithfield, RI (3,190). If volumes transported to points other than primary points as listed on the contract, maximum commodity rate per TGP's tariff apply.
Narragansett Electric Co.	Tennessee	95345	FT-A	1,000	365,000	10/31/2022	No	Transportation service used to transport gas from interconnect at Wright, NY (1,000 MMBtu) to National Grid city gates at Lincoln (1,000 MMBtu).
Narragansett Electric Co.	Tennessee	330580	FT-A	24,000	8,760,000	10/31/2038	No	Transportstion service used to transport gas from the interconnects at Dracut (14,000 MMBtu) and at Distrigas (10,000 MMBtu) to National Grid city gate - Lincoln (24,000).
Narragansett Electric Co.	Tennessee	330581	FT-A	15,000	5,475,000	10/31/2038	No	Transportstion service used to transport gas from the interconnect at Distrigas (15,000 MMBtu) to National Grid city gate - Cranston (15,000).
Narragansett Electric Co.	Tennessee	349449	FT-A	20,000	7,300,000	10/31/2025	No	Transportstion service used to transport gas from the interconnect at Dracut (20,000 MMBtu) to National Grid city gate - Cranston (20,000).

Shipper	Pipeline Company	Contract No.	Rate Schedule	City Gate MDQ	Annual Quantity	Expiration Date	Currently In Evergreen	Notes
Narragansett Electric Co.	Texas Eastern	330844	FTS	6,377	2,327,605	10/31/2022	Yes	Part-157 (7C) transportation service used to transport gas from Leidy, PA (6,377 MMBtu) to interconnect with AGT at Lambertville, NJ or Hanover, NJ (6,377 MMBtu).
Narragansett Electric Co.	Texas Eastern	330845	FTS	537	196,005	10/31/2022	Yes	Part-157 (7C) transportation service used to transport gas from Leidy, PA (537 MMBtu) to interconnect with AGT at Lambertville, NJ or Hanover, NJ (537 MMBtu).
Narragansett Electric Co.	Texas Eastern	330867	FTS-5	813	296,745	3/31/2023	Yes	Part-157 (7C) transportation service used to transport gas from Chambersburg, PA (813 MMBtu) to Lambertville, NJ (813 MMBtu).
Narragansett Electric Co.	Texas Eastern	330870	FTS-5	1,000	365,000	3/31/2023	Yes	Part-157 (7C) transportation service used to transport gas from Chambersburg, PA (1,000 MMBtu) to Lambertville, NJ (1,000 MMBtu).
Narragansett Electric Co.	Texas Eastern	330907	FTS-5	248	90,520	3/31/2023	Yes	Part-157 (7C) transportation service used to transport gas from Chambersburg, PA (248 MMBtu) to Lambertville, NJ (248 MMBtu).
Narragansett Electric Co.	Texas Eastern	331722	FTS-7	538	196,370	3/31/2023	Yes	Part- 157 (7C) transportation service used to transport gas from Oakford, PA (538 MMBtu) to either interconnects at Lambertville or Hanover, NJ (538 MMBtu).
Narragansett Electric Co.	Texas Eastern	331801	FTS-8	79	28,835	3/31/2023	Yes	Part-157 (7C) transportation service used to transport gas from Leidy, PA (38 MMBtu) to either interconnects at Lambertville or Hanover, NJ. In addition, Oakford, PA (41 MMBtu) to either interconnects at Lamberville or Hanover, NJ.
Narragansett Electric Co.	Texas Eastern	331802	FTS-8	187	68,255	3/31/2023	Yes	Part-157 (7C) transportation service used to transport gas from Leidy, PA (89 MMBtu) to either interconnects at Lambertville or Hanover, NJ. In addition, Oakford, PA (98 MMBtu) to either interconnects at Lamberville or Hanover, NJ.
Narragansett Electric Co.	Texas Eastern	331819	FTS-8	4,745	1,731,925	3/31/2023	Yes	Part- 157 (7C) transportation service used to transport gas from Oakford, PA (4,745 MMBtu) to either interconnects at Lambertville or Hanover, NJ (4,745 MMBtu).
Narragansett Electric Co.	Texas Eastern	800156	SCT	2,099	766,135	10/31/2022	Yes	Part-284 transportation contract used to transport gas from the access areas at STX (585 MMBtu oper. entitle.), ETX (392 MMBtu oper. entitle.), WLA (900 MMBtu oper. entitle.), and ELA (1,504 MMBtu oper. entitle.) to the TETCO interconnect with AGT at Lambertville, NJ (2,099 MMBtu).
Narragansett Electric Co.	Texas Eastern	800303	CDS	45,934	16,765,910	10/31/2022	Yes	Part-284 transportation contract used to transport gas from the access areas at STX (14,193 MMBtu oper. entitle.), ETX (9,523 MMBtu oper. entitle.), WLA (21,846 MMBtu oper. entitle.), and ELA (31,460 MMBtu oper. entitle.) to the TETCO interconnect with AGT at Lambertville, NJ (45,934 MMBtu) or Hanover, NJ (18,656 MMBtu) or Zone M3 Storage Point (6,665 MMBtu).
Narragansett Electric Co.	Texas Eastern	800440	CDS	944	344,560	10/31/2022	Yes	Part-284 transportation contract used to transport gas from TETCO FSS-1 #400515 to the TETCO interconnects at Lambertville, NJ (405 MMBtu) and Hanover, NJ (539 MMBtu).
Narragansett Electric Co.	TransCanada	42386	FT	1,012	369,380	10/31/2026	No	Transportation service used to transport gas from the Union Gas interconnect at Parkway to the interconnect with Iroquois Gas Transmission at Waddington (1,012 MMBtu).
Narragansett Electric Co.	TransCanada	64273	FT	29,058	10,606,170	10/31/2040	No	Transportation service used to transport gas from the Union Gas interconnect at Parkway to the interconnect with Portland Natural Gas Transmission System at East Hereford (29,058 MMBtu).
Narragansett Electric Co.	Transco	9081767	FT	1,240	452,600	3/31/2022	Yes	Part-284 transportation service used to transport gas from Transco Leidy (1,240 MMBtu) to the Algonquin interconnect at Centerville, NJ (1,240 MMBtu).
Narragansett Electric Co.	Union Gas	M12164	M12	1,025	374,125	10/31/2022	No	Transportation service used to transport gas from Dawn, Ontario to the interconnect with TransCanada Pipeline at Parkway (1,025 MMBtu).
Narragansett Electric Co.	Union Gas	M12274	M12	29,056	10,605,440	10/31/2040	No	Transportation service used to transport gas from Dawn, Ontario to the interconnect with TransCanada Pipeline at Parkway (29,056 MMBtu).

NATIONAL GRID - RHODE ISLAND ASSETS
Storage Contracts

Shipper	Pipeline Company	Contract No.	Rate Schedule	MDWQ	Annual Quantity	Expiration Date	Currently In Evergreen	Notes
Narragansett Electric	Columbia	9630	FSS	2,545	203,957	4/1/2040	No	Part-284 storage service that provides storage capacity with an injection rate of 2,545 MMBtu/day.
Narragansett Electric	Dominion	300168	GSS	1,401	154,050	3/31/2025	No	Part-284 storage service that provides storage capacity with an injection rate of 856 MMBtu/day.
Narragansett Electric	Dominion	300169	GSS	2,061	206,100	3/31/2022	No	Part-284 storage service that provides storage capacity with an injection rate of 1,145 MMBtu/day.
Narragansett Electric	Dominion	300170	GSS	5,324	490,340	3/31/2025	No	Part-284 storage service that provides storage capacity with an injection rate of 2,724 MMBtu/day.
Narragansett Electric	Dominion	300171	GSS	2,617	188,814	3/31/2022	No	Part-284 storage service that provides storage capacity with an injection rate of 1,049 MMBtu/day.
Narragansett Electric	Dominion	600045	GSS-TE	14,337	1,376,324	3/31/2022	No	Part-157 (7C) storage service that provides storage capacity with an injection rate of 7,647 MMBtu/day.
Narragansett Electric	Tennessee	501	FSMA	10,920	605,343	10/31/2025	No	Storage service that provides storage capacity at an injection rate of 4,036 MMBtu/day.
Narragansett Electric	Tennessee	62918	FSMA	10,249	210,000	10/31/2025	No	Storage service that provides storage capacity at an injection rate of 1,400 MMBtu/day.
Narragansett Electric	Texas Eastern	400185	SS-1	665	51,990	4/30/2022	Yes	Part-284 storage service that provides storage capacity with an injection rate of 267 MMBtu/day. [from Oakford and Leidy storage fields to interconnect at Lambertville, NJ (349 MMBtu) and interconnect at Hanover, NJ (506 MMBtu).]
Narragansett Electric	Texas Eastern	400221	SS-1	14,137	1,188,033	4/30/2022	Yes	Part-284 storage service that provides storage capacity with an injection rate of 6,107 MMBtu/day. [from Oakford and Leidy storage fields to interconnect at Lambertville, NJ (8,017 MMBtu) and interconnect at Hanover, NJ (11,515 MMBtu).]
Narragansett Electric	Texas Eastern	400515	FSS-1	944	56,640	4/30/2022	Yes	Part-284 storage service that provides storage capacity with an injection rate of 291 MMBtu/day.

National Grid Rhode Island
Contract Path Mapping

Contract Name	Path	Contract Name	Path
AGT 510801	AIM	TCO 31524	TCO (Pool)
AGT 9001	TCO (Pool)	TCO 9630	Storage
AGT 90106	Transco	TCO 9631	Storage Delivery
AGT 90106	Storage Delivery	TCO Appalachia	TCO (Pool)
AGT 90107	AGT M3	TCO M3	TCO (M3 ish)
AGT 93001ESC	AGT M3	TCPL 42386	Dawn via Waddington
AGT 93001ESC	TETCO SCT Long Haul	TCPL 58577	Dawn via PNGTS
AGT 93011E	TETCO CDS Long Haul	TET 330844	Storage Delivery
AGT 93011E	AGT M3	TET 330845	Dominion
AGT 93011E	TETCO CDS Long Haul	TET 330867	Storage Delivery
AGT 933005	Storage Delivery	TET 330870	Storage Delivery
AGT 93401S	Storage Delivery	TET 330907	Storage Delivery
AGT 96004SC	Transco	TET 331722	Storage Delivery
AGT 96004SC	Dominion	TET 331801	Storage Delivery
AGT 9B105	Storage Delivery	TET 331802	Storage Delivery
AGT 9S100S	Storage Delivery	TET 331819	Storage Delivery
AGT 9W009E	Storage Delivery	TET 400185	Storage
AGT Citygate	Citygate Peaking	TET 400221	Storage
Constel 0416	Everett	TET 400515	Storage
Dawn East Hereford	Dawn via PNGTS	TET 800156	TETCO SCT Long Haul
Dawn Waddington	Dawn via Waddington	TET 800303	TETCO CDS Long Haul
DETI 100118	Dominion	TET 800440	Storage Delivery
DETI 300168	Storage	Tetco M2 CDS	TETCO CDS Long Haul
DETI 300169	Storage	Tetco M2 SCT	TETCO SCT Long Haul
DETI 300170	Storage	Tetco M3	AGT M3
DETI 300171	Storage	TGP 10807	Storage Delivery
DETI 600045	Storage	TGP 1597	TGP Long Haul
DETI 700086	Storage Delivery	TGP 330580	Dawn via PNGTS
DETI 700087	Storage Delivery	TGP 330580	Everett
Dominion South Point	Dominion	TGP 330581	Everett
IGT 50001	Dawn via Waddington	TGP 349449	Dracut
LNG	LNG	TGP 39173	Niagara
LNG_Exeter	LNG	TGP 501	Storage
LNG_Prov	LNG	TGP 62918	Storage
Manchester Lateral	Manchester Lateral	TGP 62930	Dawn via PNGTS
Millenium East	AIM	TGP 64025	TGP ConneXion
MPL 214129	AIM	TGP 64026	TGP ConneXion
Niagara	Niagara	TGP 95345	Dawn via Waddington
PNGTS 210203	Dawn via PNGTS	TGP Citygate	Proposed Citygate Peaking
Portable LNG	Portable LNG	TGP Z4 CnX	TGP ConneXion
Proposed Dracut Supply Deal	Dracut	TGP Z4 LH	TGP Long Haul
Proposed Everett Supply Deal	Everett	TRA 9081767	Transco
Proposed Summer Liquid	LNG	Transco Leidy	Transco
Proposed Summer Trucking	LNG	Trucking	LNG
Ramapo	AIM	UN M12164	Dawn via Waddington
Summer Liquid Refill	LNG	UN M12274	Dawn via PNGTS
Summer Trucking	LNG	Waddington	Dawn via Waddington
TCO 31523	TCO (Pool)	Winter Trucking	LNG
TCO 31524	Storage Delivery	Yankee Interconnect	Yankee Interconnect

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Day with Existing Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	70	71	72	73	74
	Providence	305	310	316	319	322
	Warren	12	12	12	12	12
	Westerly	7	7	7	7	7
Fuel Reimbursement		5	5	5	5	5
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		398	405	412	415	419
RESOURCES						
TGP	Dawn PNGTS	29	29	29	29	29
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	34	34	34	34	34
	Dracut	20	20	20	20	20
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	20	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	40	40	40	40	40
	Dominion South Point	1	1	1	1	1
	TCO Appalachia	33	33	33	33	33
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	8	9	9	9	9
	AIM (Millennium)	9	9	9	9	9
	M3	26	25	26	25	26
	AGT Citygate	14	14	0	0	0
	Storage	28	29	28	29	28
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		1	119	46	119	24
Unserved	Valley	0	3	18	24	19
	Providence	118	23	102	26	129
	Warren	2	3	3	3	3
	Westerly	0	0	0	0	0
		121	29	123	53	152
TOTAL		398	405	412	415	419

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only and Customer Choice)
(BBtu)

		Design Heating Season (Nov-Mar) with Existing Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	5,348	5,440	5,590	5,582	5,636
	Providence	23,409	23,814	24,470	24,435	24,670
	Warren	889	904	929	928	937
	Westerly	503	512	526	525	530
Fuel Reimbursement		609	607	610	603	606
Underground Storage Refill		0	0	0	0	0
LNG Refill		95	98	0	0	0
TOTAL		30,853	31,376	32,125	32,073	32,379
RESOURCES						
TGP	Dawn PNGTS	3,113	3,181	2,975	2,963	2,986
	Dawn Iroquois	107	110	113	119	123
	Niagara	132	131	134	131	129
	Zone 4	4,970	5,321	5,640	5,614	5,622
	Dracut	1,147	1,202	1,290	1,294	1,324
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	1,341	1,067	1,006	995	995
TET/AGT	M2	5,993	5,998	6,038	5,975	6,039
	Dominion South Point	82	83	83	82	82
	TCO Appalachia	4,751	4,722	4,566	4,353	4,360
	Transco Leidy	187	187	188	187	187
	AIM (Ramapo)	448	474	518	531	542
	AIM (Millennium)	1,365	1,365	1,374	1,365	1,365
	M3	2,381	2,457	2,877	3,086	3,092
	AGT Citygate	508	508	0	0	0
	Storage	2,619	2,617	2,650	2,627	2,626
Liquid for Portables and Refill		95	98	0	0	0
LNG From Storage		173	831	733	733	733
Unserved	Valley	2	3	77	92	83
	Providence	784	1,015	1,852	1,916	2,080
	Warren	4	5	9	10	11
	Westerly	0	0	0	0	0
		790	1,023	1,938	2,018	2,173
TOTAL		30,853	31,376	32,125	32,073	32,379

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

Design Non-Heating Season (Apr-Oct) with Existing Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,997	2,034	2,048	2,066	2,083
	Providence	8,741	8,905	8,963	9,044	9,116
	Warren	332	338	340	343	346
	Westerly	188	191	193	194	196
Fuel Reimbursement		293	351	334	356	403
Underground Storage Refill		4,002	3,924	3,896	3,939	3,973
LNG Refill		212	867	867	867	867
TOTAL		15,765	16,610	16,640	16,810	16,984
RESOURCES						
TGP	Dawn PNGTS	38	138	142	50	53
	Dawn Iroquois	2	4	6	6	7
	Niagara	34	67	134	135	111
	Zone 4	2,367	2,832	2,932	3,042	3,319
	Dracut	909	579	320	322	97
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	232	234	236	238
TET/AGT	M2	7,387	5,486	5,393	6,061	7,841
	Dominion South Point	44	32	47	34	68
	TCO Appalachia	513	1,027	610	542	552
	Transco Leidy	35	54	54	54	60
	AIM (Ramapo)	96	100	88	92	90
	AIM (Millennium)	1,935	1,695	1,085	1,578	1,843
	M3	2,066	4,221	5,451	4,437	2,488
	AGT Citygate	0	0	0	0	0
	Storage	102	8	5	82	77
Liquid for Portables and Refill		105	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	2	3	5	6
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	2	3	5	6
TOTAL		15,765	16,610	16,640	16,810	16,984

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Annual with Existing Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	7,345	7,475	7,638	7,648	7,719
	Providence	32,150	32,719	33,433	33,479	33,786
	Warren	1,220	1,242	1,269	1,271	1,283
	Westerly	691	703	718	719	726
Fuel Reimbursement		903	958	943	958	1,009
Underground Storage Refill		4,002	3,924	3,896	3,939	3,973
LNG Refill		308	965	867	867	867
TOTAL		46,618	47,986	48,764	48,883	49,363
RESOURCES						
TGP	Dawn PNGTS	3,151	3,319	3,117	3,013	3,039
	Dawn Iroquois	109	114	120	125	130
	Niagara	165	198	268	266	240
	Zone 4	7,337	8,153	8,572	8,656	8,940
	Dracut	2,056	1,781	1,611	1,616	1,421
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	1,341	1,299	1,240	1,231	1,233
TET/AGT	M2	13,380	11,484	11,432	12,036	13,880
	Dominion South Point	127	114	130	116	150
	TCO Appalachia	5,264	5,749	5,176	4,895	4,913
	Transco Leidy	222	241	243	241	247
	AIM (Ramapo)	544	575	606	623	632
	AIM (Millennium)	3,300	3,060	2,459	2,943	3,208
	M3	4,446	6,678	8,328	7,524	5,580
	AGT Citygate	508	508	0	0	0
	Storage	2,721	2,625	2,656	2,709	2,702
Liquid for Portables and Refill		200	98	0	0	0
LNG From Storage		308	965	867	867	867
Unserved	Valley	2	3	77	92	83
	Providence	784	1,017	1,855	1,921	2,086
	Warren	4	5	9	10	11
	Westerly	0	0	0	0	0
		790	1,025	1,941	2,023	2,179
TOTAL		46,618	47,986	48,764	48,883	49,363

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Heating Season (Nov-Mar) with Existing Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	4,839	4,923	5,056	5,051	5,099
	Providence	21,199	21,567	22,149	22,128	22,340
	Warren	788	802	823	822	830
	Westerly	453	461	474	473	478
Fuel Reimbursement		578	577	578	573	576
Underground Storage Refill		0	0	0	0	0
LNG Refill		31	37	0	0	0
TOTAL		27,889	28,366	29,080	29,047	29,324
RESOURCES						
TGP	Dawn PNGTS	2,516	2,575	2,465	2,460	2,487
	Dawn Iroquois	89	95	98	99	100
	Niagara	120	117	119	113	113
	Zone 4	4,624	5,044	5,489	5,512	5,523
	Dracut	381	651	844	860	895
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	1,341	1,091	1,006	994	994
TET/AGT	M2	5,966	5,972	6,003	5,947	6,005
	Dominion South Point	82	83	83	82	83
	TCO Appalachia	4,649	4,550	4,314	4,109	4,135
	Transco Leidy	187	187	188	187	187
	AIM (Ramapo)	292	325	376	407	412
	AIM (Millennium)	1,365	1,365	1,374	1,365	1,365
	M3	1,726	1,825	2,183	2,338	2,359
	AGT Citygate	381	508	0	0	0
	Storage	2,618	2,622	2,646	2,616	2,605
Liquid for Portables and Refill		31	37	0	0	0
LNG From Storage		109	770	733	733	733
Unserved	Valley	10	15	99	107	96
	Providence	746	529	1,049	1,109	1,219
	Warren	4	5	10	11	12
	Westerly	0	0	0	0	0
		760	549	1,158	1,228	1,327
TOTAL		27,889	28,366	29,080	29,047	29,324

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

Cold Snap Non-Heating Season (Apr-Oct) with Existing Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,853	1,888	1,900	1,917	1,932
	Providence	8,118	8,270	8,323	8,399	8,465
	Warren	302	307	309	312	315
	Westerly	174	177	178	180	181
Fuel Reimbursement		283	339	321	344	391
Underground Storage Refill		3,985	3,928	3,866	3,904	3,917
LNG Refill		212	867	867	867	867
TOTAL		14,926	15,775	15,765	15,922	16,068
RESOURCES						
TGP	Dawn PNGTS	25	75	77	29	29
	Dawn Iroquois	1	1	3	3	3
	Niagara	32	66	131	131	84
	Zone 4	2,246	2,698	2,770	2,828	3,126
	Dracut	805	538	283	287	61
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	211	212	215	217
TET/AGT	M2	7,326	5,445	5,371	6,030	7,805
	Dominion South Point	43	30	47	33	67
	TCO Appalachia	400	915	443	399	399
	Transco Leidy	34	51	51	52	55
	AIM (Ramapo)	59	58	54	58	58
	AIM (Millennium)	1,935	1,651	1,071	1,582	1,848
	M3	1,696	3,898	5,115	4,065	2,108
	AGT Citygate	0	0	0	0	0
	Storage	86	4	3	79	75
Liquid for Portables and Refill		105	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	0	0
TOTAL		14,926	15,775	15,765	15,922	16,068

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Annual with Existing Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	6,692	6,810	6,956	6,968	7,032
	Providence	29,317	29,837	30,473	30,527	30,806
	Warren	1,090	1,109	1,133	1,135	1,145
	Westerly	627	638	652	653	659
Fuel Reimbursement		861	915	900	916	967
Underground Storage Refill		3,985	3,928	3,866	3,904	3,917
LNG Refill		243	904	867	867	867
TOTAL		42,814	44,141	44,845	44,970	45,391
RESOURCES						
TGP	Dawn PNGTS	2,541	2,650	2,542	2,489	2,516
	Dawn Iroquois	90	96	101	102	103
	Niagara	152	183	250	244	198
	Zone 4	6,870	7,742	8,259	8,340	8,649
	Dracut	1,186	1,189	1,127	1,146	956
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	1,341	1,302	1,218	1,209	1,211
TET/AGT	M2	13,292	11,417	11,374	11,976	13,810
	Dominion South Point	125	113	130	115	150
	TCO Appalachia	5,049	5,465	4,757	4,508	4,534
	Transco Leidy	221	238	240	239	242
	AIM (Ramapo)	350	383	430	464	469
	AIM (Millennium)	3,300	3,016	2,445	2,947	3,213
	M3	3,421	5,723	7,298	6,402	4,467
	AGT Citygate	381	508	0	0	0
	Storage	2,704	2,626	2,649	2,695	2,680
Liquid for Portables and Refill		136	37	0	0	0
LNG From Storage		243	904	867	867	867
Unserved	Valley	10	15	99	107	96
	Providence	746	529	1,049	1,109	1,219
	Warren	4	5	10	11	12
	Westerly	0	0	0	0	0
		760	549	1,158	1,228	1,327
TOTAL		42,814	44,141	44,845	44,970	45,391

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

Design Day with Proposed Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	70	71	72	73	74
	Providence	305	310	316	319	322
	Warren	12	12	12	12	12
	Westerly	7	7	7	7	7
Fuel Reimbursement		5	5	5	5	5
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		398	405	412	415	419
RESOURCES						
TGP	Dawn PNGTS	29	29	29	29	29
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	34	34	34	34	34
	Dracut	20	20	20	20	20
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	20	0	0	0	0
	Everett Swing	5	25	30	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	40	40	40	40	40
	Dominion South Point	1	1	1	1	1
	TCO Appalachia	33	33	33	33	33
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	8	9	9	9	9
	AIM (Millennium)	9	9	9	9	9
	M3	25	25	26	26	25
	AGT Citygate	11	14	0	0	0
	Storage	29	29	28	28	29
Liquid for Portables and Refill		0	4	6	0	0
LNG From Storage		119	119	119	119	37
Unserved	Valley	0	0	8	19	19
	Providence	0	0	4	32	117
	Warren	0	0	3	3	3
	Westerly	0	0	0	0	0
		0	0	15	53	139
TOTAL		398	405	412	415	419

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only and Customer Choice)
(BBtu)

		Design Heating Season (Nov-Mar) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	5,348	5,440	5,590	5,582	5,636
	Providence	23,409	23,814	24,470	24,435	24,670
	Warren	889	904	929	928	937
	Westerly	503	512	526	525	530
Fuel Reimbursement		610	609	612	603	606
Underground Storage Refill		0	0	0	0	0
LNG Refill		263	192	94	0	0
TOTAL		31,022	31,472	32,221	32,073	32,379
RESOURCES						
TGP	Dawn PNGTS	3,105	3,175	2,975	2,963	2,986
	Dawn Iroquois	107	110	113	119	123
	Niagara	132	131	134	131	129
	Zone 4	4,967	5,321	5,640	5,614	5,622
	Dracut	1,047	1,196	1,277	1,294	1,324
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	187	911	1,247	0	0
	Storage	1,341	1,067	1,006	995	995
TET/AGT	M2	5,993	5,997	6,038	5,975	6,039
	Dominion South Point	82	83	83	82	82
	TCO Appalachia	4,751	4,721	4,566	4,353	4,360
	Transco Leidy	187	187	188	187	187
	AIM (Ramapo)	445	464	518	531	542
	AIM (Millennium)	1,365	1,365	1,374	1,365	1,365
	M3	2,362	2,437	2,877	3,086	3,092
	AGT Citygate	508	508	0	0	0
	Storage	2,649	2,654	2,650	2,627	2,626
Liquid for Portables and Refill		276	223	181	0	0
LNG From Storage		867	923	827	733	733
Unserved	Valley	0	0	8	82	84
	Providence	0	0	508	1,926	2,078
	Warren	0	0	9	10	11
	Westerly	0	0	0	0	0
		0	0	526	2,018	2,173
TOTAL		31,022	31,472	32,221	32,073	32,379

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

Design Non-Heating Season (Apr-Oct) with Proposed Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,997	2,034	2,048	2,066	2,083
	Providence	8,741	8,905	8,963	9,044	9,116
	Warren	332	338	340	343	346
	Westerly	188	191	193	194	196
Fuel Reimbursement		294	351	334	356	403
Underground Storage Refill		4,017	3,959	3,896	3,939	3,973
LNG Refill		738	867	867	867	867
TOTAL		16,307	16,646	16,640	16,810	16,984
RESOURCES						
TGP	Dawn PNGTS	38	139	142	50	53
	Dawn Iroquois	2	4	6	6	7
	Niagara	34	67	134	135	111
	Zone 4	2,367	2,833	2,932	3,042	3,319
	Dracut	909	579	320	322	97
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	232	234	236	238
TET/AGT	M2	7,387	5,486	5,393	6,061	7,841
	Dominion South Point	44	32	47	34	68
	TCO Appalachia	540	1,063	610	542	552
	Transco Leidy	35	54	54	54	60
	AIM (Ramapo)	98	100	88	92	90
	AIM (Millennium)	1,935	1,695	1,085	1,578	1,843
	M3	2,066	4,221	5,451	4,437	2,488
	AGT Citygate	0	0	0	0	0
	Storage	88	6	5	82	77
Liquid for Portables and Refill		631	0	0	0	0
LNG From Storage		134	137	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	3	5	6
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	3	5	6
TOTAL		16,307	16,646	16,640	16,810	16,984

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Annual with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	7,345	7,475	7,638	7,648	7,719
	Providence	32,150	32,719	33,433	33,479	33,786
	Warren	1,220	1,242	1,269	1,271	1,283
	Westerly	691	703	718	719	726
Fuel Reimbursement		904	961	946	958	1,009
Underground Storage Refill		4,017	3,959	3,896	3,939	3,973
LNG Refill		1,001	1,060	961	867	867
TOTAL		47,328	48,118	48,861	48,883	49,363
RESOURCES						
TGP	Dawn PNGTS	3,144	3,313	3,117	3,013	3,039
	Dawn Iroquois	109	114	120	125	130
	Niagara	165	198	268	266	240
	Zone 4	7,334	8,153	8,572	8,656	8,940
	Dracut	1,956	1,775	1,597	1,616	1,421
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	187	911	1,247	0	0
	Storage	1,341	1,299	1,240	1,231	1,233
TET/AGT	M2	13,379	11,483	11,432	12,036	13,880
	Dominion South Point	127	114	130	116	150
	TCO Appalachia	5,291	5,784	5,175	4,895	4,913
	Transco Leidy	222	241	243	241	247
	AIM (Ramapo)	542	565	606	623	632
	AIM (Millennium)	3,300	3,060	2,459	2,943	3,208
	M3	4,428	6,657	8,328	7,524	5,580
	AGT Citygate	508	508	0	0	0
	Storage	2,737	2,660	2,656	2,709	2,702
Liquid for Portables and Refill		907	223	181	0	0
LNG From Storage		1,001	1,060	961	867	867
Unserved	Valley	0	0	8	82	84
	Providence	0	0	512	1,931	2,084
	Warren	0	0	9	10	11
	Westerly	0	0	0	0	0
		0	0	529	2,023	2,179
TOTAL		47,328	48,118	48,861	48,883	49,363

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

		Normal Heating Season (Nov-Mar) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	4,614	4,694	4,823	4,816	4,862
	Providence	20,214	20,565	21,128	21,100	21,301
	Warren	751	764	785	784	792
	Westerly	432	440	452	451	456
Fuel Reimbursement		572	574	576	570	573
Underground Storage Refill		0	0	0	0	0
LNG Refill		191	123	140	0	0
TOTAL		26,774	27,160	27,904	27,721	27,984
RESOURCES						
TGP	Dawn PNGTS	2,497	2,565	2,459	2,459	2,486
	Dawn Iroquois	87	93	96	97	101
	Niagara	120	117	119	113	113
	Zone 4	4,624	5,044	5,489	5,512	5,523
	Dracut	179	140	443	678	700
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	6	24	225	0	0
	Storage	1,341	1,091	1,006	994	994
TET/AGT	M2	5,964	5,972	6,003	5,947	6,005
	Dominion South Point	82	83	83	82	83
	TCO Appalachia	4,651	4,550	4,321	4,109	4,135
	Transco Leidy	187	187	188	187	187
	AIM (Ramapo)	170	290	343	375	380
	AIM (Millennium)	1,365	1,365	1,374	1,365	1,365
	M3	1,551	1,701	2,042	2,212	2,238
	AGT Citygate	261	278	0	0	0
	Storage	2,616	2,622	2,658	2,616	2,603
Liquid for Portables and Refill		191	181	181	0	0
LNG From Storage		230	856	873	733	733
Unserved	Valley	0	0	0	6	7
	Providence	0	0	0	236	330
	Warren	0	0	0	1	1
	Westerly	0	0	0	0	0
		0	0	0	242	338
TOTAL		26,774	27,160	27,904	27,721	27,984

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

Normal Non-Heating Season (Apr-Oct) with Proposed Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,855	1,890	1,902	1,919	1,935
	Providence	8,128	8,280	8,333	8,409	8,475
	Warren	302	308	310	313	315
	Westerly	174	177	178	180	181
Fuel Reimbursement		283	339	321	344	391
Underground Storage Refill		3,983	3,928	3,879	3,904	3,915
LNG Refill		173	867	867	867	867
TOTAL		14,898	15,788	15,791	15,935	16,079
RESOURCES						
TGP	Dawn PNGTS	25	75	77	29	29
	Dawn Iroquois	1	1	3	3	3
	Niagara	32	66	131	131	86
	Zone 4	2,246	2,698	2,771	2,829	3,127
	Dracut	808	539	284	288	61
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	211	212	215	217
TET/AGT	M2	7,327	5,445	5,367	6,030	7,805
	Dominion South Point	43	30	47	33	67
	TCO Appalachia	398	915	460	399	397
	Transco Leidy	34	51	51	52	55
	AIM (Ramapo)	59	58	54	58	58
	AIM (Millennium)	1,935	1,651	1,071	1,582	1,848
	M3	1,703	3,908	5,125	4,075	2,118
	AGT Citygate	0	0	0	0	0
	Storage	87	4	3	79	75
Liquid for Portables and Refill		66	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	0	0
TOTAL		14,898	15,788	15,791	15,935	16,079

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

		Normal Annual with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	6,469	6,584	6,725	6,736	6,797
	Providence	28,341	28,845	29,462	29,508	29,776
	Warren	1,053	1,072	1,095	1,097	1,107
	Westerly	606	617	630	631	637
Fuel Reimbursement		855	913	898	914	964
Underground Storage Refill		3,983	3,928	3,879	3,904	3,915
LNG Refill		364	990	1,007	867	867
TOTAL		41,672	42,948	43,695	43,656	44,063
RESOURCES						
TGP	Dawn PNGTS	2,522	2,640	2,536	2,488	2,515
	Dawn Iroquois	88	94	99	100	104
	Niagara	152	183	250	244	199
	Zone 4	6,870	7,743	8,260	8,341	8,650
	Dracut	987	679	727	966	761
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	6	24	225	0	0
	Storage	1,341	1,302	1,218	1,209	1,211
TET/AGT	M2	13,292	11,417	11,370	11,976	13,810
	Dominion South Point	125	113	130	115	150
	TCO Appalachia	5,049	5,465	4,780	4,508	4,532
	Transco Leidy	221	238	240	239	242
	AIM (Ramapo)	229	348	397	433	438
	AIM (Millennium)	3,300	3,016	2,445	2,947	3,213
	M3	3,255	5,610	7,168	6,287	4,357
	AGT Citygate	261	278	0	0	0
	Storage	2,702	2,626	2,661	2,695	2,678
Liquid for Portables and Refill		257	181	181	0	0
LNG From Storage		364	990	1,007	867	867
Unserved	Valley	0	0	0	6	7
	Providence	0	0	0	236	330
	Warren	0	0	0	1	1
	Westerly	0	0	0	0	0
		0	0	0	242	338
TOTAL		41,672	42,948	43,695	43,656	44,063

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Heating Season (Nov-Mar) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	4,839	4,923	5,056	5,051	5,099
	Providence	21,199	21,567	22,149	22,128	22,340
	Warren	788	802	823	822	830
	Westerly	453	461	474	473	478
Fuel Reimbursement		579	578	580	573	576
Underground Storage Refill		0	0	0	0	0
LNG Refill		194	152	96	0	0
TOTAL		28,052	28,483	29,178	29,047	29,324
RESOURCES						
TGP	Dawn PNGTS	2,516	2,575	2,461	2,460	2,487
	Dawn Iroquois	89	95	98	99	100
	Niagara	120	117	119	113	113
	Zone 4	4,624	5,044	5,489	5,512	5,523
	Dracut	338	519	666	678	700
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	70	517	834	0	0
	Storage	1,341	1,091	1,006	994	994
TET/AGT	M2	5,966	5,972	6,003	5,947	6,005
	Dominion South Point	82	83	83	82	83
	TCO Appalachia	4,649	4,550	4,321	4,109	4,135
	Transco Leidy	187	187	188	187	187
	AIM (Ramapo)	292	325	374	407	412
	AIM (Millennium)	1,365	1,365	1,374	1,365	1,365
	M3	1,726	1,825	2,169	2,338	2,360
	AGT Citygate	381	508	0	0	0
	Storage	2,618	2,622	2,658	2,616	2,604
Liquid for Portables and Refill		212	202	181	0	0
LNG From Storage		825	885	829	733	733
Unserved	Valley	0	0	12	113	105
	Providence	0	0	302	1,285	1,405
	Warren	0	0	10	11	12
	Westerly	0	0	0	0	0
		0	0	324	1,410	1,522
TOTAL		28,052	28,483	29,178	29,047	29,324

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Non-Heating Season (Apr-Oct) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,853	1,888	1,900	1,917	1,932
	Providence	8,118	8,270	8,323	8,399	8,465
	Warren	302	307	309	312	315
	Westerly	174	177	178	180	181
Fuel Reimbursement		283	339	321	344	391
Underground Storage Refill		3,985	3,928	3,879	3,904	3,916
LNG Refill		765	867	867	867	867
TOTAL		15,478	15,775	15,778	15,922	16,067
RESOURCES						
TGP	Dawn PNGTS	25	75	77	29	29
	Dawn Iroquois	1	1	3	3	3
	Niagara	32	66	131	131	84
	Zone 4	2,246	2,698	2,770	2,828	3,126
	Dracut	805	538	283	287	61
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	211	212	215	217
TET/AGT	M2	7,326	5,445	5,367	6,030	7,805
	Dominion South Point	43	30	47	33	67
	TCO Appalachia	400	915	460	399	398
	Transco Leidy	34	51	51	52	55
	AIM (Ramapo)	59	58	54	58	58
	AIM (Millennium)	1,935	1,651	1,071	1,582	1,848
	M3	1,696	3,898	5,115	4,065	2,108
	AGT Citygate	0	0	0	0	0
	Storage	86	4	3	79	75
Liquid for Portables and Refill		658	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	0	0
TOTAL		15,478	15,775	15,778	15,922	16,067

National Grid Rhode Island
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Annual with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	6,692	6,810	6,956	6,968	7,032
	Providence	29,317	29,837	30,473	30,527	30,806
	Warren	1,090	1,109	1,133	1,135	1,145
	Westerly	627	638	652	653	659
Fuel Reimbursement		861	916	902	916	967
Underground Storage Refill		3,985	3,928	3,879	3,904	3,916
LNG Refill		959	1,019	963	867	867
TOTAL		43,531	44,257	44,956	44,970	45,390
RESOURCES						
TGP	Dawn PNGTS	2,541	2,650	2,538	2,489	2,516
	Dawn Iroquois	90	96	101	102	103
	Niagara	152	183	250	244	198
	Zone 4	6,870	7,742	8,259	8,340	8,649
	Dracut	1,142	1,057	949	964	761
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	70	517	834	0	0
	Storage	1,341	1,302	1,218	1,209	1,211
TET/AGT	M2	13,292	11,417	11,370	11,976	13,810
	Dominion South Point	125	113	130	115	150
	TCO Appalachia	5,049	5,465	4,780	4,508	4,533
	Transco Leidy	221	238	240	239	242
	AIM (Ramapo)	350	383	428	464	470
	AIM (Millennium)	3,300	3,016	2,445	2,947	3,213
	M3	3,421	5,723	7,284	6,402	4,467
	AGT Citygate	381	508	0	0	0
	Storage	2,704	2,626	2,661	2,695	2,679
Liquid for Portables and Refill		870	202	181	0	0
LNG From Storage		959	1,019	963	867	867
Unserved	Valley	0	0	12	113	105
	Providence	0	0	302	1,285	1,405
	Warren	0	0	10	11	12
	Westerly	0	0	0	0	0
		0	0	324	1,410	1,522
TOTAL		43,531	44,257	44,956	44,970	45,390

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Day with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	59	60	62	62	63
	Providence	259	264	270	273	276
	Warren	10	10	10	10	10
	Westerly	6	6	6	6	6
Fuel Reimbursement		5	5	5	5	5
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		339	345	352	356	360
RESOURCES						
TGP	Dawn PNGTS	24	24	24	24	24
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	34	34	34	34	34
	Dracut	17	7	17	17	17
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	20	0	0	0	0
	Everett Swing	5	1	30	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	40	40	40	40	40
	Dominion South Point	1	1	1	1	1
	TCO Appalachia	33	33	33	33	33
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	6	6	6	7	7
	AIM (Millennium)	7	7	7	7	7
	M3	17	17	17	17	17
	AGT Citygate	14	14	0	0	0
	Storage	29	29	29	29	28
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		79	119	95	117	119
Unserved	Valley	0	0	5	15	16
	Providence	0	0	0	0	1
	Warren	0	0	2	2	2
	Westerly	0	0	0	0	0
		0	0	7	17	19
TOTAL		339	345	352	356	360

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Heating Season (Nov-Mar) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	4,426	4,503	4,633	4,633	4,684
	Providence	19,373	19,710	20,281	20,279	20,502
	Warren	735	748	770	770	778
	Westerly	416	424	436	436	441
Fuel Reimbursement		544	543	546	539	542
Underground Storage Refill		0	0	0	0	0
LNG Refill		212	153	156	0	0
TOTAL		25,706	26,080	26,822	26,656	26,946
RESOURCES						
TGP	Dawn PNGTS	2,018	2,065	1,978	1,982	2,008
	Dawn Iroquois	78	79	84	84	87
	Niagara	99	90	92	91	91
	Zone 4	4,457	4,842	5,187	5,204	5,237
	Dracut	245	333	621	628	649
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	18	189	686	0	0
	Storage	1,341	1,097	1,005	1,009	994
TET/AGT	M2	5,900	5,915	5,936	5,888	5,938
	Dominion South Point	82	83	82	82	82
	TCO Appalachia	4,503	4,421	4,317	4,076	4,096
	Transco Leidy	186	186	184	184	185
	AIM (Ramapo)	240	256	282	303	312
	AIM (Millennium)	1,116	1,116	1,123	1,116	1,116
	M3	1,161	1,226	1,517	1,713	1,740
	AGT Citygate	386	508	0	0	0
	Storage	2,582	2,609	2,648	2,610	2,599
Liquid for Portables and Refill		212	181	181	0	0
LNG From Storage		431	886	889	733	733
Unserved	Valley	0	0	5	49	54
	Providence	0	0	0	900	1,022
	Warren	0	0	4	4	5
	Westerly	0	0	0	0	0
		0	0	9	953	1,081
TOTAL		25,706	26,080	26,822	26,656	26,946

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Non-Heating Season (Apr-Oct) with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,502	1,528	1,542	1,558	1,574
	Providence	6,575	6,689	6,749	6,822	6,889
	Warren	250	254	256	259	262
	Westerly	141	144	145	147	148
Fuel Reimbursement		239	297	287	306	347
Underground Storage Refill		3,954	3,916	3,864	3,908	3,891
LNG Refill		354	867	867	867	867
TOTAL		13,015	13,695	13,710	13,867	13,978
RESOURCES						
TGP	Dawn PNGTS	16	65	68	24	24
	Dawn Iroquois	1	0	0	1	1
	Niagara	32	37	98	104	67
	Zone 4	2,069	2,456	2,480	2,542	2,773
	Dracut	624	433	227	229	46
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	205	206	208	209
TET/AGT	M2	6,457	5,278	5,258	5,801	7,533
	Dominion South Point	20	12	24	12	41
	TCO Appalachia	362	735	467	403	399
	Transco Leidy	21	41	41	41	45
	AIM (Ramapo)	38	54	33	36	35
	AIM (Millennium)	1,581	927	550	975	1,039
	M3	1,321	3,314	4,121	3,274	1,544
	AGT Citygate	0	0	0	0	0
	Storage	92	5	4	81	89
Liquid for Portables and Refill		247	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	0	0
TOTAL		13,015	13,695	13,710	13,867	13,978

National Grid Rhode Island
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Annual with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	5,928	6,031	6,175	6,191	6,258
	Providence	25,947	26,398	27,029	27,101	27,391
	Warren	985	1,002	1,026	1,029	1,040
	Westerly	558	567	581	582	589
Fuel Reimbursement		783	840	834	845	889
Underground Storage Refill		3,954	3,916	3,864	3,908	3,891
LNG Refill		566	1,020	1,023	867	867
TOTAL		38,721	39,775	40,531	40,523	40,924
RESOURCES						
TGP	Dawn PNGTS	2,034	2,131	2,046	2,006	2,032
	Dawn Iroquois	79	79	84	85	88
	Niagara	131	127	190	196	158
	Zone 4	6,526	7,298	7,667	7,746	8,009
	Dracut	869	765	848	857	695
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	651	0	0	0	0
	Everett Swing	18	189	686	0	0
	Storage	1,341	1,302	1,211	1,217	1,204
TET/AGT	M2	12,357	11,193	11,194	11,689	13,470
	Dominion South Point	102	95	106	94	123
	TCO Appalachia	4,865	5,156	4,784	4,479	4,496
	Transco Leidy	207	226	224	225	230
	AIM (Ramapo)	278	309	315	339	347
	AIM (Millennium)	2,696	2,042	1,673	2,091	2,154
	M3	2,482	4,539	5,637	4,987	3,283
	AGT Citygate	386	508	0	0	0
	Storage	2,674	2,615	2,652	2,691	2,688
Liquid for Portables and Refill		458	181	181	0	0
LNG From Storage		566	1,020	1,023	867	867
Unserved	Valley	0	0	5	49	54
	Providence	0	0	0	900	1,022
	Warren	0	0	4	4	5
	Westerly	0	0	0	0	0
		0	0	9	953	1,081
TOTAL		38,721	39,775	40,531	40,523	40,924

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

Normal Heating Season (Nov-Mar) with Proposed Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	3,798	3,864	3,975	3,975	4,019
	Providence	16,638	16,927	17,415	17,416	17,607
	Warren	618	629	647	647	654
	Westerly	356	362	372	372	377
Fuel Reimbursement		500	498	503	499	504
Underground Storage Refill		0	0	0	0	0
LNG Refill		186	159	142	0	0
TOTAL		22,095	22,439	23,054	22,910	23,161
RESOURCES						
TGP	Dawn PNGTS	1,391	1,487	1,500	1,493	1,533
	Dawn Iroquois	48	50	58	58	60
	Niagara	87	70	75	75	75
	Zone 4	3,844	4,364	4,779	4,913	4,982
	Dracut	12	0	0	0	32
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	504	0	0	0	0
	Everett Swing	0	0	3	0	0
	Storage	1,341	1,125	1,005	1,037	994
TET/AGT	M2	5,857	5,861	5,820	5,805	5,861
	Dominion South Point	81	83	82	82	82
	TCO Appalachia	4,089	4,072	4,086	3,639	3,677
	Transco Leidy	183	183	178	176	177
	AIM (Ramapo)	46	34	60	130	174
	AIM (Millennium)	1,116	1,116	1,123	1,116	1,116
	M3	392	431	707	1,104	1,136
	AGT Citygate	42	0	0	0	0
	Storage	2,666	2,526	2,523	2,545	2,524
Liquid for Portables and Refill		186	181	181	0	0
LNG From Storage		210	855	875	733	733
Unserved	Valley	0	0	0	4	4
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	4	4
TOTAL		22,095	22,439	23,054	22,910	23,161

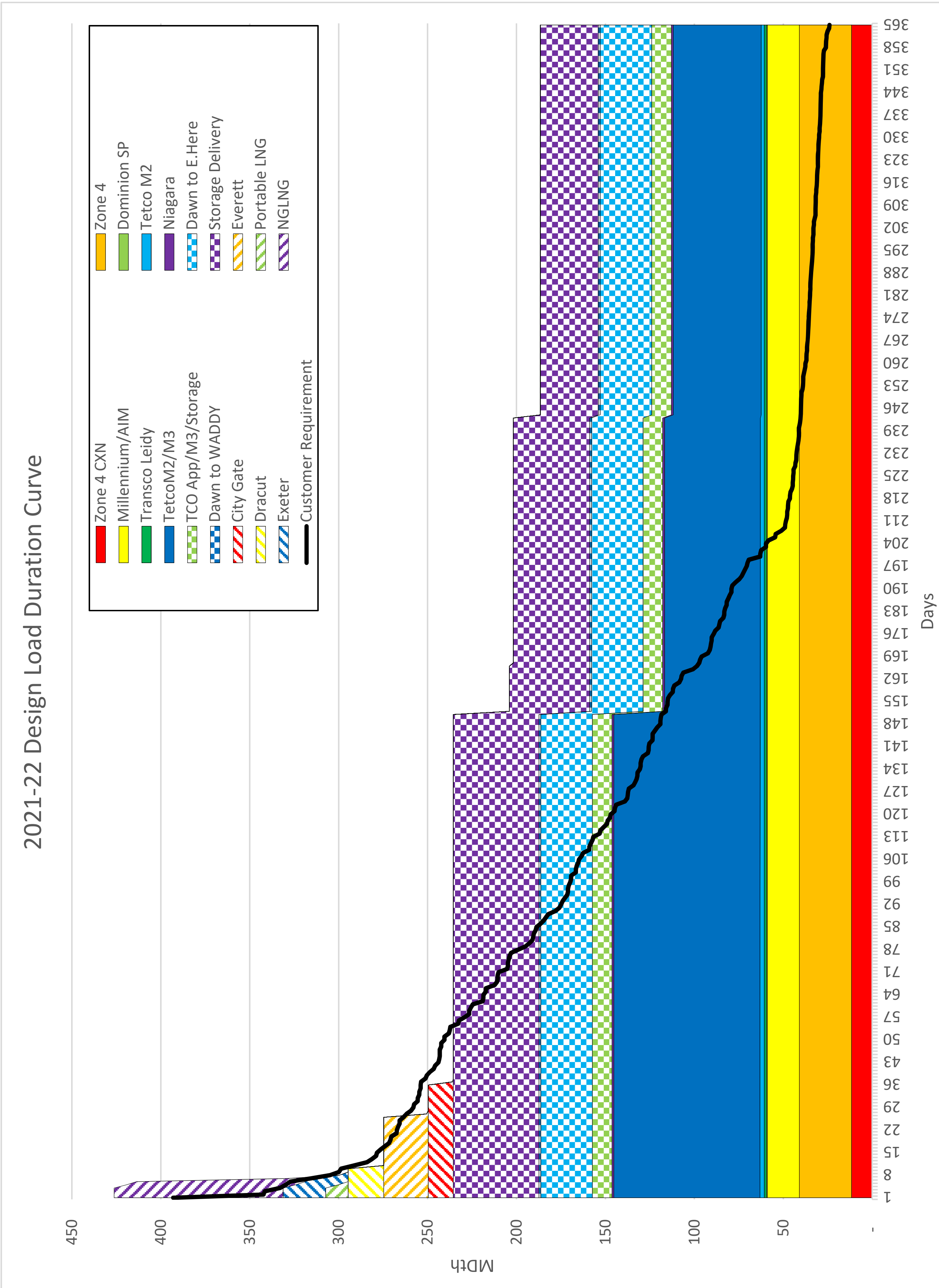
National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

Normal Non-Heating Season (Apr-Oct) with Proposed Resources

		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	1,387	1,411	1,424	1,439	1,454
	Providence	6,077	6,183	6,239	6,306	6,369
	Warren	226	230	232	234	237
	Westerly	130	132	133	135	136
Fuel Reimbursement		232	274	276	296	336
Underground Storage Refill		4,033	3,831	3,711	3,840	3,786
LNG Refill		158	829	867	867	867
TOTAL		12,243	12,890	12,882	13,118	13,184
RESOURCES						
TGP	Dawn PNGTS	1	39	40	10	11
	Dawn Iroquois	1	0	0	0	0
	Niagara	32	34	98	102	66
	Zone 4	1,998	2,321	2,359	2,434	2,622
	Dracut	556	411	208	209	33
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	0	0	0	0	0
	Everett Swing	0	0	0	0	0
	Storage	0	176	178	181	183
TET/AGT	M2	6,466	5,180	5,113	5,705	7,407
	Dominion South Point	18	12	20	12	37
	TCO Appalachia	296	658	373	339	342
	Transco Leidy	18	38	39	39	41
	AIM (Ramapo)	22	30	12	13	13
	AIM (Millennium)	1,581	873	521	960	1,012
	M3	985	2,979	3,782	2,902	1,198
	AGT Citygate	0	0	0	0	0
	Storage	86	3	5	77	86
Liquid for Portables and Refill		51	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	0	0
TOTAL		12,243	12,890	12,882	13,118	13,184

National Grid Rhode Island
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

		Normal Annual with Proposed Resources				
		2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
REQUIREMENTS						
Firm Sendout	Valley	5,185	5,275	5,399	5,415	5,473
	Providence	22,715	23,110	23,653	23,722	23,976
	Warren	844	859	879	882	891
	Westerly	486	494	506	507	513
Fuel Reimbursement		731	771	778	795	840
Underground Storage Refill		4,033	3,831	3,711	3,840	3,786
LNG Refill		344	989	1,009	867	867
TOTAL		34,338	35,329	35,936	36,028	36,346
RESOURCES						
TGP	Dawn PNGTS	1,392	1,526	1,540	1,503	1,544
	Dawn Iroquois	49	50	58	58	60
	Niagara	119	105	173	177	142
	Zone 4	5,842	6,685	7,138	7,347	7,604
	Dracut	568	411	208	209	64
	TGP Citygate	0	0	0	0	0
	Everett Multi Year	504	0	0	0	0
	Everett Swing	0	0	3	0	0
	Storage	1,341	1,302	1,183	1,217	1,177
TET/AGT	M2	12,323	11,041	10,933	11,510	13,268
	Dominion South Point	98	95	102	94	120
	TCO Appalachia	4,385	4,730	4,459	3,978	4,020
	Transco Leidy	200	221	216	216	218
	AIM (Ramapo)	67	64	71	143	187
	AIM (Millennium)	2,696	1,989	1,644	2,075	2,127
	M3	1,377	3,410	4,489	4,006	2,333
	AGT Citygate	42	0	0	0	0
	Storage	2,752	2,529	2,528	2,623	2,610
Liquid for Portables and Refill		237	181	181	0	0
LNG From Storage		344	989	1,009	867	867
Unserved	Valley	0	0	0	4	4
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
		0	0	0	4	4
TOTAL		34,338	35,329	35,936	36,028	36,346


2021-22 Design Load Duration Curve
Zone 4 CXN
Millennium/AIM
Transco Leidy
TetcoM2/M3
TCO App/M3/Storage
Dawn to WADDY
City Gate
Dracut
Exeter
Customer Requirement
Zone 4
Dominion SP
Tetco M2
Niagara
Dawn to E.Here
Storage Delivery
Everett
Portable LNG
NGLNG
MDth
Days
450
400
350
300
250
200
150
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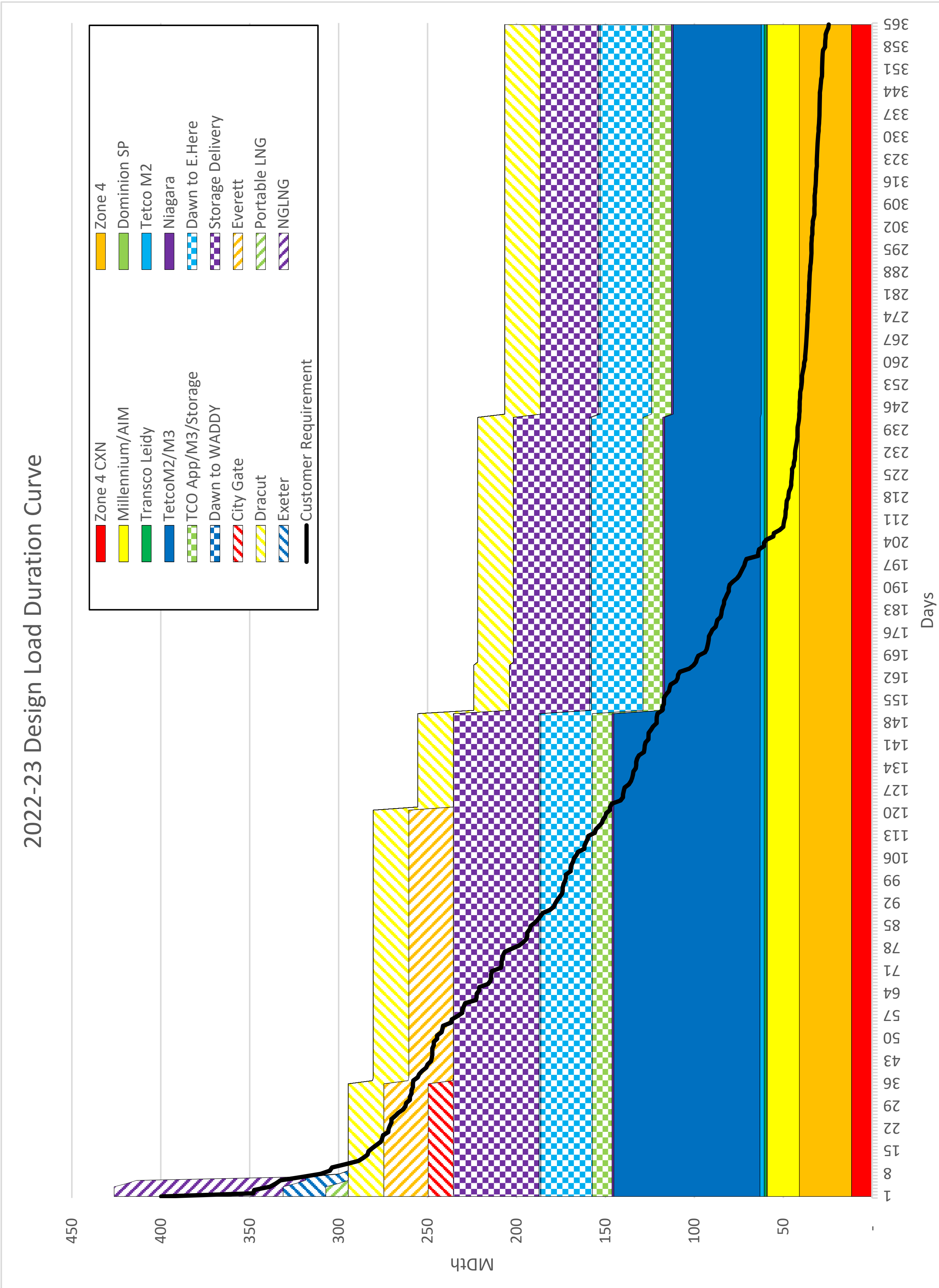
2022-23 Design Load Duration Curve
Zone 4 CXN
Millennium/AIM
Transco Leidy
TetcoM2/M3
TCO App/M3/Storage
Dawn to WADDY
City Gate
Dracut
Exeter
Customer Requirement
Zone 4
Dominion SP
Tetco M2
Niagara
Dawn to E.Here
Storage Delivery
Everett
Portable LNG
NGLNG
MDth
Days
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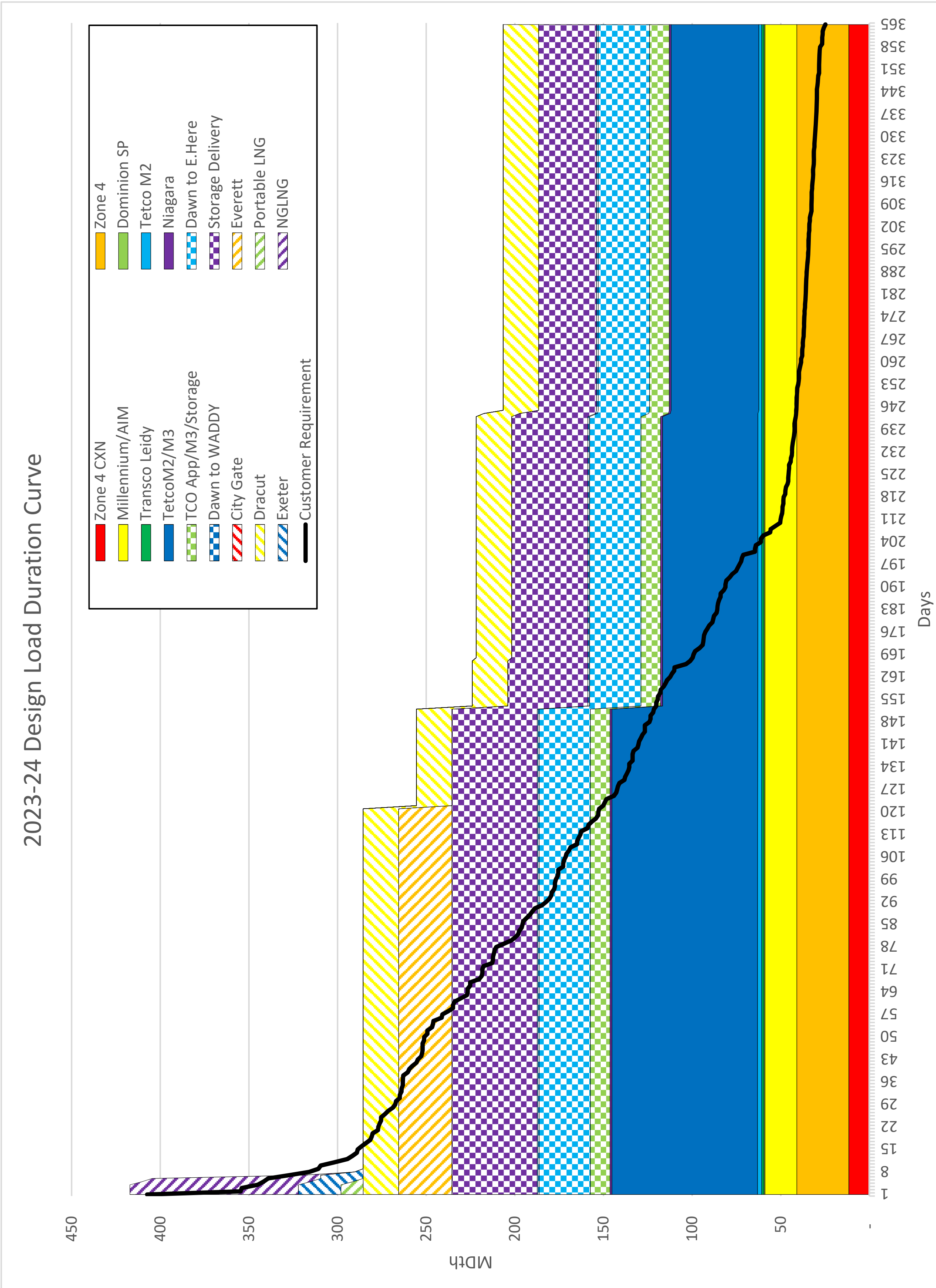
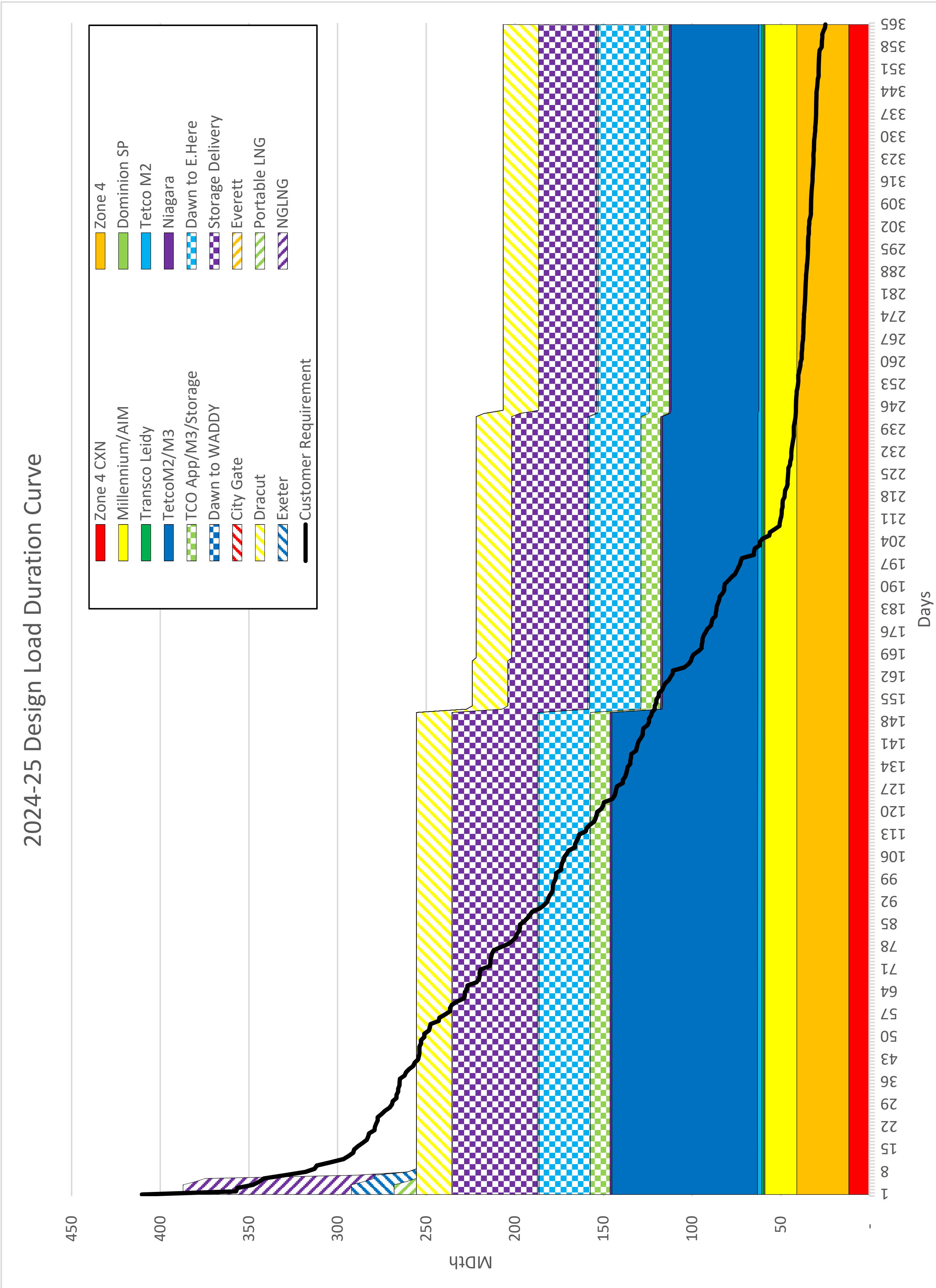

2023-24 Design Load Duration Curve
Zone 4 CXN
Millennium/AIM
Transco Leidy
TetcoM2/M3
TCO App/M3/Storage
Dawn to WADDY
City Gate
Dracut
Exeter
Customer Requirement
Zone 4
Dominion SP
Tetco M2
Niagara
Dawn to E.Here
Storage Delivery
Everett
Portable LNG
NGLNG
MDth
Days


2024-25 Design Load Duration Curve
Zone 4 CXN
Millennium/AIM
Transco Leidy
TetcoM2/M3
TCO App/M3/Storage
Dawn to WADDY
City Gate
Dracut
Exeter
Customer Requirement
Zone 4
Dominion SP
Tetco M2
Niagara
Dawn to E.Here
Storage Delivery
Everett
Portable LNG
NGLNG
MDth
Days
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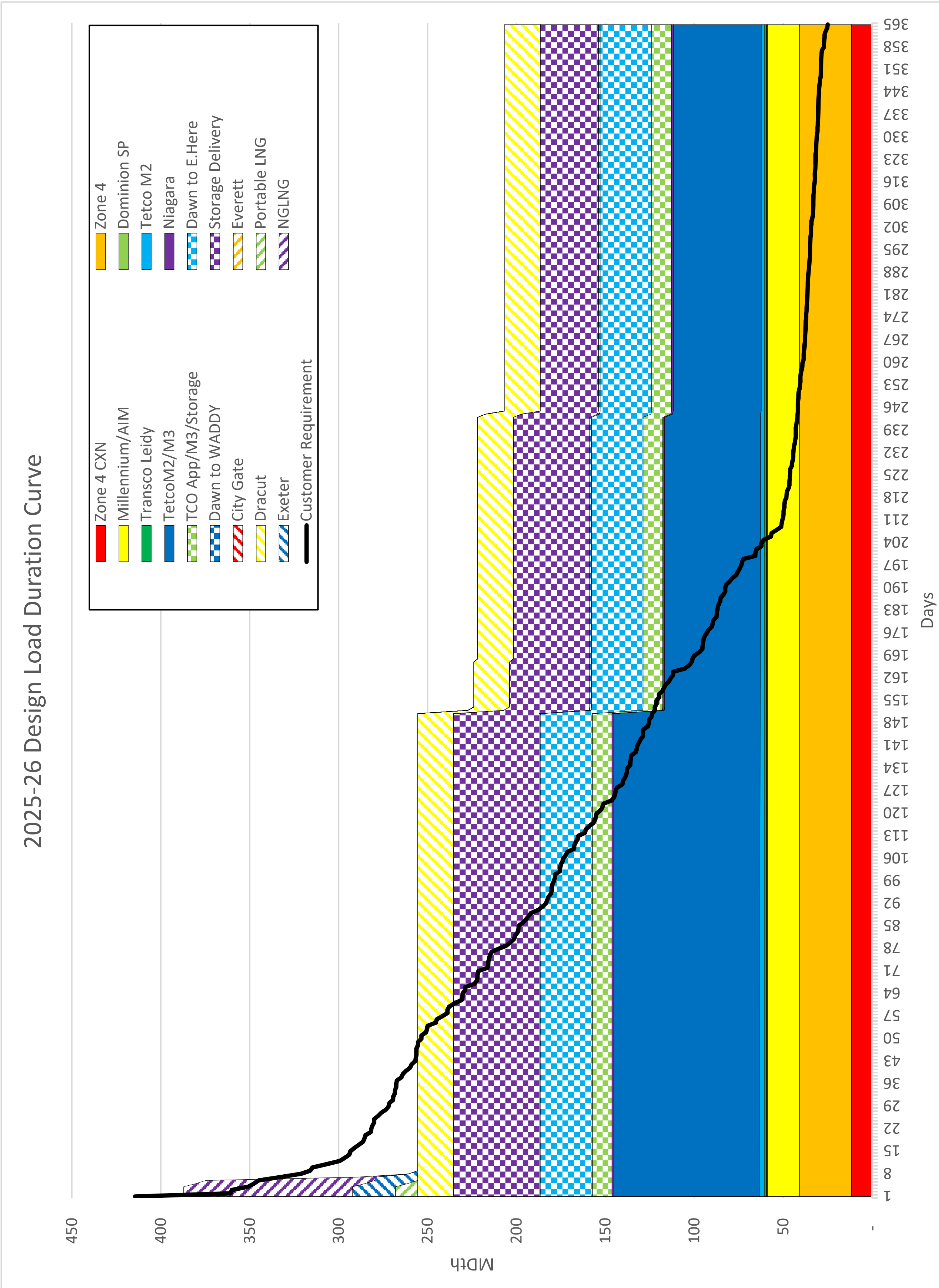
2025-26 Design Load Duration Curve
Zone 4 CXN
Millennium/AIM
Transco Leidy
TetcoM2/M3
TCO App/M3/Storage
Dawn to WADDY
City Gate
Dracut
Exeter
Customer Requirement
Zone 4
Dominion SP
Tetco M2
Niagara
Dawn to E.Here
Storage Delivery
Everett
Portable LNG
NGLNG
MDth
450
400
350
300
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302
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344
351
358
365

REDACTED

National Grid Rhode Island Gas Cost Recovery Cost of Gas ($000)	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
Design Weather Scenario - SCC Adj FT1													
FIXED COSTS													
Total Transportation Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Delivery Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liquefaction Fixed Costs	$ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Supplier Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LESS:													
AMA Credits	$ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Hourly Peaking Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL FIXED COSTS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 95,518.7
VARIABLE COSTS													
Commodity													
Commodity for Purchases to City Gate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Commodity for Purchases to Injections	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Commodity Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 123,518.8
Withdrawal													
Underground Storage Withdrawal Value	$ [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LNG Storage Withdrawal Value	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Withdrawal Value	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 12,770.4
Transportation	[redacted]												
Variable Costs for Purchases to City Gate													
Variable Costs for Storage Withdrawal													
Variable Costs for Storage Injection													
Total Transportation Variable Costs													
Total Storage Variable Costs													
LESS:	[redacted]												
LNG Trucking													
Storage Refill													
Liquefaction													
Total Storage and Liquefaction	[redacted]												12,439.7
TOTAL VARIABLE COSTS	[redacted]												128,105.6
TOTAL FIXED AND VARIABLE COSTS	[redacted]												223,624.3
NGPMP Credit	[redacted]												8,039.2
TOTAL GAS COSTS	[redacted]												215,585.1

REDACTED

Narragansett Electric Company
Volume & Cost Summary
Sendout Volumes (MDth)

Design Weather Scenario - SCC Adj FT1

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
Algonquin													
TETCO CDS Long Haul	1,099	1,145	1,139	1,029	1,139	1,086	1,151	878	864	976	1,102	1,151	12,759
TETCO SCT Long Haul	24	58	62	56	51	-	-	-	-	-	-	-	252
AIM	307	349	402	363	321	312	276	263	271	271	263	314	3,713
AGT M3	189	394	649	608	500	824	350	-	-	-	72	801	4,386
TCO Appalachia	733	998	998	902	997	215	21	49	51	51	32	111	5,158
Storage	383	535	558	526	209	86	-	-	-	-	-	-	2,296
Total Algonquin	2,736	3,479	3,808	3,483	3,217	2,523	1,798	1,190	1,186	1,298	1,468	2,377	28,564
Tennessee													
TGP Long Haul	676	725	729	664	689	335	4	-	-	106	-	185	4,114
TGP ConneXion	280	293	293	264	293	212	280	151	235	294	252	294	3,141
Storage	4	414	466	412	404	-	-	-	-	-	-	-	1,700
Total Tennessee	960	1,432	1,488	1,341	1,385	547	284	151	235	401	252	479	8,955
Other													
Dawn via PNGTS	153	704	848	733	613	38	-	-	-	-	-	-	3,088
Dracut	69	201	293	336	148	13	342	163	-	-	171	220	1,956
Dawn / Niagara / Waddington	20	48	61	55	50	34	1	-	0	-	-	-	269
Dominion / Transco Leidy	51	54	54	49	54	4	18	2	2	2	27	21	340
Everett	-	125	430	201	81	-	-	-	-	-	-	-	837
LNG Vapor	120	119	403	196	29	19	19	19	19	19	19	19	1,001
LNG Truck	95	-	-	-	181	93	94	108	83	112	63	77	907
City Gate	-	93	133	193	89	-	-	-	-	-	-	-	508
Total Other	508	1,343	2,221	1,764	1,246	201	475	292	105	134	281	337	8,906
Total Purchases	4,204	6,255	7,517	6,588	5,848	3,271	2,556	1,633	1,526	1,833	2,001	3,193	46,425
LESS:													
Liquefaction	-	-	-	-	(13)	-	-	-	-	-	78	29	94
LNG Truck	95	-	-	-	181	93	94	108	83	112	63	77	907
AGT Storage Refill	-	-	-	-	-	40	502	286	419	520	472	458	2,696
TGP Storage Refill	-	-	-	-	-	20	274	151	103	266	252	255	1,322
Total	95	-	-	-	168	153	870	546	605	898	865	819	5,019
Total Sendout	4,108	6,255	7,517	6,588	5,681	3,118	1,687	1,087	922	935	1,136	2,374	41,406
Datacheck	4,108	6,255	7,517	6,588	5,681	3,118	1,687	1,087	922	935	1,136	2,374	41,406
Delta	-	-	-	-	-	-	-	-	-	-	-	-	-

REDACTED

Narragansett Electric Company
Volume & Cost Summary
Cost of Gas ($000)

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
DEMAND													
[redacted]													
Total Demand	[redacted]												$ 101,564
Datacheck													$ 101,564
Delta													$ -

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
COMMODITY													
[redacted]													
TOTAL COMMODITY	[redacted]												$ 140,545
Datacheck													$ 140,545
Delta													$ -

REDACTED

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
TOTAL DC+CC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 242,109
LESS:	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Liquefaction	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LNG Truck	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
AGT Storage Refill	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TGP Storage Refill	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liquefaction & Storage	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 12,440
TOTAL GAS COST	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 229,670
Commodity to Sendout	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 128,106
Days/month	30	31	31	28	31	30	31	30	31	31	30	31	365
Unit Commodity Cost ($/MMBtu)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$3.094
NYMEX (06/08/2021)	$3.216	$3.332	$3.414	$3.352	$3.177	$2.773	$2.716	$2.744	$2.779	$2.784	$2.769	$2.795	

REDACTED

National Grid Rhode Island
Gas Cost Recovery
Cost of Gas ($000)

Normal Weather Scenario - Sales	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
FIXED COSTS													
Total Transportation Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Delivery Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liquefaction Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Supplier Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 15,903.8
LESS:													
AMA Credits	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Hourly Peaking Fixed Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL FIXED COSTS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 82,766.6
VARIABLE COSTS													
Commodity													
Commodity for Purchases to City Gate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Commodity for Purchases to Injections	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Commodity Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 75,882.3
Withdrawal													
Underground Storage Withdrawal Value	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LNG Storage Withdrawal Value	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Withdrawal Value	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 9,977.3
Transportation													
Variable Costs for Purchases to City Gate	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variable Costs for Storage Withdrawal	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variable Costs for Storage Injection	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Transportation Variable Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage Variable Costs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LESS:													
LNG Trucking	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ [redacted]
Storage Refill	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Liquefaction	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Storage and Liquefaction	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 9,857.9
TOTAL VARIABLE COSTS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 79,119.3
TOTAL FIXED AND VARIABLE COSTS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 161,885.9
NGPMP Credit	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 8,039.2
TOTAL GAS COSTS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 153,846.7

REDACTED

Narragansett Electric Company
Volume & Cost Summary
Sendout Volumes (MDth)

Normal Weather Scenario - Sales

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
Algonquin													
TETCO CDS Long Haul	1,089	1,145	1,139	1,029	1,139	1,037	1,063	687	678	793	949	1,106	11,852
TETCO SCT Long Haul	7	23	41	39	22	2	-	-	-	-	-	-	134
AIM	223	222	234	212	227	232	223	215	222	222	215	226	2,671
AGT M3	57	28	89	45	169	434	110	-	-	-	7	425	1,364
TCO Appalachia	364	910	986	873	851	87	4	49	51	51	32	18	4,275
Storage	393	538	556	531	209	83	-	-	-	-	-	-	2,311
Total Algonquin	2,133	2,866	3,044	2,728	2,617	1,875	1,400	950	950	1,066	1,203	1,775	22,607
Tennessee													
TGP Long Haul	376	427	653	582	374	208	-	-	-	56	-	105	2,781
TGP ConneXion	247	292	293	264	289	165	279	146	185	295	252	294	3,001
Storage	4	415	462	412	408	-	-	-	-	-	-	-	1,700
Total Tennessee	627	1,134	1,407	1,259	1,071	373	279	146	185	350	252	399	7,482
Other													
Dawn via PNGTS	22	194	485	432	233	1	-	-	-	-	-	-	1,367
Dracut	-	-	-	12	-	-	232	107	-	-	109	107	568
Dawn / Niagara / Waddington	5	17	50	44	17	33	-	-	-	-	-	-	166
Dominion / Transco Leidy	45	54	54	49	54	3	8	2	2	2	4	12	291
Everett	-	89	238	171	4	-	-	-	-	-	-	-	503
LNG Vapor	19	19	118	34	19	19	19	19	19	19	19	19	344
LNG Truck	5	-	-	-	181	3	5	8	6	8	6	15	237
City Gate	-	-	-	42	-	-	-	-	-	-	-	-	42
Total Other	96	374	946	784	509	58	265	136	27	30	139	154	3,518
Total Purchases	2,856	4,374	5,397	4,771	4,197	2,306	1,944	1,233	1,162	1,446	1,594	2,328	33,607
LESS:													
Liquefaction	-	-	-	-	-	-	-	-	-	-	78	29	107
LNG Truck	5	-	-	-	181	3	5	8	6	8	6	15	237
AGT Storage Refill	-	-	-	-	-	37	502	305	419	520	472	458	2,711
TGP Storage Refill	-	-	-	-	-	20	279	146	103	266	252	255	1,322
Total	5	-	-	-	181	59	786	459	527	794	809	757	4,377
Total Sendout	2,852	4,374	5,397	4,771	4,016	2,246	1,157	774	635	652	785	1,571	29,230
Datacheck	2,852	4,374	5,397	4,771	4,016	2,246	1,157	774	635	652	785	1,571	29,230
Delta	-	-	-	-	-	-	-	-	-	-	-	-	-

REDACTED

Narragansett Electric Company
Volume & Cost Summary
Cost of Gas ($000)

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
DEMAND													
[redacted]													
Total Demand	$ 6,133	$ 9,725	$ 9,721	$ 9,721	$ 9,721	$ 6,162	$ 6,162	$ 6,162	$ 6,162	$ 6,162	$ 6,491	$ 6,491	$ 88,812
Datacheck	$ 6,133	$ 9,725	$ 9,721	$ 9,721	$ 9,721	$ 6,162	$ 6,162	$ 6,162	$ 6,162	$ 6,162	$ 6,491	$ 6,491	$ 88,812
Delta	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
COMMODITY													
[redacted]													
TOTAL COMMODITY	$ 7,183	$ 12,240	$ 16,545	$ 14,659	$ 12,137	$ 5,522	$ 4,244	$ 2,767	$ 2,599	$ 3,151	$ 3,228	$ 4,704	$ 88,977
Datacheck	$ 7,183	$ 12,240	$ 16,545	$ 14,659	$ 12,137	$ 5,522	$ 4,244	$ 2,767	$ 2,599	$ 3,151	$ 3,228	$ 4,704	$ 88,977
Delta	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

REDACTED

	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Total
TOTAL DC+CC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 177,789
LESS:													
Liquefaction	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LNG Truck	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
AGT Storage Refill	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TGP Storage Refill	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Liquefaction & Storage	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 9,858
TOTAL GAS COST	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 167,931
Commodity to Sendout	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$ 79,119
Days/month	30	31	31	28	31	30	31	30	31	31	30	31	365
Unit Commodity Cost ($/MMBtu)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	$2.707
NYMEX (06/08/2021)	$3.216	$3.332	$3.414	$3.352	$3.177	$2.773	$2.716	$2.744	$2.779	$2.784	$2.769	$2.795	

REDACTED

National Grid Rhode Island
Design Year
Fixed + Variable + Commodity Cost per Dth per Day by Path (100% Load Factor)
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					

[redacted]

REDACTED

National Grid Rhode Island
Normal Year
Fixed + Variable + Commodity Cost per Dth per Day by Path (100% Load Factor)
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Design Year
Fixed + Variable + Commodity Cost per Dth per Day by Path (100% Load Factor)
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Normal Year
Fixed + Variable + Commodity Cost per Dth per Day by Path (100% Load Factor)
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Design Year
Effective Fixed + Variable + Commodity Cost per Dth per Day by Path
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Normal Year
Effective Fixed + Variable + Commodity Cost per Dth per Day by Path
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Design Year
Effective Fixed + Variable + Commodity Cost per Dth per Day by Path
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					
[redacted]					

REDACTED

National Grid Rhode Island
Normal Year
Effective Fixed + Variable + Commodity Cost per Dth per Day by Path
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Path					

[redacted]

REDACTED

National Grid Rhode Island
SCC Adj FT1
Fixed Cost per Dth per Day by Contract (100% Load Factor)
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					

[redacted]

REDACTED

[redacted]

REDACTED

National Grid Rhode Island
Design Sales
Fixed Cost per Dth per Day by Contract (100% Load Factor)
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					
[redacted]					

REDACTED

[redacted]

REDACTED

National Grid Rhode Island
Design Year
Effective Fixed Cost per Dth per Day by Contract
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					

[redacted]

REDACTED

[redacted]

REDACTED

National Grid Rhode Island
Normal Year
Effective Fixed Cost per Dth per Day by Contract
SCC Adj FT1
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					

[redacted]

REDACTED

[redacted]

REDACTED

National Grid Rhode Island
Design Year
Effective Fixed Cost per Dth per Day by Contract
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					
[redacted]					

REDACTED

[redacted]

REDACTED

National Grid Rhode Island
Normal Year
Effective Fixed Cost per Dth per Day by Contract
Sales
Existing and Proposed Assets

	Dollars per Dth per Day				
Gas Year	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Contract					
[redacted]					

REDACTED

[redacted]

National Grid Rhode Island
Customer Choice Proposed Releases
2021/22

Paths	Peak Day City Gate MDQ (Dth/day)	Contract	Release % of Design Day Quantity	Release Volume (Dth/day)	City Gate Release (Dth/day)
TGP Long Haul	29,335	TGP 1597	13.7%	5,355	5,355
TGP ConneXion	11,600	TGP 64026	5.4%	2,117	2,117
Dawn via PNGTS	29,000	PNGTS 233317	13.5%	5,293	
		TCPL 64273	13.6%	5,304	
		Union M12274	13.6%	5,304	
		TGP 62930	13.5%	5,293	5,293
AIM	18,000	MPL 210165	4.2%	1,643	
		AGT 510801	8.4%	3,286	3,286
TETCO CDS Long Haul	45,934	TETCO 800303	21.5%	8,384	
		AGT 93011E	21.5%	8,384	8,384
		AGT 510985	21.5%	8,384	
TCO Appalachia	40,000	TCO 31524	18.7%	7,301	
		AGT 90106	18.7%	7,301	7,301
		AGT 510985	18.7%	7,301	
AGT M3	18,099	AGT 93011E	6.7%	2,599	2,599
		AGT 510985	8.5%	3,304	
		AGT 90107	1.8%	705	705
Dracut	20,000	TGP 62930	9.3%	3,651	3,651
TETCO SCT Long Haul	2,099	TETCO 800156	1.0%	383	
		AGT 93001ESC	1.0%	383	383

Customer Choice Design Day Transportation Requirement **39,074**
*Based on June 2021 Pools

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Appendix B:

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Attachment GLF-1

National Grid RI Retail Volume Forecast

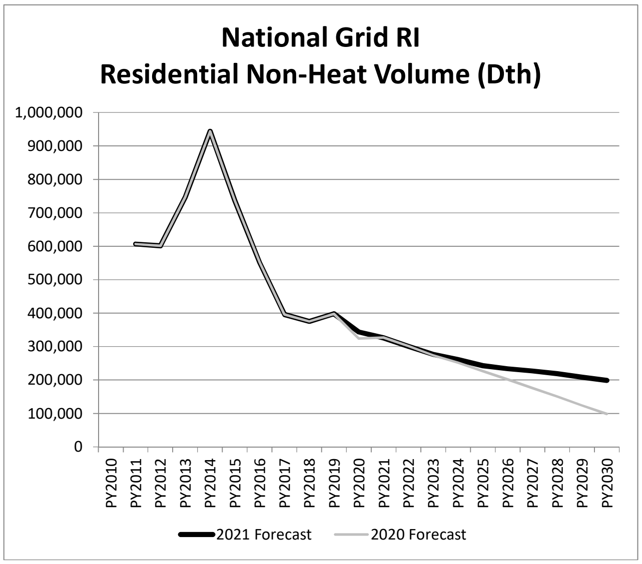
2021 vs 2020 Forecast

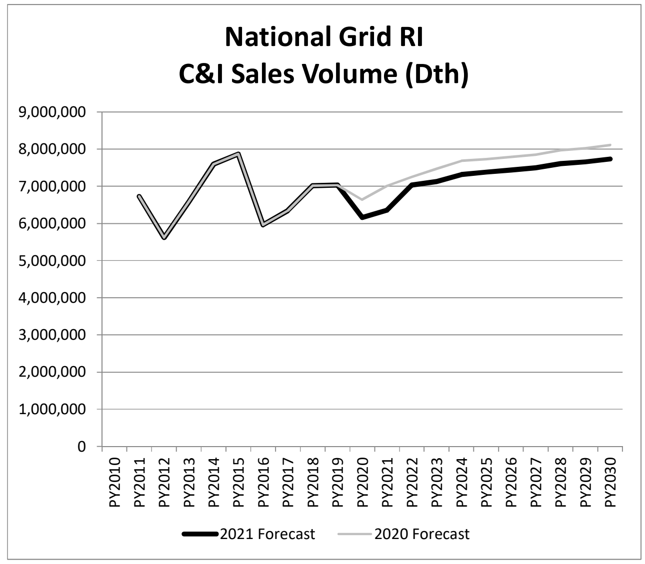
2021 National Grid RI Volume Forecast (Dth)
Planning Year (Nov-Oct)

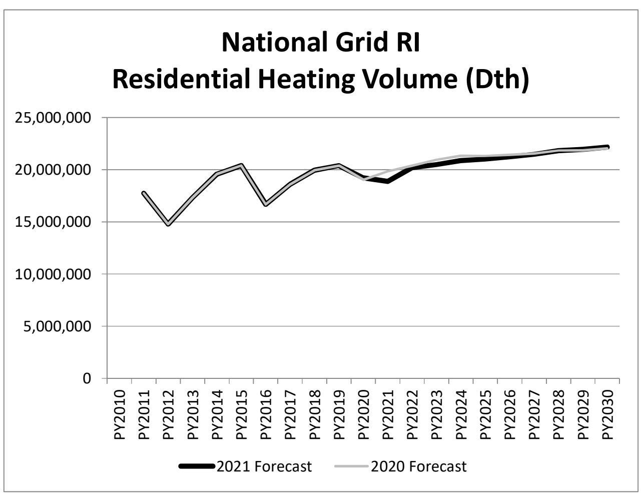
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,350	17,738,289	6,726,982	7,680,544	2,569,158	35,321,323	2,267,651	37,588,973
PY2012	601,399	14,783,757	5,621,832	7,610,425	2,333,884	30,951,297	2,195,914	33,147,211
PY2013	746,890	17,315,788	6,583,721	8,278,483	3,049,869	35,974,752	2,014,144	37,988,895
PY2014	944,174	19,573,872	7,599,237	8,563,673	3,548,382	40,229,338	1,793,702	42,023,040
PY2015	736,952	20,389,772	7,870,336	9,416,525	3,680,836	42,094,420	1,828,764	43,923,185
PY2016	551,336	16,675,372	5,959,428	8,656,943	3,569,930	35,413,008	1,865,144	37,278,152
PY2017	395,749	18,594,274	6,348,282	8,698,747	3,950,370	37,987,422	1,860,594	39,848,016
PY2018	375,502	19,943,709	7,021,050	9,022,578	4,205,501	40,568,340	1,938,339	42,506,679
PY2019	397,877	20,381,718	7,033,149	8,768,235	4,469,173	41,050,152	2,012,027	43,062,179
PY2020	343,560	19,204,168	6,161,983	8,208,510	4,313,144	38,231,365	2,067,717	40,299,082
PY2021	325,747	18,874,655	6,358,826	7,907,310	4,334,777	37,801,316	2,045,839	39,847,155
PY2022	300,785	20,203,541	7,034,186	7,779,116	4,766,925	40,084,553	2,459,542	42,544,095
PY2023	276,392	20,488,801	7,126,983	8,050,746	4,832,976	40,775,897	2,499,722	43,275,619
PY2024	260,581	20,878,142	7,319,546	8,134,775	4,898,558	41,491,601	2,511,128	44,002,729
PY2025	242,867	21,008,058	7,382,548	8,080,974	4,908,508	41,622,955	2,495,241	44,118,195
PY2026	233,703	21,239,154	7,443,635	8,034,205	4,934,251	41,884,947	2,482,684	44,367,632
PY2027	226,965	21,467,738	7,503,053	7,989,121	4,959,688	42,146,566	2,470,607	44,617,173
PY2028	218,461	21,828,142	7,607,716	7,958,767	5,010,890	42,623,977	2,463,942	45,087,919
PY2029	208,599	21,934,358	7,656,121	7,914,767	5,031,032	42,744,877	2,451,954	45,196,830
PY2030	198,661	22,170,600	7,736,384	7,885,606	5,070,235	43,061,486	2,445,121	45,506,607
PY26/PY21	-6.4%	2.4%	3.2%	0.3%	2.6%	2.1%	3.9%	2.2%

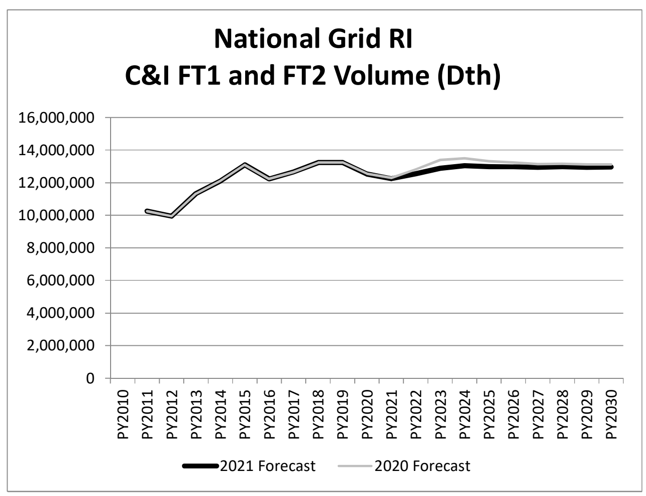
2020 National Grid RI Volume Forecast (Dth)
Planning Year (Nov-Oct)

	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,350	17,738,289	6,726,982	7,680,544	2,569,158	35,321,323	2,267,651	37,588,973
PY2012	601,399	14,783,757	5,621,832	7,610,425	2,333,884	30,951,297	2,195,914	33,147,211
PY2013	746,890	17,315,788	6,583,721	8,278,483	3,049,869	35,974,752	2,014,144	37,988,895
PY2014	944,174	19,573,872	7,599,237	8,563,673	3,548,382	40,229,338	1,793,702	42,023,040
PY2015	736,952	20,389,772	7,870,336	9,416,525	3,680,836	42,094,420	1,828,764	43,923,185
PY2016	551,336	16,675,372	5,959,428	8,656,943	3,569,930	35,413,008	1,865,144	37,278,152
PY2017	395,749	18,594,264	6,348,282	8,698,747	3,950,370	37,987,412	1,860,594	39,848,006
PY2018	375,500	19,943,386	7,021,056	9,022,578	4,205,501	40,568,021	1,938,339	42,506,360
PY2019	397,642	20,381,686	7,030,001	8,770,816	4,479,693	41,059,838	2,012,039	43,071,878
PY2020	323,837	19,039,603	6,639,392	8,251,676	4,300,551	38,555,058	1,890,633	40,445,691
PY2021	327,328	19,842,428	7,014,708	8,051,014	4,235,312	39,470,789	1,799,964	41,270,753
PY2022	301,598	20,377,128	7,254,018	8,426,323	4,388,407	40,747,475	1,880,060	42,627,535
PY2023	274,203	20,948,766	7,472,223	8,866,659	4,529,798	42,091,649	1,941,674	44,033,323
PY2024	251,856	21,339,906	7,686,813	8,908,249	4,589,397	42,776,222	1,936,813	44,713,035
PY2025	226,569	21,313,493	7,731,019	8,749,950	4,573,365	42,594,397	1,904,790	44,499,187
PY2026	201,699	21,431,465	7,791,207	8,647,306	4,584,956	42,656,633	1,884,881	44,541,514
PY2027	176,056	21,553,988	7,849,419	8,550,507	4,596,793	42,726,763	1,866,108	44,592,871
PY2028	150,402	21,841,445	7,974,627	8,517,749	4,646,435	43,130,657	1,861,753	44,992,409
PY2029	123,602	21,862,099	8,022,933	8,458,272	4,660,570	43,127,475	1,851,302	44,978,778
PY2030	98,317	22,039,250	8,113,332	8,430,431	4,697,161	43,378,491	1,847,671	45,226,162
PY26/PY21	-9.2%	1.6%	2.1%	1.4%	1.6%	1.6%	0.9%	1.5%


National Grid RI
Residential Non-Heat Volume (Dth)
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
PY2010
PY2011
PY2012
PY2013
PY2014
PY2015
PY2016
PY2017
PY2018
PY2019
PY2020
PY2021
PY2022
PY2023
PY2024
PY2025
PY2026
PY2027
PY2028
PY2029
PY2030
2021 Forecast
2020 Forecast


National Grid RI
C&I Sales Volume (Dth)
9,000,000
8,000,000
7,000,000
6,000,000
5,000,000
4,000,000
3,000,000
2,000,000
1,000,000
0
PY2010
PY2011
PY2012
PY2013
PY2014
PY2015
PY2016
PY2017
PY2018
PY2019
PY2020
PY2021
PY2022
PY2023
PY2024
PY2025
PY2026
PY2027
PY2028
PY2029
PY2030
2021 Forecast
2020 Forecast


National Grid RI
Residential Heating Volume (Dth)
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
PY2010
PY2011
PY2012
PY2013
PY2014
PY2015
PY2016
PY2017
PY2018
PY2019
PY2020
PY2021
PY2022
PY2023
PY2024
PY2025
PY2026
PY2027
PY2028
PY2029
PY2030
2021 Forecast
2020 Forecast


National Grid RI
C&I FT1 and FT2 Volume (Dth)
16,000,000
14,000,000
12,000,000
10,000,000
8,000,000
6,000,000
4,000,000
2,000,000
0
PY2010
PY2011
PY2012
PY2013
PY2014
PY2015
PY2016
PY2017
PY2018
PY2019
PY2020
PY2021
PY2022
PY2023
PY2024
PY2025
PY2026
PY2027
PY2028
PY2029
PY2030
2021 Forecast
2020 Forecast

Attachment GLF-2

National Grid RI Retail Meter Count Forecast

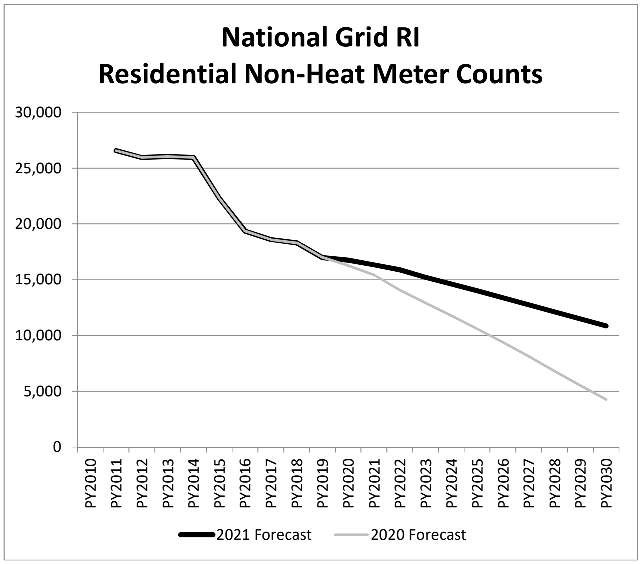
2021 vs 2020 Forecast

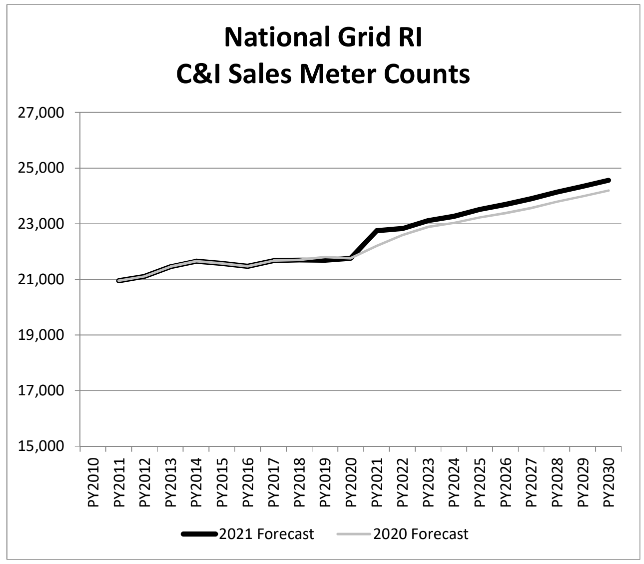
2021 National Grid RI Meter Count Forecast
End of Planning Year (Nov-Oct)

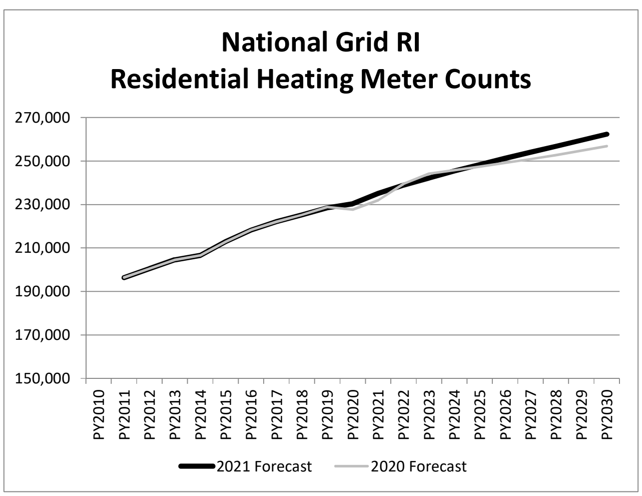
	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	26,570	196,414	20,950	747	1,244	245,925	54	245,979
PY2012	25,955	200,463	21,105	734	1,399	249,656	65	249,721
PY2013	26,042	204,521	21,451	721	1,499	254,234	159	254,393
PY2014	25,958	206,568	21,651	699	1,486	256,362	178	256,540
PY2015	22,313	212,900	21,567	684	1,552	259,016	326	259,342
PY2016	19,351	218,314	21,467	674	1,680	261,486	488	261,974
PY2017	18,591	222,124	21,670	636	1,758	264,779	577	265,356
PY2018	18,299	225,211	21,693	624	1,776	267,603	637	268,240
PY2019	16,978	228,468	21,685	609	1,865	269,605	812	270,417
PY2020	16,750	230,384	21,757	595	1,823	271,309	870	272,179
PY2021	16,329	235,062	22,745	614	1,902	276,652	876	277,528
PY2022	15,883	238,872	22,826	619	1,911	280,111	880	280,991
PY2023	15,215	242,148	23,110	628	1,935	283,036	891	283,927
PY2024	14,617	245,378	23,268	634	1,947	285,844	896	286,740
PY2025	13,996	248,385	23,513	640	1,967	288,501	905	289,406
PY2026	13,372	251,226	23,689	645	1,981	290,913	912	291,825
PY2027	12,738	254,023	23,900	650	1,998	293,309	920	294,229
PY2028	12,105	256,778	24,132	655	2,017	295,687	928	296,615
PY2029	11,476	259,550	24,342	660	2,034	298,062	936	298,998
PY2030	10,852	262,321	24,556	664	2,050	300,443	944	301,387
PY26/PY21	-3.9%	1.3%	0.8%	1.0%	0.8%	1.0%	0.8%	1.0%

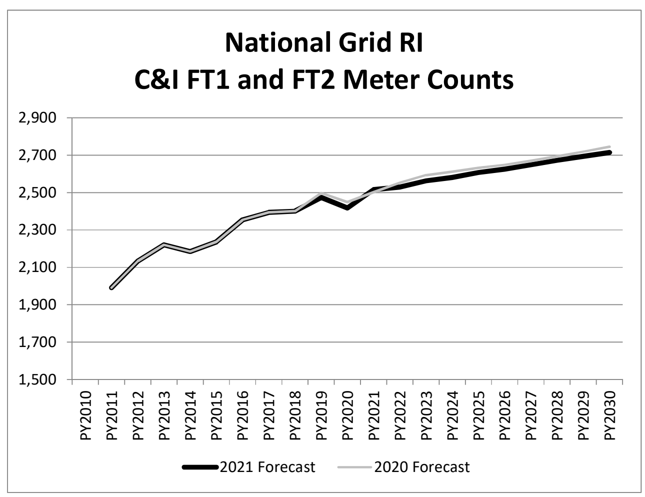
2020 National Grid RI Meter Count Forecast
End of Planning Year (Nov-Oct)

	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	26,570	196,414	20,950	747	1,244	245,925	54	245,979
PY2012	25,955	200,463	21,105	734	1,399	249,656	65	249,721
PY2013	26,042	204,521	21,451	721	1,499	254,234	159	254,393
PY2014	25,958	206,568	21,651	699	1,486	256,362	178	256,540
PY2015	22,313	212,900	21,567	684	1,552	259,016	326	259,342
PY2016	19,351	218,313	21,467	674	1,680	261,485	488	261,973
PY2017	18,590	222,122	21,672	636	1,758	264,778	577	265,355
PY2018	18,304	225,228	21,702	624	1,776	267,634	637	268,271
PY2019	17,012	228,896	21,804	609	1,888	270,209	816	271,025
PY2020	16,272	227,624	21,758	588	1,861	268,103	845	268,948
PY2021	15,436	231,871	22,202	603	1,899	272,011	862	272,873
PY2022	14,078	239,512	22,592	616	1,936	278,734	877	279,611
PY2023	12,912	244,122	22,881	629	1,964	282,508	887	283,395
PY2024	11,787	245,713	23,024	636	1,976	283,136	893	284,029
PY2025	10,613	247,442	23,223	641	1,991	283,910	900	284,810
PY2026	9,396	249,132	23,379	643	2,005	284,555	906	285,461
PY2027	8,125	250,853	23,565	649	2,021	285,213	914	286,127
PY2028	6,820	252,737	23,786	655	2,039	286,037	922	286,959
PY2029	5,536	254,751	23,984	661	2,058	286,990	929	287,919
PY2030	4,257	256,858	24,192	669	2,076	288,052	937	288,989
PY26/PY21	-9.5%	1.4%	1.0%	1.3%	1.1%	0.9%	1.0%	0.9%


National Grid RI
Residential Non-Heat Meter Counts
30,000
25,000
20,000
15,000
10,000
5,000
0
PY2010 PY2011 PY2012 PY2013 PY2014 PY2015 PY2016 PY2017 PY2018 PY2019 PY2020 PY2021 PY2022 PY2023 PY2024 PY2025 PY2026 PY2027 PY2028 PY2029 PY2030
2021 Forecast
2020 Forecast


National Grid RI
C&I Sales Meter Counts
27,000
25,000
23,000
21,000
19,000
17,000
15,000
PY2010 PY2011 PY2012 PY2013 PY2014 PY2015 PY2016 PY2017 PY2018 PY2019 PY2020 PY2021 PY2022 PY2023 PY2024 PY2025 PY2026 PY2027 PY2028 PY2029 PY2030
2021 Forecast
2020 Forecast


National Grid RI
Residential Heating Meter Counts
270,000
250,000
230,000
210,000
190,000
170,000
150,000
PY2010 PY2011 PY2012 PY2013 PY2014 PY2015 PY2016 PY2017 PY2018 PY2019 PY2020 PY2021 PY2022 PY2023 PY2024 PY2025 PY2026 PY2027 PY2028 PY2029 PY2030
2021 Forecast
2020 Forecast


National Grid RI
C&I FT1 and FT2 Meter Counts
2,900
2,700
2,500
2,300
2,100
1,900
1,700
1,500
PY2010 PY2011 PY2012 PY2013 PY2014 PY2015 PY2016 PY2017 PY2018 PY2019 PY2020 PY2021 PY2022 PY2023 PY2024 PY2025 PY2026 PY2027 PY2028 PY2029 PY2030
2021 Forecast
2020 Forecast

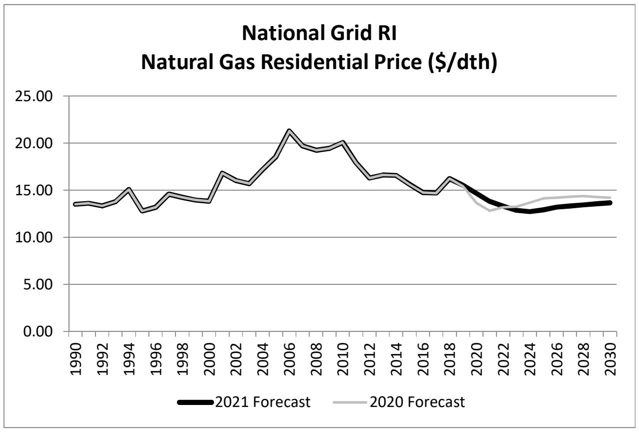
Attachment GLF-3

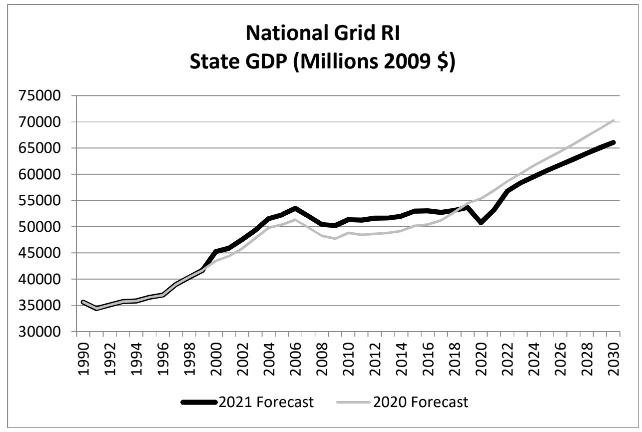
National Grid RI Economic Forecast

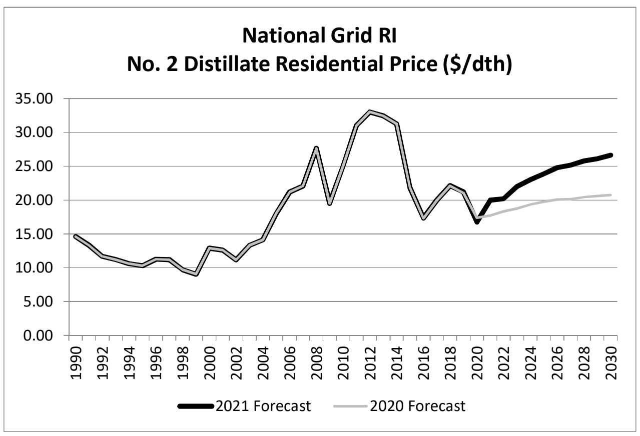
2021 vs 2020 Forecast

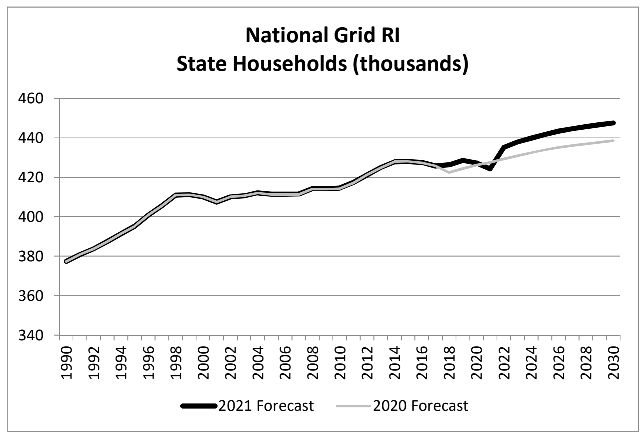
Year	NGPRCR Natural Gas Residential Price	OILPRCR No 2 Distillate Residential Price by All Sellers	*GORR* *Residential Gas-to-Oil Price Ratio*	GDP GDP (2009 Millions of $)	HH Households (thousands)	EMPL Non-Farm Employment (thousands)
1990	*13.50*	*14.60*	*0.92*	*35616*	*377*	*454*
1991	*13.62*	*13.32*	*1.02*	*34372*	*381*	*424*
1992	*13.33*	*11.69*	*1.14*	*35063*	*384*	*424*
1993	*13.77*	*11.20*	*1.23*	*35716*	*387*	*430*
1994	*15.06*	*10.61*	*1.42*	*35826*	*391*	*434*
1995	*12.79*	*10.30*	*1.24*	*36505*	*395*	*439*
1996	*13.18*	*11.25*	*1.17*	*36926*	*401*	*441*
1997	*14.58*	*11.19*	*1.30*	*38989*	*406*	*450*
1998	*14.24*	*9.70*	*1.47*	*40360*	*411*	*458*
1999	*13.96*	*9.05*	*1.54*	*41651*	*411*	*466*
2000	*13.82*	*12.91*	*1.07*	45250	410	480
2001	*16.81*	*12.61*	*1.33*	45903	407	481
2002	*16.03*	*11.17*	*1.43*	47581	410	482
2003	*15.68*	*13.33*	*1.18*	49344	411	487
2004	*17.18*	*14.12*	*1.22*	51552	412	491
2005	*18.56*	*18.01*	*1.03*	52284	411	494
2006	*21.29*	*21.17*	*1.01*	53492	411	496
2007	*19.70*	*22.08*	*0.89*	51999	412	495
2008	*19.25*	*27.64*	*0.70*	50413	414	484
2009	*19.45*	*19.50*	*1.00*	50216	414	463
2010	20.06	25.04	*0.80*	51363	415	462
2011	17.92	31.02	*0.58*	51263	417	464
2012	16.28	33.03	*0.49*	51607	421	469
2013	16.62	32.44	*0.51*	51679	425	475
2014	16.57	31.26	*0.53*	52004	428	482
2015	15.61	21.83	*0.72*	52956	428	489
2016	14.75	17.33	*0.85*	53031	428	494
2017	14.70	19.98	*0.74*	52728	426	497
2018	16.23	22.12	*0.73*	53133	426	500
2019	15.53	21.22	*0.73*	53671	429	504
2020	14.66	16.75	*0.88*	50796	427	465
2021	13.79	19.99	*0.69*	53216	424	476
2022	13.28	20.19	*0.66*	56770	435	490
2023	12.86	22.03	*0.58*	58328	438	498
2024	12.73	23.01	*0.55*	59566	440	502
2025	12.91	23.87	*0.54*	60747	442	504
2026	13.21	24.77	*0.53*	61800	443	506
2027	13.32	25.17	*0.53*	62899	445	507
2028	13.45	25.76	*0.52*	63982	446	509
2029	13.56	26.11	*0.52*	65056	447	510
2030	13.65	26.63	*0.51*	66078	448	512
PY26/PY21	-0.86%	4.39%	-5.03%	3.04%	0.88%	1.22%

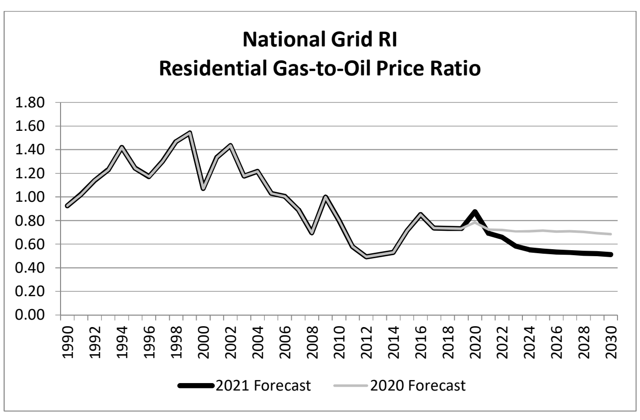
Year	NGPRCR Natural Gas Residential Price	OILPRCR No 2 Distillate Residential Price by All Sellers	*GORR*	GDP (2005 Millions of $)	Households (thousands)	Non-Farm Employment (thousands)
1990	13.50	14.60	*0.92*	35616	377	454
1991	13.62	13.32	*1.02*	34372	381	424
1992	13.33	11.69	*1.14*	35063	384	424
1993	13.77	11.20	*1.23*	35716	387	430
1994	15.06	10.61	*1.42*	35826	391	434
1995	12.79	10.30	*1.24*	36505	395	439
1996	13.18	11.25	*1.17*	36926	401	441
1997	14.58	11.19	*1.30*	38989	406	450
1998	14.24	9.70	*1.47*	40360	411	458
1999	13.96	9.05	*1.54*	41651	411	466
2000	13.82	12.91	*1.07*	43474	410	477
2001	16.81	12.61	*1.33*	44386	407	479
2002	16.03	11.17	*1.43*	45877	410	479
2003	15.68	13.33	*1.18*	47804	411	484
2004	17.18	14.12	*1.22*	49762	412	488
2005	18.56	18.01	*1.03*	50378	411	491
2006	21.29	21.17	*1.01*	51304	411	493
2007	19.70	22.08	*0.89*	49843	411	492
2008	19.25	27.64	*0.70*	48263	414	481
2009	19.45	19.50	*1.00*	47708	414	459
2010	20.06	25.04	*0.80*	48801	414	458
2011	17.92	31.03	*0.58*	48425	417	461
2012	16.28	33.04	*0.49*	48630	421	465
2013	16.62	32.45	*0.51*	48815	425	472
2014	16.57	31.26	*0.53*	49217	428	479
2015	15.61	21.83	*0.72*	50174	428	485
2016	14.74	17.32	*0.85*	50406	427	490
2017	14.69	19.96	*0.74*	51192	426	494
2018	16.23	22.12	*0.73*	52719	422	501
2019	15.42	21.07	*0.73*	54456	424	507
2020	13.64	17.38	*0.78*	55401	426	510
2021	12.82	17.73	*0.72*	56891	428	509
2022	13.19	18.32	*0.72*	58647	429	512
2023	13.26	18.73	*0.71*	60158	431	515
2024	13.68	19.34	*0.71*	61647	432	518
2025	14.13	19.75	*0.72*	63013	434	520
2026	14.19	20.08	*0.71*	64358	435	522
2027	14.30	20.14	*0.71*	65762	436	524
2028	14.35	20.43	*0.70*	67267	437	526
2029	14.27	20.62	*0.69*	68769	438	528
2030	14.19	20.73	*0.68*	70270	438	530
PY26/PY21	2.04%	2.52%	-0.46%	2.50%	0.35%	0.49%

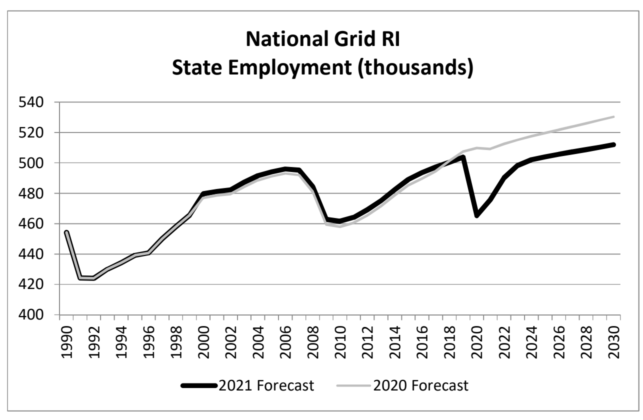

National Grid RI
Natural Gas Residential Price ($/dth)
2021 Forecast
2020 Forecast


National Grid RI
State GDP (Millions 2009 $)
2021 Forecast
2020 Forecast


National Grid RI
No. 2 Distillate Residential Price ($/dth)
2021 Forecast
2020 Forecast


National Grid RI
State Households (thousands)
2021 Forecast
2020 Forecast


National Grid RI
Residential Gas-to-Oil Price Ratio
2021 Forecast
2020 Forecast

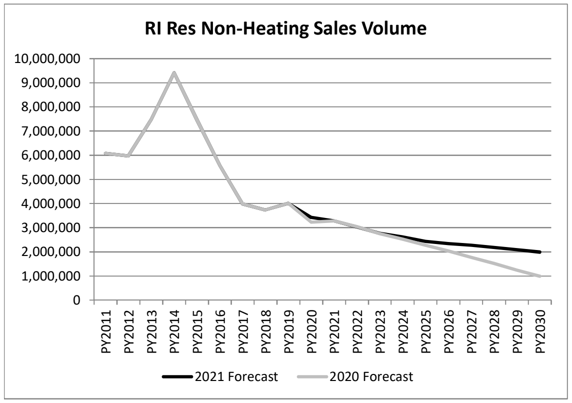

National Grid RI
State Employment (thousands)
2021 Forecast
2020 Forecast

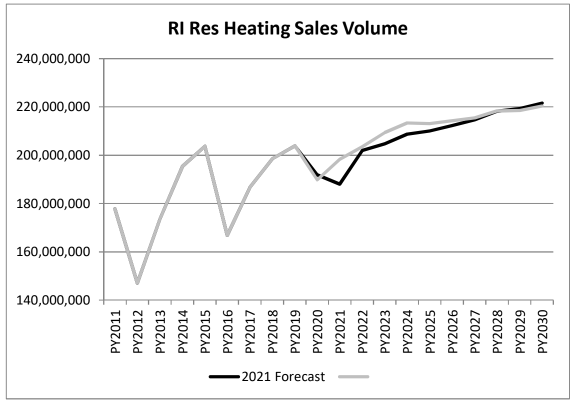
Attachment GLF-4

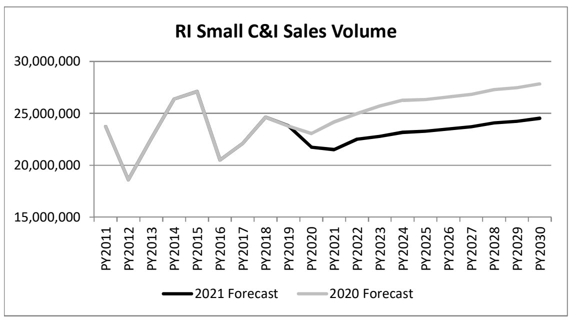
National Grid RI Retail Volume Forecast by Rate Class

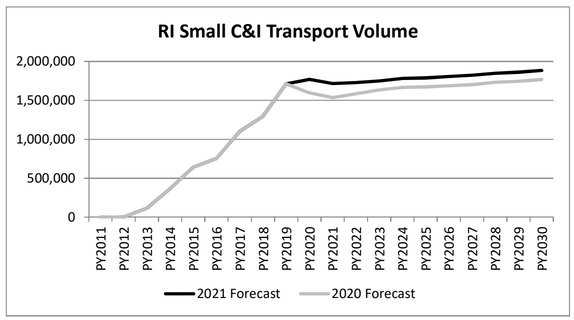
2021 vs 2020 Forecast

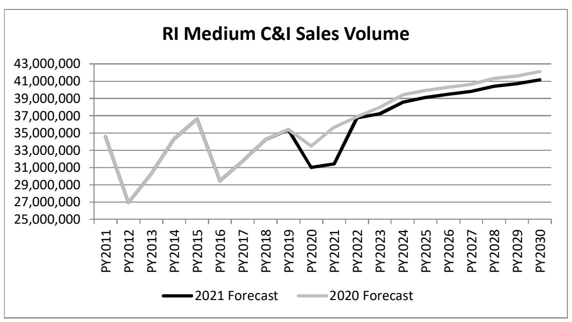
National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)

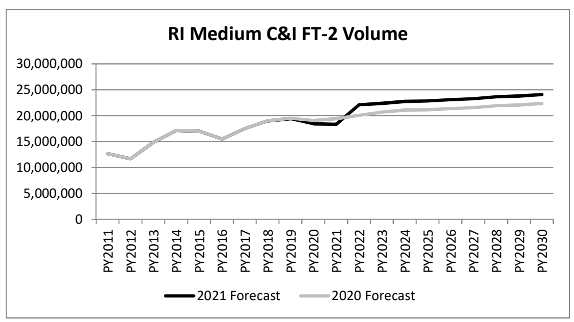


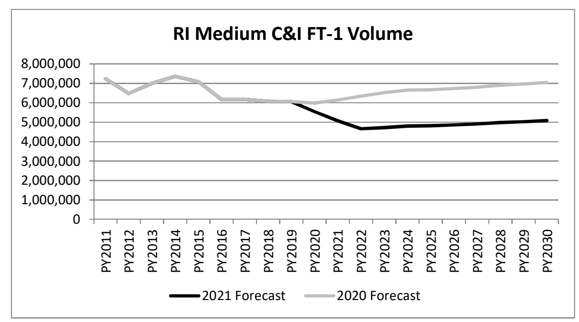




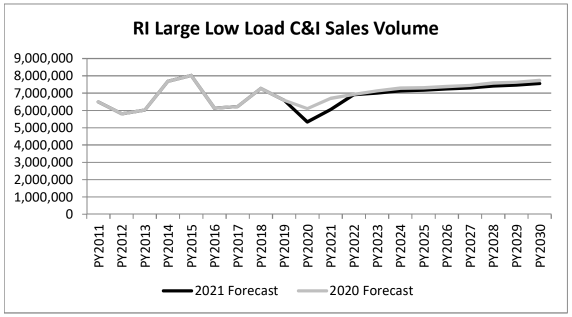


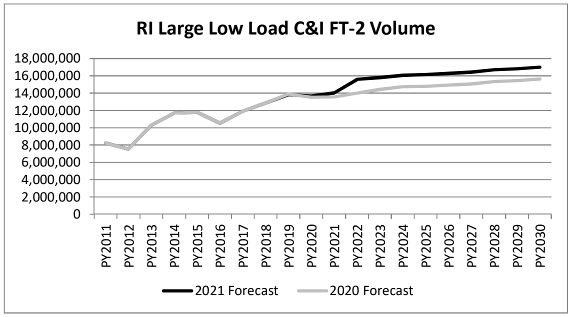


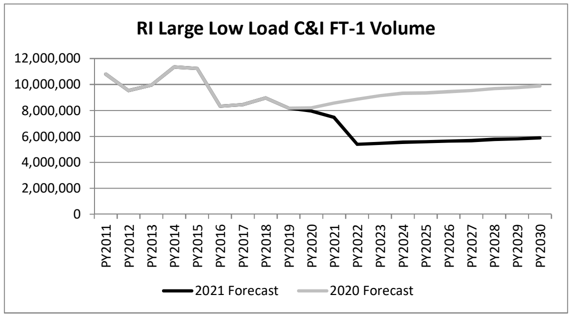


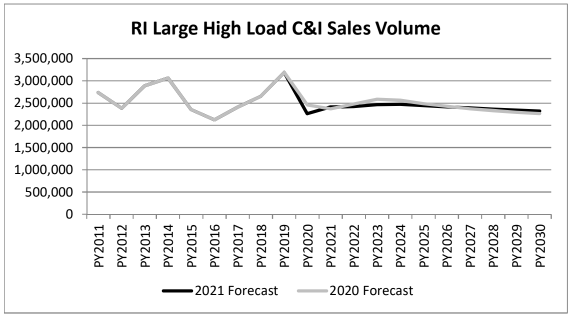


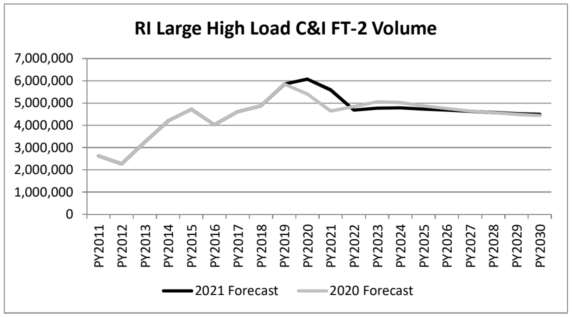
National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)

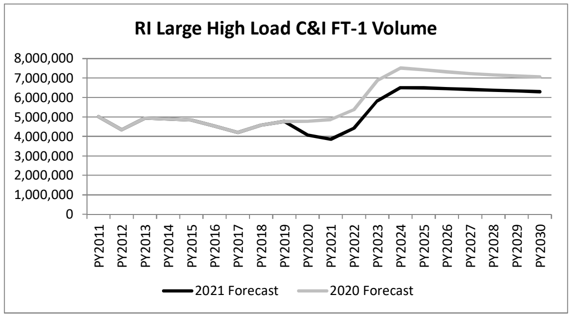


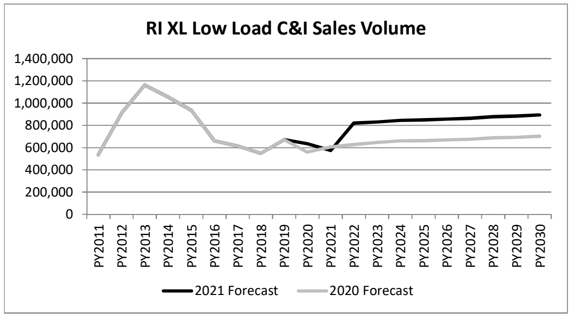


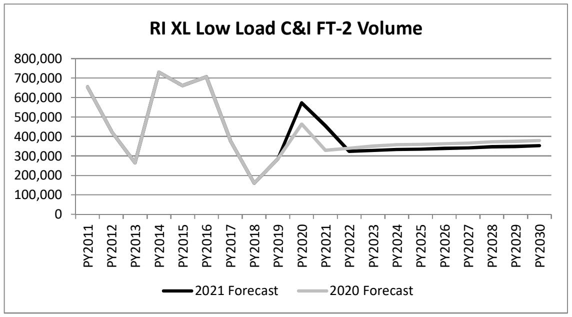


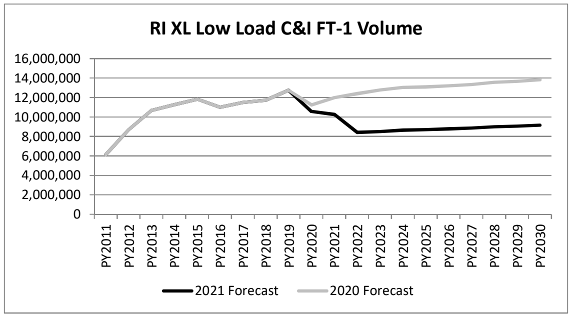




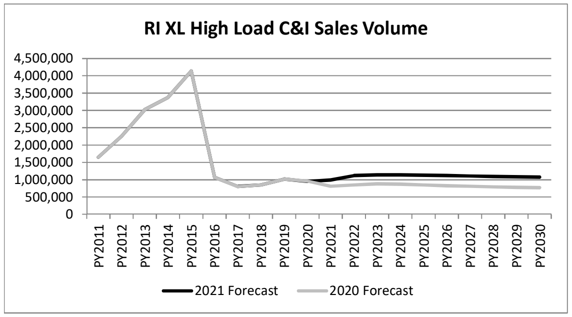


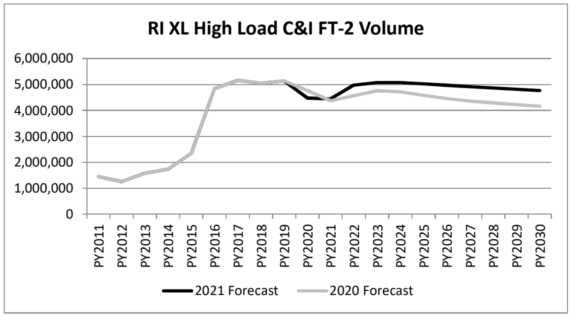


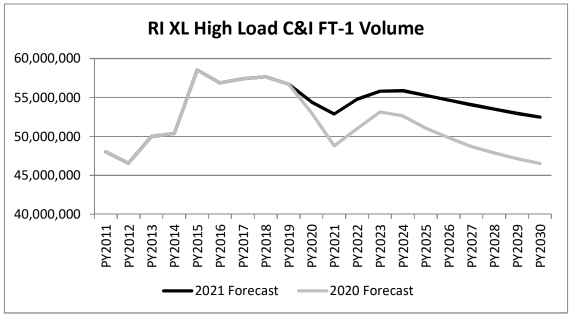


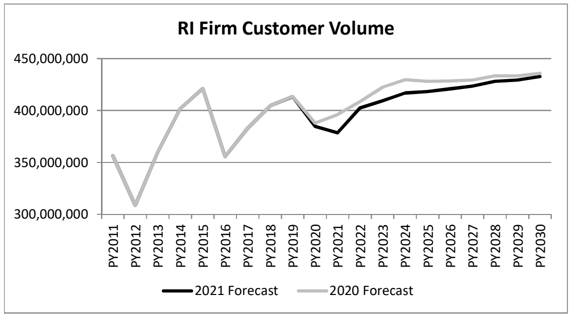


National Grid
2021 and 2020 Volume Forecasts by Rate Class
(Therms; Planning Year)







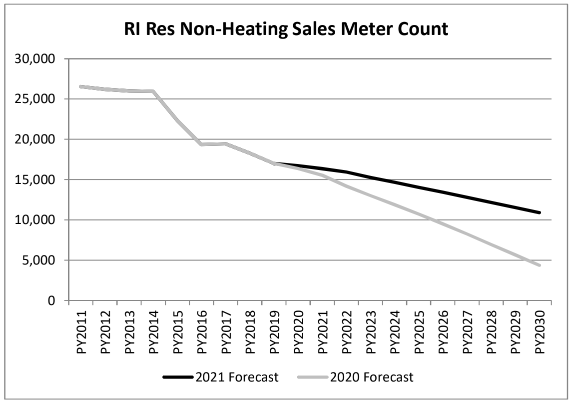


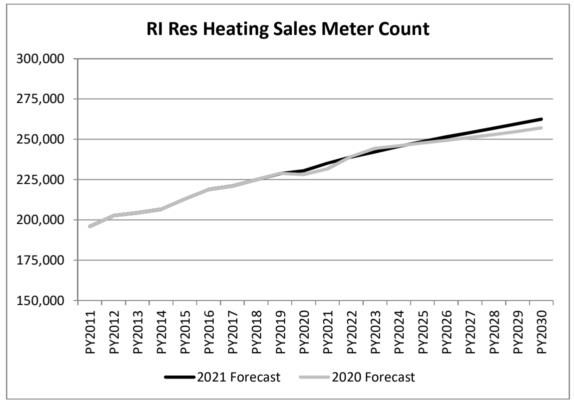
Attachment GLF-5

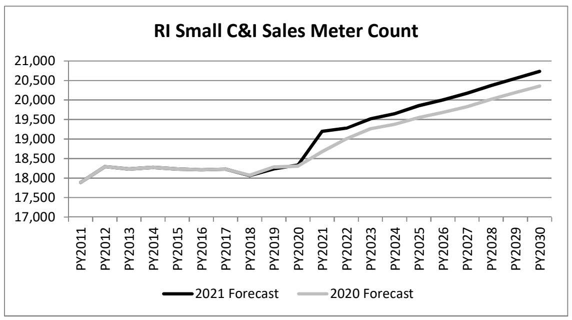
National Grid RI Retail Meter Count Forecast by Rate Class

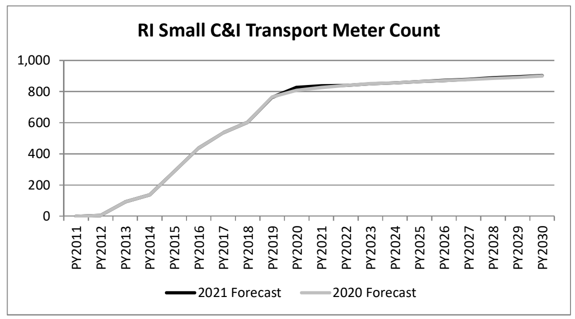
2021 vs 2020 Forecast

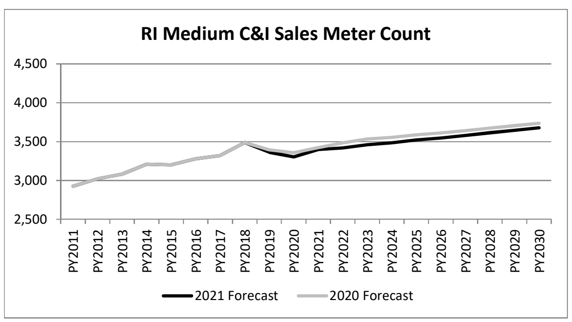
National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)

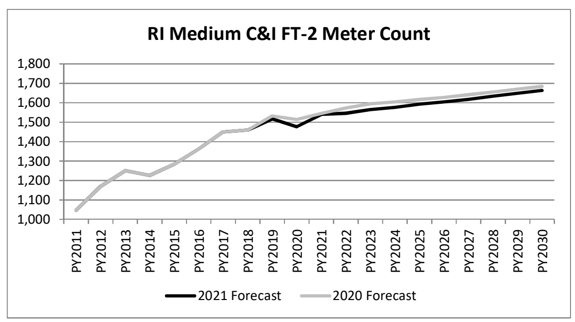


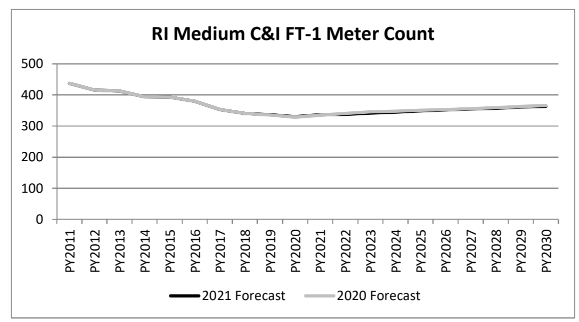




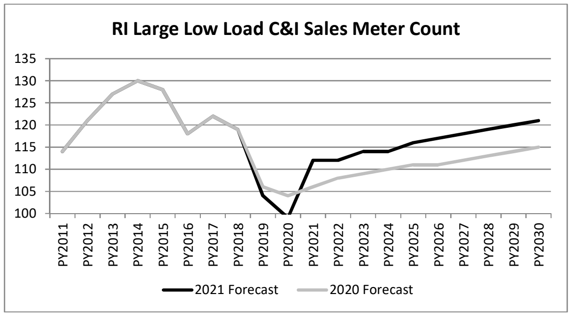


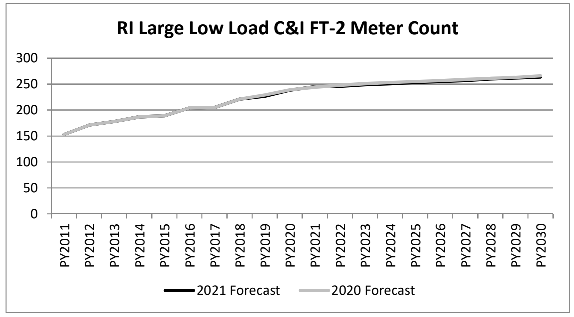


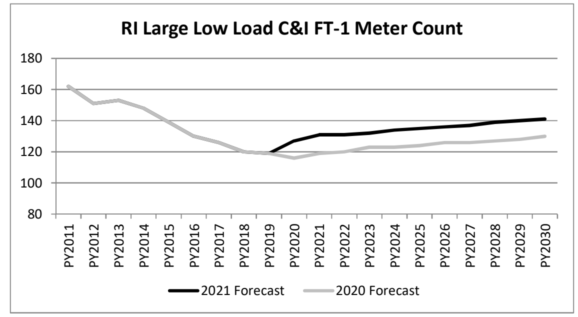


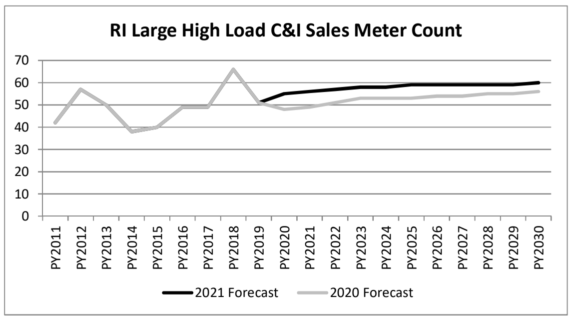


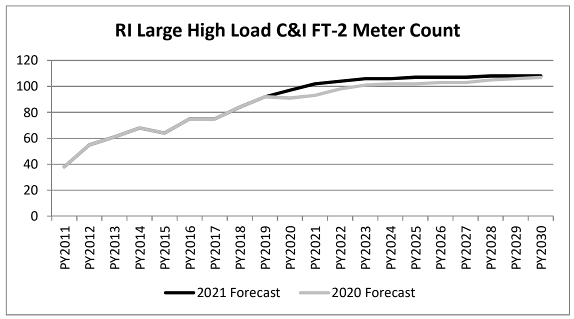
National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)

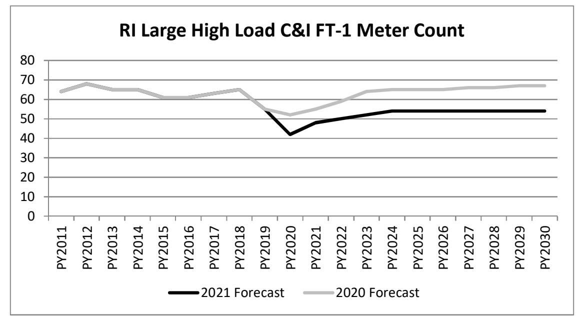


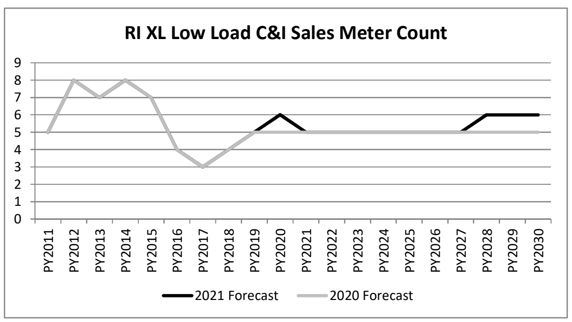


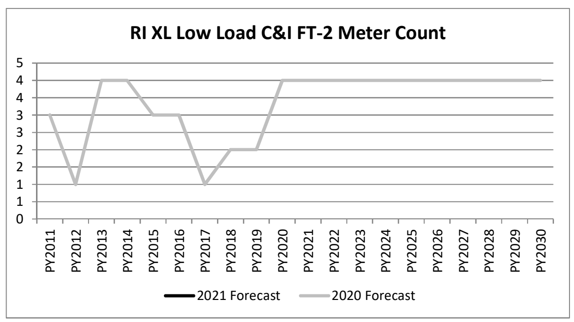


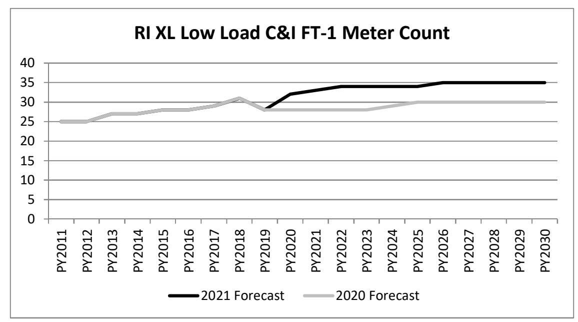




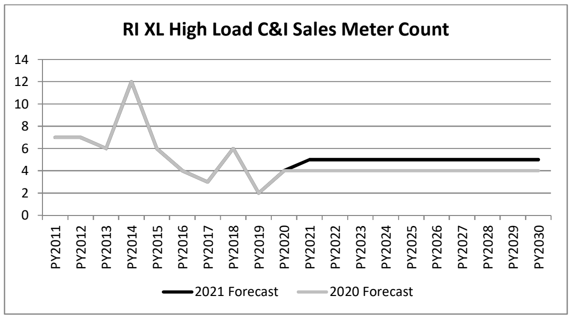


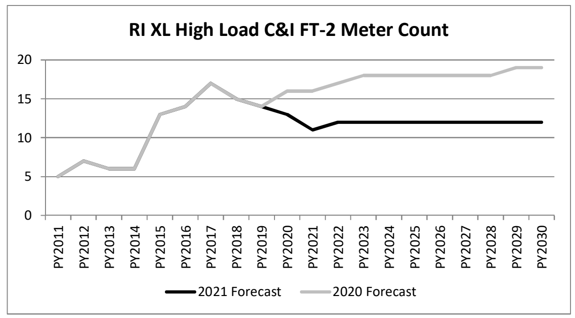


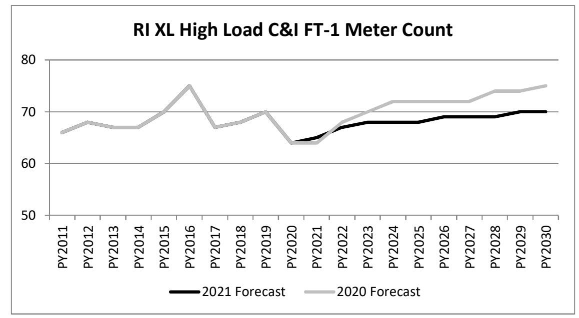


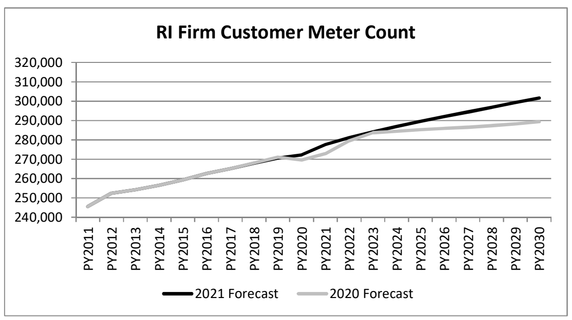


National Grid
2021 and 2020 Meter Count Forecasts by Rate Class
(end of Planning Year)









Appendix C:

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Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	74,108	74,995	76,235	77,700	78,282	79,083	79,802	80,988	81,383	82,184	82,991
2-Nov	9	44,493	45,025	45,769	46,649	46,998	47,480	47,911	48,623	48,860	49,341	49,826
3-Nov	14	72,727	73,598	74,814	76,253	76,823	77,610	78,315	79,480	79,867	80,653	81,445
4-Nov	13	66,830	67,629	68,747	70,069	70,594	71,316	71,964	73,034	73,390	74,112	74,840
5-Nov	20	103,935	105,178	106,917	108,972	109,788	110,912	111,920	113,584	114,137	115,260	116,393
6-Nov	19	99,323	100,512	102,173	104,138	104,917	105,991	106,954	108,545	109,073	110,147	111,229
7-Nov	16	84,588	85,601	87,016	88,689	89,352	90,267	91,087	92,442	92,892	93,806	94,728
8-Nov	14	74,850	75,745	76,997	78,478	79,065	79,875	80,600	81,799	82,197	83,006	83,822
9-Nov	20	105,188	106,447	108,206	110,287	111,112	112,250	113,270	114,954	115,514	116,651	117,797
10-Nov	15	81,550	82,526	83,890	85,503	86,143	87,025	87,816	89,122	89,556	90,437	91,325
11-Nov	15	81,968	82,949	84,320	85,941	86,585	87,471	88,266	89,578	90,015	90,900	91,793
12-Nov	14	74,817	75,712	76,964	78,443	79,031	79,840	80,565	81,763	82,161	82,970	83,785
13-Nov	20	102,714	103,943	105,661	107,692	108,498	109,609	110,605	112,250	112,796	113,906	115,025
14-Nov	19	97,685	98,853	100,488	102,420	103,186	104,243	105,189	106,754	107,274	108,329	109,393
15-Nov	24	127,140	128,662	130,788	133,303	134,301	135,676	136,908	138,944	139,621	140,995	142,380
16-Nov	27	146,054	147,802	150,245	153,134	154,280	155,860	157,275	159,614	160,391	161,970	163,561
17-Nov	19	108,902	110,205	112,027	114,181	115,036	116,213	117,269	119,013	119,592	120,769	121,956
18-Nov	28	152,370	154,193	156,742	159,755	160,951	162,599	164,076	166,516	167,327	168,974	170,633
19-Nov	30	162,912	164,861	167,586	170,808	172,087	173,849	175,427	178,037	178,903	180,664	182,439
20-Nov	31	170,514	172,554	175,406	178,779	180,117	181,961	183,614	186,345	187,252	189,094	190,952
21-Nov	31	169,711	171,741	174,580	177,937	179,269	181,104	182,749	185,467	186,370	188,204	190,053
22-Nov	37	202,557	204,980	208,369	212,375	213,964	216,155	218,118	221,362	222,440	224,629	226,836
23-Nov	41	227,368	230,089	233,892	238,389	240,174	242,633	244,836	248,478	249,687	252,145	254,621
24-Nov	43	241,671	244,563	248,605	253,385	255,282	257,896	260,238	264,108	265,394	268,006	270,639
25-Nov	45	254,302	257,345	261,599	266,629	268,624	271,375	273,839	277,912	279,265	282,013	284,784
26-Nov	27	164,860	166,832	169,590	172,851	174,145	175,928	177,525	180,166	181,043	182,825	184,620
27-Nov	17	105,498	106,760	108,525	110,611	111,439	112,580	113,603	115,292	115,854	116,994	118,143
28-Nov	20	106,926	108,205	109,994	112,108	112,948	114,104	115,140	116,853	117,422	118,577	119,742
29-Nov	24	126,304	127,816	129,929	132,427	133,418	134,784	136,008	138,031	138,703	140,068	141,444
30-Nov	29	156,596	158,470	161,089	164,186	165,415	167,109	168,627	171,135	171,968	173,660	175,366
1-Dec	20	114,800	116,174	118,094	120,365	121,266	122,507	123,620	125,458	126,069	127,310	128,560
2-Dec	28	153,624	155,462	158,032	161,070	162,276	163,937	165,426	167,886	168,704	170,364	172,037
3-Dec	29	158,268	160,161	162,809	165,939	167,181	168,893	170,427	172,962	173,804	175,514	177,238
4-Dec	34	185,281	187,498	190,598	194,262	195,716	197,720	199,516	202,483	203,469	205,471	207,490
5-Dec	25	140,175	141,852	144,197	146,970	148,070	149,586	150,944	153,189	153,935	155,450	156,977
6-Dec	39	211,427	213,956	217,493	221,675	223,334	225,621	227,670	231,056	232,181	234,466	236,769
7-Dec	28	159,892	161,805	164,480	167,642	168,897	170,626	172,176	174,737	175,588	177,315	179,057
8-Dec	19	115,589	116,972	118,905	121,192	122,099	123,349	124,469	126,320	126,935	128,184	129,444
9-Dec	29	157,850	159,738	162,379	165,501	166,740	168,447	169,977	172,505	173,345	175,050	176,770
10-Dec	23	127,896	129,427	131,566	134,096	135,099	136,482	137,722	139,770	140,451	141,833	143,226
11-Dec	20	112,325	113,669	115,548	117,770	118,652	119,866	120,955	122,754	123,352	124,565	125,789
12-Dec	27	141,941	143,639	146,014	148,821	149,935	151,470	152,846	155,119	155,874	157,408	158,954
13-Dec	27	145,669	147,412	149,849	152,730	153,873	155,449	156,860	159,193	159,968	161,543	163,130
14-Dec	41	221,518	224,168	227,874	232,255	233,993	236,389	238,536	242,084	243,262	245,656	248,069
15-Dec	45	247,616	250,579	254,721	259,618	261,561	264,239	266,639	270,605	271,922	274,598	277,296
16-Dec	39	224,767	227,456	231,216	235,661	237,425	239,856	242,035	245,635	246,830	249,259	251,708
17-Dec	32	188,498	190,753	193,906	197,634	199,114	201,152	202,979	205,998	207,001	209,038	211,092
18-Dec	41	226,565	229,276	233,066	237,547	239,325	241,776	243,971	247,600	248,806	251,254	253,722
19-Dec	32	179,787	181,939	184,946	188,502	189,913	191,857	193,600	196,479	197,436	199,379	201,337
20-Dec	49	267,896	271,102	275,583	280,882	282,984	285,881	288,478	292,768	294,194	297,089	300,007
21-Dec	51	283,420	286,811	291,552	297,158	299,382	302,447	305,194	309,733	311,241	314,304	317,392
22-Dec	32	195,184	197,520	200,785	204,645	206,177	208,288	210,179	213,305	214,344	216,453	218,579
23-Dec	21	132,399	133,983	136,198	138,817	139,856	141,287	142,571	144,691	145,396	146,826	148,269
24-Dec	27	150,233	152,031	154,544	157,515	158,694	160,319	161,775	164,181	164,981	166,604	168,241
25-Dec	41	216,954	219,549	223,179	227,470	229,172	231,519	233,621	237,096	238,250	240,595	242,958
26-Dec	42	228,317	231,049	234,868	239,384	241,175	243,645	245,858	249,514	250,729	253,196	255,684
27-Dec	51	282,199	285,576	290,296	295,878	298,092	301,144	303,879	308,399	309,900	312,950	316,024
28-Dec	51	288,435	291,886	296,711	302,416	304,679	307,799	310,594	315,214	316,748	319,865	323,007
29-Dec	32	196,020	198,365	201,644	205,521	207,060	209,180	211,079	214,219	215,262	217,380	219,515
30-Dec	35	203,265	205,698	209,098	213,118	214,713	216,912	218,882	222,137	223,219	225,415	227,629
31-Dec	30	171,270	173,319	176,184	179,571	180,915	182,768	184,428	187,171	188,082	189,933	191,798
1-Jan	61	325,296	329,188	334,629	341,063	343,616	347,134	350,287	355,497	357,228	360,743	364,287
2-Jan	38	217,681	220,286	223,927	228,232	229,941	232,295	234,405	237,891	239,049	241,402	243,773
3-Jan	23	147,152	148,913	151,375	154,285	155,440	157,031	158,458	160,814	161,597	163,188	164,791
4-Jan	28	158,638	160,537	163,190	166,328	167,573	169,288	170,826	173,367	174,211	175,925	177,653
5-Jan	19	108,902	110,205	112,027	114,181	115,036	116,213	117,269	119,013	119,592	120,769	121,956
6-Jan	28	152,788	154,616	157,172	160,194	161,393	163,045	164,526	166,973	167,786	169,437	171,101
7-Jan	38	203,407	205,840	209,243	213,266	214,862	217,062	219,034	222,291	223,374	225,572	227,788
8-Jan	41	226,532	229,243	233,032	237,513	239,291	241,741	243,936	247,564	248,770	251,218	253,685
9-Jan	41	227,852	230,578	234,390	238,896	240,684	243,148	245,357	249,006	250,218	252,681	255,163
10-Jan	30	175,481	177,581	180,517	183,987	185,364	187,262	188,963	191,774	192,707	194,604	196,515
11-Jan	43	238,746	241,602	245,596	250,318	252,192	254,774	257,088	260,912	262,182	264,762	267,363
12-Jan	50	275,015	278,305	282,906	288,345	290,503	293,478	296,143	300,548	302,011	304,983	307,979
13-Jan	41	237,816	240,661	244,640	249,343	251,209	253,781	256,086	259,895	261,160	263,730	266,321
14-Jan	46	262,289	265,428	269,815	275,003	277,061	279,898	282,440	286,641	288,037	290,871	293,728
15-Jan	43	243,375	246,288	250,359	255,172	257,082	259,714	262,073	265,971	267,266	269,896	272,547
16-Jan	30	176,350	178,460	181,410	184,898	186,282	188,189	189,898	192,723	193,661	195,567	197,488
17-Jan	40	222,339	225,000	228,719	233,116	234,861	237,266	239,421	242,982	244,165	246,567	248,989
18-Jan	55	299,071	302,649	307,652	313,567	315,914	319,148	322,047	326,837	328,428	331,660	334,918
19-Jan	68	375,323	380,026	386,326	393,773	396,744	400,831	404,494	410,525	412,536	416,600	420,696
20-Jan	54	316,157	319,940	325,229	331,482	333,963	337,382	340,447	345,510	347,192	350,609	354,053
21-Jan	44	265,121	268,293	272,728	277,971	280,052	282,919	285,489	289,735	291,146	294,011	296,899
22-Jan	34	202,415	204,837	208,223	212,227	213,815	216,004	217,966	221,208	222,285	224,472	226,678
23-Jan	32	181,877	184,053	187,096	190,693	192,120	194,087	195,850	198,763	199,730	201,696	203,677
24-Jan	44	239,661	242,529	246,538	251,278	253,159	255,751	258,074	261,912	263,187	265,777	268,388
25-Jan	24	144,659	146,390	148,810	151,671	152,806	154,371	155,773	158,090	158,859	160,423	161,999
26-Jan	41	227,368	230,089	233,892	238,389	240,174	242,633	244,836	248,478	249,687	252,145	254,621
27-Jan	46	251,424	254,432	258,638	263,611	265,584	268,303	270,740	274,767	276,104	278,822	281,561

	AI	RI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	189,751	192,022	195,196	198,949	200,438	202,490	204,329	207,368	208,378	210,429	212,496
29-Jan	46	254,800	257,849	262,111	267,151	269,150	271,906	274,375	278,456	279,812	282,566	285,341
30-Jan	47	257,805	260,890	265,203	270,301	272,325	275,113	277,612	281,741	283,112	285,898	288,707
31-Jan	43	245,883	248,825	252,938	257,801	259,731	262,390	264,773	268,711	270,019	272,677	275,355
1-Feb	17	115,077	116,454	118,379	120,655	121,558	122,802	123,918	125,761	126,373	127,617	128,870
2-Feb	28	158,220	160,114	162,760	165,890	167,131	168,843	170,376	172,910	173,752	175,462	177,185
3-Feb	45	238,004	240,852	244,833	249,540	251,408	253,982	256,289	260,101	261,367	263,939	266,532
4-Feb	45	249,705	252,693	256,870	261,809	263,769	266,469	268,889	272,889	274,217	276,916	279,636
5-Feb	56	310,434	314,148	319,341	325,481	327,917	331,275	334,283	339,255	340,907	344,262	347,643
6-Feb	56	312,974	316,719	321,954	328,144	330,601	333,985	337,019	342,031	343,696	347,079	350,488
7-Feb	57	324,690	328,574	334,006	340,428	342,976	346,487	349,634	354,834	356,562	360,071	363,608
8-Feb	42	251,236	254,242	258,444	263,413	265,385	268,102	270,537	274,561	275,898	278,613	281,350
9-Feb	44	255,509	258,566	262,840	267,894	269,899	272,662	275,139	279,231	280,590	283,352	286,135
10-Feb	39	224,767	227,456	231,216	235,661	237,425	239,856	242,035	245,635	246,830	249,259	251,708
11-Feb	42	238,699	241,555	245,548	250,269	252,142	254,724	257,037	260,860	262,130	264,710	267,310
12-Feb	37	210,497	213,015	216,537	220,700	222,352	224,628	226,668	230,040	231,160	233,434	235,728
13-Feb	43	237,976	240,823	244,804	249,511	251,378	253,952	256,258	260,070	261,336	263,908	266,500
14-Feb	45	250,574	253,572	257,764	262,720	264,686	267,396	269,825	273,838	275,171	277,879	280,609
15-Feb	32	190,169	192,445	195,626	199,387	200,880	202,936	204,779	207,825	208,837	210,892	212,964
16-Feb	33	190,634	192,915	196,104	199,875	201,371	203,432	205,280	208,333	209,347	211,408	213,484
17-Feb	35	195,743	198,085	201,360	205,231	206,767	208,884	210,781	213,917	214,958	217,073	219,206
18-Feb	31	176,749	178,864	181,821	185,317	186,704	188,615	190,328	193,159	194,100	196,010	197,935
19-Feb	37	204,228	206,672	210,088	214,127	215,730	217,939	219,918	223,189	224,276	226,483	228,708
20-Feb	22	127,079	128,599	130,725	133,239	134,236	135,610	136,842	138,877	139,553	140,927	142,311
21-Feb	39	211,427	213,956	217,493	221,675	223,334	225,621	227,670	231,056	232,181	234,466	236,769
22-Feb	43	234,567	237,373	241,297	245,937	247,777	250,314	252,588	256,345	257,592	260,127	262,683
23-Feb	22	137,043	138,683	140,975	143,686	144,761	146,243	147,571	149,766	150,495	151,976	153,469
24-Feb	35	195,743	198,085	201,360	205,231	206,767	208,884	210,781	213,917	214,958	217,073	219,206
25-Feb	43	232,895	235,682	239,578	244,184	246,012	248,530	250,788	254,518	255,757	258,274	260,811
26-Feb	43	239,614	242,481	246,490	251,229	253,109	255,701	258,023	261,861	263,136	265,725	268,335
27-Feb	41	230,777	233,538	237,399	241,963	243,774	246,270	248,507	252,203	253,431	255,925	258,439
28-Feb	39	221,874	224,529	228,241	232,629	234,370	236,770	238,920	242,474	243,654	246,052	248,469
1-Mar	47	262,754	265,898	270,294	275,491	277,553	280,394	282,941	287,149	288,547	291,387	294,249
2-Mar	32	189,333	191,599	194,766	198,511	199,997	202,044	203,879	206,912	207,919	209,965	212,028
3-Mar	43	242,089	244,986	249,035	253,823	255,723	258,341	260,688	264,565	265,853	268,469	271,107
4-Mar	42	235,355	238,172	242,109	246,763	248,611	251,156	253,437	257,206	258,459	261,002	263,566
5-Mar	27	161,549	163,482	166,185	169,380	170,648	172,395	173,961	176,548	177,408	179,153	180,913
6-Mar	36	198,363	200,737	204,055	207,978	209,535	211,680	213,603	216,780	217,835	219,979	222,140
7-Mar	32	177,665	179,791	182,763	186,277	187,671	189,592	191,314	194,160	195,105	197,025	198,961
8-Mar	41	227,368	230,089	233,892	238,389	240,174	242,633	244,836	248,478	249,687	252,145	254,621
9-Mar	45	249,705	252,693	256,870	261,809	263,769	266,469	268,889	272,889	274,217	276,916	279,636
10-Mar	46	260,200	263,313	267,666	272,812	274,854	277,668	280,190	284,358	285,742	288,554	291,388
11-Mar	21	135,742	137,366	139,637	142,322	143,387	144,855	146,171	148,345	149,067	150,534	152,013
12-Mar	16	98,346	99,523	101,168	103,113	103,885	104,949	105,902	107,477	108,000	109,063	110,135
13-Mar	22	114,124	115,490	117,399	119,656	120,551	121,786	122,892	124,720	125,327	126,560	127,803
14-Mar	20	106,475	107,749	109,530	111,636	112,471	113,623	114,655	116,360	116,927	118,077	119,237
15-Mar	25	135,513	137,134	139,401	142,081	143,145	144,610	145,924	148,094	148,815	150,279	151,756
16-Mar	27	146,890	148,648	151,105	154,010	155,163	156,751	158,175	160,528	161,309	162,897	164,497
17-Mar	35	190,311	192,588	195,771	199,535	201,029	203,087	204,931	207,979	208,992	211,049	213,122
18-Mar	27	153,994	155,837	158,413	161,459	162,667	164,333	165,825	168,292	169,111	170,775	172,453
19-Mar	28	157,000	158,878	161,504	164,610	165,842	167,540	169,061	171,576	172,411	174,108	175,818
20-Mar	28	152,018	153,837	156,379	159,386	160,579	162,223	163,697	166,131	166,940	168,583	170,239
21-Mar	28	154,492	156,341	158,925	161,981	163,193	164,864	166,361	168,836	169,658	171,327	173,010
22-Mar	21	121,116	122,565	124,591	126,986	127,937	129,247	130,421	132,360	133,005	134,314	135,633
23-Mar	24	133,376	134,972	137,203	139,841	140,888	142,330	143,623	145,759	146,469	147,910	149,363
24-Mar	29	157,014	158,893	161,519	164,625	165,857	167,555	169,077	171,591	172,427	174,124	175,834
25-Mar	21	119,862	121,296	123,301	125,672	126,612	127,909	129,070	130,990	131,628	132,923	134,229
26-Mar	26	141,861	143,558	145,931	148,737	149,851	151,385	152,760	155,032	155,786	157,320	158,865
27-Mar	41	214,479	217,045	220,633	224,875	226,558	228,878	230,957	234,392	235,533	237,851	240,187
28-Mar	42	229,956	232,707	236,554	241,102	242,907	245,394	247,622	251,305	252,529	255,014	257,519
29-Mar	29	172,894	174,963	177,855	181,275	182,631	184,501	186,177	188,946	189,866	191,734	193,618
30-Mar	20	122,322	123,786	125,832	128,251	129,211	130,534	131,720	133,679	134,330	135,652	136,984
31-Mar	21	118,190	119,604	121,582	123,919	124,847	126,125	127,270	129,163	129,792	131,069	132,357
1-Apr	23	125,620	127,697	130,152	131,126	132,469	133,672	135,660	136,321	137,662	139,014	141,243
2-Apr	24	132,434	134,624	137,212	138,239	139,654	140,923	143,019	143,715	145,129	146,555	148,904
3-Apr	25	137,167	139,435	142,115	143,179	144,645	145,959	148,130	148,851	150,316	151,792	154,226
4-Apr	21	115,442	117,350	119,606	120,502	121,735	122,841	124,668	125,275	126,508	127,751	129,799
5-Apr	39	208,459	211,905	215,979	217,595	219,823	221,820	225,119	226,215	228,441	230,685	234,383
6-Apr	31	175,481	178,382	181,811	183,172	185,048	186,728	189,506	190,428	192,302	194,191	197,304
7-Apr	19	118,241	120,195	122,506	123,423	124,687	125,819	127,690	128,312	129,575	130,848	132,945
8-Apr	29	161,007	163,669	166,815	168,064	169,785	171,327	173,875	174,721	176,441	178,174	181,030
9-Apr	12	73,079	74,287	75,716	76,283	77,064	77,763	78,920	79,304	80,085	80,871	82,168
10-Apr	22	119,262	121,234	123,565	124,490	125,764	126,906	128,794	129,421	130,695	131,978	134,094
11-Apr	21	109,098	110,902	113,034	113,880	115,046	116,091	117,818	118,391	119,556	120,731	122,666
12-Apr	19	104,741	106,472	108,519	109,332	110,451	111,454	113,112	113,663	114,781	115,909	117,767
13-Apr	7	47,464	48,249	49,176	49,545	50,052	50,506	51,258	51,507	52,014	52,525	53,367
14-Apr	15	79,143	80,451	81,998	82,612	83,458	84,216	85,468	85,884	86,729	87,581	88,985
15-Apr	17	87,696	89,146	90,860	91,540	92,477	93,317	94,705	95,166	96,103	97,047	98,603
16-Apr	21	112,415	114,273	116,470	117,342	118,544	119,620	121,399	121,991	123,191	124,401	126,395
17-Apr	21	112,871	114,737	116,943	117,818	119,025	120,106	121,892	122,485	123,691	124,906	126,908
18-Apr	13	71,502	72,684	74,081	74,636	75,400	76,085	77,216	77,592	78,356	79,126	80,394
19-Apr	15	80,445	81,775	83,347	83,971	84,831	85,601	86,874	87,297	88,156	89,022	90,449
20-Apr	5	42,724	43,431	44,266	44,597	45,054	45,463	46,139	46,364	46,820	47,280	48,038
21-Apr	14	71,483	72,665	74,062	74,616	75,380	76,065	77,196	77,572	78,335	79,105	80,373
22-Apr	7	38,583	39,221	39,975	40,274	40,687	41,056	41,667	41,870	42,282	42,697	43,382
23-Apr	15	77,029	78,302	79,807	80,405	81,228	81,966	83,185	83,590	84,412	85,241	86,608
24-Apr	15	75,370	76,616	78,089	78,674	79,479	80,201	81,394	81,790	82,595	83,406	84,743
25-Apr	14	71,550	72,732	74,131	74,686	75,450	76,135	77,268	77,644	78,408	79,178	80,448

Date	AI HDDd	RI SFT2 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	52,718	53,590	54,620	55,029	55,592	56,097	56,931	57,209	57,772	58,339	59,274
27-Apr	7	40,698	41,371	42,166	42,482	42,917	43,306	43,950	44,164	44,599	45,037	45,759
28-Apr	8	39,480	40,132	40,904	41,210	41,632	42,010	42,635	42,843	43,264	43,689	44,390
29-Apr	13	64,246	65,308	66,564	67,062	67,749	68,364	69,381	69,719	70,405	71,096	72,236
30-Apr	16	82,151	83,509	85,115	85,752	86,630	87,416	88,717	89,148	90,026	90,910	92,368
1-May	0	41,903	42,596	43,415	43,740	44,188	44,589	45,252	45,473	45,920	46,371	47,115
2-May	0	34,324	34,892	35,563	35,829	36,196	36,524	37,068	37,248	37,615	37,984	38,593
3-May	0	29,639	30,129	30,709	30,938	31,255	31,539	32,008	32,164	32,480	32,799	33,325
4-May	0	31,721	32,245	32,865	33,111	33,450	33,754	34,256	34,422	34,761	35,103	35,665
5-May	6	30,716	31,223	31,824	32,062	32,390	32,684	33,170	33,332	33,660	33,991	34,536
6-May	17	80,930	82,268	83,849	84,477	85,342	86,117	87,398	87,823	88,688	89,559	90,995
7-May	23	118,854	120,819	123,142	124,063	125,334	126,472	128,353	128,978	130,247	131,526	133,635
8-May	14	77,860	79,147	80,669	81,272	82,105	82,850	84,083	84,492	85,323	86,161	87,543
9-May	13	69,387	70,534	71,891	72,429	73,170	73,835	74,933	75,298	76,039	76,786	78,017
10-May	2	40,723	41,396	42,192	42,508	42,943	43,333	43,977	44,191	44,626	45,065	45,787
11-May	0	38,064	38,693	39,437	39,732	40,139	40,504	41,106	41,306	41,713	42,123	42,798
12-May	0	32,566	33,105	33,741	33,994	34,342	34,654	35,169	35,340	35,688	36,039	36,616
13-May	3	31,218	31,734	32,344	32,586	32,920	33,219	33,713	33,877	34,211	34,547	35,101
14-May	8	33,559	34,114	34,770	35,030	35,389	35,710	36,241	36,418	36,776	37,137	37,733
15-May	12	55,351	56,266	57,348	57,777	58,368	58,898	59,774	60,065	60,657	61,252	62,234
16-May	17	82,688	84,055	85,671	86,312	87,196	87,988	89,296	89,731	90,614	91,504	92,971
17-May	12	62,963	64,004	65,234	65,723	66,396	66,999	67,995	68,326	68,999	69,676	70,793
18-May	12	65,044	66,120	67,391	67,895	68,590	69,213	70,243	70,585	71,279	71,980	73,133
19-May	1	41,703	42,392	43,207	43,531	43,976	44,376	45,036	45,255	45,700	46,149	46,889
20-May	8	37,788	38,413	39,151	39,444	39,848	40,210	40,808	41,007	41,410	41,817	42,488
21-May	9	41,219	41,900	42,706	43,026	43,466	43,861	44,513	44,730	45,170	45,614	46,345
22-May	9	42,521	43,224	44,055	44,385	44,839	45,246	45,919	46,143	46,597	47,055	47,809
23-May	8	35,740	36,331	37,029	37,306	37,688	38,031	38,596	38,784	39,166	39,551	40,185
24-May	10	47,643	48,431	49,362	49,731	50,241	50,697	51,451	51,701	52,210	52,723	53,568
25-May	7	38,160	38,791	39,537	39,833	40,241	40,606	41,210	41,411	41,818	42,229	42,906
26-May	7	37,738	38,361	39,099	39,392	39,795	40,156	40,754	40,952	41,355	41,761	42,431
27-May	1	37,474	38,093	38,826	39,116	39,517	39,876	40,469	40,666	41,066	41,469	42,134
28-May	5	34,266	34,833	35,503	35,768	36,134	36,463	37,005	37,185	37,551	37,920	38,528
29-May	3	31,674	32,198	32,817	33,063	33,401	33,704	34,206	34,372	34,710	35,051	35,613
30-May	9	36,633	37,239	37,955	38,239	38,631	38,981	39,561	39,754	40,145	40,539	41,189
31-May	12	55,774	56,696	57,786	58,218	58,814	59,348	60,231	60,524	61,120	61,720	62,710
1-Jun	6	39,597	40,251	41,025	41,332	41,755	42,135	42,761	42,969	43,392	43,818	44,521
2-Jun	7	38,160	38,791	39,537	39,833	40,241	40,606	41,210	41,411	41,818	42,229	42,906
3-Jun	2	36,883	37,493	38,214	38,500	38,894	39,247	39,831	40,025	40,419	40,816	41,470
4-Jun	0	35,527	36,114	36,808	37,084	37,464	37,804	38,366	38,553	38,932	39,315	39,945
5-Jun	0	30,485	30,989	31,585	31,821	32,147	32,439	32,921	33,082	33,407	33,735	34,276
6-Jun	0	27,558	28,014	28,552	28,766	29,060	29,324	29,760	29,905	30,200	30,496	30,985
7-Jun	0	29,639	30,129	30,709	30,938	31,255	31,539	32,008	32,164	32,480	32,799	33,325
8-Jun	0	32,056	32,585	33,212	33,461	33,803	34,110	34,617	34,786	35,128	35,473	36,042
9-Jun	0	31,210	31,726	32,336	32,578	32,911	33,210	33,704	33,868	34,201	34,537	35,091
10-Jun	0	30,531	31,036	31,633	31,870	32,196	32,488	32,972	33,132	33,458	33,787	34,328
11-Jun	0	30,109	30,606	31,195	31,428	31,750	32,038	32,515	32,673	32,995	33,319	33,853
12-Jun	0	27,269	27,720	28,253	28,465	28,756	29,017	29,449	29,592	29,883	30,177	30,661
13-Jun	0	26,034	26,464	26,973	27,175	27,453	27,702	28,115	28,251	28,529	28,810	29,272
14-Jun	0	29,128	29,610	30,179	30,405	30,716	30,995	31,456	31,610	31,921	32,234	32,751
15-Jun	9	36,144	36,742	37,448	37,728	38,115	38,461	39,033	39,223	39,609	39,998	40,639
16-Jun	7	33,508	34,062	34,717	34,977	35,335	35,656	36,187	36,363	36,721	37,081	37,676
17-Jun	1	38,320	38,953	39,702	39,999	40,409	40,776	41,382	41,584	41,993	42,405	43,085
18-Jun	5	34,266	34,833	35,503	35,768	36,134	36,463	37,005	37,185	37,551	37,920	38,528
19-Jun	6	31,172	31,687	32,296	32,538	32,871	33,170	33,663	33,827	34,160	34,495	35,048
20-Jun	5	31,372	31,891	32,504	32,748	33,083	33,383	33,880	34,045	34,380	34,717	35,274
21-Jun	0	35,129	35,709	36,396	36,668	37,044	37,380	37,936	38,121	38,496	38,874	39,497
22-Jun	0	32,558	33,096	33,733	33,985	34,333	34,645	35,160	35,331	35,679	36,029	36,607
23-Jun	0	28,329	28,797	29,351	29,571	29,873	30,145	30,593	30,742	31,045	31,350	31,852
24-Jun	0	28,329	28,797	29,351	29,571	29,873	30,145	30,593	30,742	31,045	31,350	31,852
25-Jun	0	28,329	28,797	29,351	29,571	29,873	30,145	30,593	30,742	31,045	31,350	31,852
26-Jun	0	26,583	27,022	27,542	27,748	28,032	28,286	28,707	28,847	29,131	29,417	29,889
27-Jun	0	23,656	24,047	24,509	24,692	24,945	25,172	25,546	25,671	25,923	26,178	26,597
28-Jun	0	24,891	25,303	25,789	25,982	26,248	26,486	26,880	27,011	27,277	27,545	27,987
29-Jun	0	26,805	27,248	27,772	27,980	28,266	28,523	28,947	29,088	29,374	29,663	30,138
30-Jun	0	27,228	27,678	28,210	28,421	28,712	28,973	29,404	29,547	29,838	30,131	30,614
1-Jul	0	27,651	28,108	28,648	28,863	29,158	29,423	29,861	30,006	30,301	30,599	31,089
2-Jul	0	27,651	28,108	28,648	28,863	29,158	29,423	29,861	30,006	30,301	30,599	31,089
3-Jul	0	25,737	26,162	26,665	26,865	27,140	27,386	27,794	27,929	28,204	28,481	28,938
4-Jul	0	23,400	23,787	24,244	24,426	24,676	24,900	25,270	25,393	25,643	25,895	26,310
5-Jul	0	24,468	24,873	25,351	25,541	25,802	26,036	26,424	26,552	26,814	27,077	27,511
6-Jul	1	25,210	25,626	26,119	26,315	26,584	26,825	27,224	27,357	27,626	27,897	28,345
7-Jul	2	28,848	29,325	29,889	30,113	30,421	30,697	31,154	31,305	31,614	31,924	32,436
8-Jul	0	34,497	35,067	35,741	36,009	36,377	36,708	37,254	37,435	37,803	38,175	38,787
9-Jul	0	30,435	30,938	31,533	31,769	32,094	32,386	32,868	33,028	33,353	33,680	34,220
10-Jul	0	23,279	23,664	24,119	24,299	24,548	24,771	25,140	25,262	25,510	25,761	26,174
11-Jul	0	20,440	20,778	21,177	21,336	21,554	21,750	22,073	22,181	22,399	22,619	22,982
12-Jul	0	23,199	23,583	24,036	24,216	24,464	24,686	25,054	25,176	25,423	25,673	26,085
13-Jul	0	26,717	27,159	27,681	27,888	28,173	28,429	28,852	28,993	29,278	29,566	30,040
14-Jul	0	26,884	27,329	27,854	28,063	28,350	28,608	29,033	29,174	29,462	29,751	30,228
15-Jul	0	26,039	26,469	26,978	27,180	27,458	27,708	28,120	28,257	28,535	28,815	29,277
16-Jul	0	25,783	26,209	26,713	26,913	27,189	27,436	27,844	27,979	28,255	28,532	28,990
17-Jul	0	23,447	23,834	24,292	24,474	24,725	24,949	25,320	25,444	25,694	25,946	26,362
18-Jul	0	20,687	21,029	21,433	21,594	21,815	22,013	22,340	22,449	22,670	22,893	23,260
19-Jul	0	21,755	22,115	22,540	22,708	22,941	23,149	23,494	23,608	23,840	24,074	24,460
20-Jul	0	23,669	24,060	24,523	24,706	24,959	25,186	25,560	25,685	25,938	26,192	26,612
21-Jul	0	24,682	25,090	25,572	25,764	26,028	26,264	26,655	26,784	27,048	27,314	27,752
22-Jul	0	24,515	24,920	25,399	25,589	25,851	26,086	26,474	26,603	26,864	27,128	27,563

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI SFT2 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	24,347	24,749	25,225	25,414	25,674	25,908	26,293	26,421	26,681	26,943	27,375
24-Jul	0	23,112	23,494	23,945	24,125	24,372	24,593	24,959	25,080	25,327	25,576	25,986
25-Jul	0	21,453	21,808	22,227	22,393	22,623	22,828	23,168	23,280	23,510	23,741	24,121
26-Jul	0	23,367	23,753	24,210	24,391	24,641	24,865	25,234	25,357	25,607	25,858	26,273
27-Jul	0	26,039	26,469	26,978	27,180	27,458	27,708	28,120	28,257	28,535	28,815	29,277
28-Jul	0	26,039	26,469	26,978	27,180	27,458	27,708	28,120	28,257	28,535	28,815	29,277
29-Jul	0	25,616	26,039	26,540	26,738	27,012	27,258	27,663	27,798	28,071	28,347	28,801
30-Jul	0	25,616	26,039	26,540	26,738	27,012	27,258	27,663	27,798	28,071	28,347	28,801
31-Jul	0	23,367	23,753	24,210	24,391	24,641	24,865	25,234	25,357	25,607	25,858	26,273
1-Aug	0	22,044	22,408	22,839	23,010	23,245	23,456	23,805	23,921	24,157	24,394	24,785
2-Aug	0	23,869	24,264	24,730	24,916	25,171	25,399	25,777	25,903	26,157	26,414	26,838
3-Aug	0	24,682	25,090	25,572	25,764	26,028	26,264	26,655	26,784	27,048	27,314	27,752
4-Aug	0	24,259	24,660	25,134	25,322	25,582	25,814	26,198	26,325	26,585	26,846	27,276
5-Aug	0	24,092	24,490	24,961	25,148	25,405	25,636	26,017	26,144	26,401	26,660	27,088
6-Aug	0	24,180	24,579	25,052	25,239	25,498	25,729	26,112	26,239	26,497	26,758	27,187
7-Aug	0	23,367	23,753	24,210	24,391	24,641	24,865	25,234	25,357	25,607	25,858	26,273
8-Aug	0	22,299	22,668	23,103	23,276	23,515	23,728	24,081	24,198	24,436	24,677	25,072
9-Aug	0	23,957	24,353	24,822	25,007	25,263	25,493	25,872	25,998	26,254	26,512	26,937
10-Aug	0	25,616	26,039	26,540	26,738	27,012	27,258	27,663	27,798	28,071	28,347	28,801
11-Aug	0	25,616	26,039	26,540	26,738	27,012	27,258	27,663	27,798	28,071	28,347	28,801
12-Aug	0	25,281	25,699	26,193	26,389	26,659	26,901	27,301	27,434	27,704	27,976	28,425
13-Aug	0	26,294	26,729	27,243	27,447	27,728	27,979	28,396	28,534	28,815	29,098	29,564
14-Aug	0	24,636	25,043	25,524	25,715	25,979	26,215	26,605	26,734	26,997	27,262	27,699
15-Aug	0	21,964	22,327	22,756	22,927	23,161	23,372	23,719	23,835	24,069	24,306	24,695
16-Aug	0	24,636	25,043	25,524	25,715	25,979	26,215	26,605	26,734	26,997	27,262	27,699
17-Aug	0	26,717	27,159	27,681	27,888	28,173	28,429	28,852	28,993	29,278	29,566	30,040
18-Aug	1	24,787	25,196	25,681	25,873	26,138	26,375	26,768	26,898	27,163	27,429	27,869
19-Aug	0	29,765	30,257	30,839	31,070	31,388	31,673	32,144	32,301	32,618	32,939	33,467
20-Aug	0	30,611	31,117	31,715	31,953	32,280	32,573	33,057	33,218	33,545	33,875	34,418
21-Aug	1	24,397	24,800	25,277	25,466	25,727	25,961	26,347	26,475	26,736	26,998	27,431
22-Aug	0	26,448	26,886	27,403	27,608	27,890	28,144	28,562	28,701	28,984	29,268	29,738
23-Aug	0	28,362	28,831	29,385	29,605	29,908	30,180	30,629	30,778	31,081	31,386	31,889
24-Aug	0	27,906	28,367	28,913	29,129	29,427	29,695	30,136	30,283	30,581	30,882	31,377
25-Aug	0	28,329	28,797	29,351	29,571	29,873	30,145	30,593	30,742	31,045	31,350	31,852
26-Aug	0	28,496	28,968	29,524	29,745	30,050	30,323	30,774	30,924	31,228	31,535	32,040
27-Aug	0	28,241	28,708	29,260	29,479	29,781	30,051	30,498	30,647	30,948	31,252	31,753
28-Aug	0	25,481	25,903	26,401	26,598	26,871	27,115	27,518	27,652	27,924	28,198	28,650
29-Aug	0	22,219	22,587	23,021	23,193	23,431	23,644	23,995	24,112	24,349	24,588	24,983
30-Aug	0	24,556	24,962	25,442	25,632	25,895	26,130	26,519	26,648	26,910	27,174	27,610
31-Aug	0	27,906	28,367	28,913	29,129	29,427	29,695	30,136	30,283	30,581	30,882	31,377
1-Sep	0	28,162	28,627	29,177	29,396	29,697	29,967	30,412	30,560	30,861	31,164	31,664
2-Sep	0	28,584	29,057	29,616	29,837	30,143	30,417	30,869	31,019	31,324	31,632	32,139
3-Sep	0	29,007	29,487	30,054	30,279	30,589	30,867	31,326	31,478	31,788	32,100	32,615
4-Sep	0	26,926	27,371	27,897	28,106	28,394	28,652	29,078	29,220	29,507	29,797	30,275
5-Sep	0	24,677	25,085	25,567	25,759	26,023	26,259	26,649	26,779	27,043	27,308	27,746
6-Sep	0	27,181	27,631	28,162	28,373	28,663	28,924	29,354	29,497	29,787	30,080	30,562
7-Sep	0	29,686	30,176	30,757	30,987	31,304	31,588	32,058	32,214	32,531	32,851	33,377
8-Sep	0	29,518	30,006	30,583	30,812	31,127	31,410	31,877	32,032	32,348	32,665	33,189
9-Sep	0	29,941	30,436	31,021	31,253	31,573	31,860	32,334	32,491	32,811	33,133	33,665
10-Sep	3	29,527	30,015	30,592	30,821	31,136	31,419	31,886	32,042	32,357	32,675	33,199
11-Sep	3	29,560	30,048	30,626	30,855	31,171	31,454	31,922	32,078	32,393	32,711	33,236
12-Sep	0	30,263	30,763	31,355	31,589	31,913	32,203	32,682	32,841	33,164	33,490	34,026
13-Sep	0	30,820	31,330	31,932	32,171	32,500	32,795	33,283	33,445	33,774	34,106	34,653
14-Sep	0	30,787	31,296	31,897	32,136	32,465	32,760	33,247	33,409	33,738	34,069	34,616
15-Sep	1	29,861	30,355	30,939	31,170	31,489	31,775	32,248	32,405	32,724	33,045	33,575
16-Sep	3	30,795	31,304	31,906	32,145	32,474	32,769	33,256	33,418	33,747	34,079	34,625
17-Sep	0	33,412	33,965	34,618	34,877	35,234	35,554	36,083	36,258	36,615	36,975	37,567
18-Sep	0	30,908	31,419	32,023	32,263	32,593	32,889	33,378	33,541	33,871	34,203	34,752
19-Sep	2	27,223	27,673	28,205	28,416	28,707	28,968	29,399	29,542	29,833	30,126	30,609
20-Sep	7	29,313	29,797	30,370	30,597	30,911	31,191	31,655	31,809	32,123	32,438	32,958
21-Sep	5	34,689	35,263	35,941	36,210	36,580	36,913	37,462	37,644	38,014	38,388	39,003
22-Sep	0	36,795	37,404	38,123	38,408	38,801	39,154	39,736	39,930	40,323	40,719	41,371
23-Sep	6	32,830	33,373	34,015	34,269	34,620	34,934	35,454	35,627	35,977	36,331	36,913
24-Sep	12	55,318	56,232	57,313	57,742	58,333	58,863	59,739	60,029	60,620	61,216	62,197
25-Sep	1	37,084	37,697	38,422	38,709	39,106	39,461	40,048	40,243	40,639	41,038	41,696
26-Sep	0	33,056	33,602	34,248	34,505	34,858	35,174	35,698	35,871	36,224	36,580	37,167
27-Sep	1	29,895	30,389	30,973	31,205	31,524	31,811	32,284	32,441	32,760	33,082	33,612
28-Sep	5	31,306	31,824	32,435	32,678	33,013	33,313	33,808	33,973	34,307	34,644	35,199
29-Sep	8	34,828	35,403	36,084	36,354	36,726	37,060	37,611	37,794	38,166	38,541	39,159
30-Sep	13	63,400	64,448	65,688	66,179	66,857	67,464	68,467	68,801	69,478	70,160	71,285
1-Oct	0	40,602	41,273	42,066	42,381	42,815	43,204	43,846	44,060	44,493	44,931	45,651
2-Oct	7	33,965	34,526	35,190	35,453	35,816	36,142	36,679	36,858	37,220	37,586	38,189
3-Oct	9	36,211	36,809	37,517	37,798	38,185	38,531	39,105	39,295	39,682	40,071	40,714
4-Oct	1	36,238	36,837	37,545	37,827	38,214	38,561	39,134	39,325	39,712	40,102	40,745
5-Oct	3	35,447	36,033	36,726	37,001	37,380	37,719	38,280	38,466	38,845	39,227	39,855
6-Oct	0	33,412	33,965	34,618	34,877	35,234	35,554	36,083	36,258	36,615	36,975	37,567
7-Oct	2	32,654	33,194	33,832	34,086	34,435	34,747	35,264	35,436	35,784	36,136	36,715
8-Oct	0	32,566	33,105	33,741	33,994	34,342	34,654	35,169	35,340	35,688	36,039	36,616
9-Oct	14	61,790	62,811	64,019	64,498	65,158	65,750	66,728	67,053	67,713	68,378	69,474
10-Oct	23	110,885	112,718	114,885	115,745	116,930	117,992	119,747	120,330	121,514	122,708	124,675
11-Oct	19	102,203	103,893	105,890	106,683	107,775	108,754	110,372	110,909	112,000	113,101	114,914
12-Oct	16	91,032	92,537	94,316	95,022	95,995	96,867	98,307	98,786	99,758	100,738	102,353
13-Oct	9	52,214	53,077	54,098	54,503	55,061	55,561	56,387	56,662	57,220	57,782	58,708
14-Oct	6	41,288	41,971	42,778	43,098	43,539	43,935	44,588	44,805	45,246	45,690	46,423
15-Oct	5	37,227	37,842	38,570	38,858	39,256	39,613	40,202	40,398	40,795	41,196	41,856
16-Oct	15	70,718	71,887	73,269	73,818	74,574	75,251	76,370	76,742	77,497	78,258	79,513
17-Oct	20	98,055	99,676	101,593	102,353	103,401	104,340	105,892	106,407	107,455	108,510	110,250
18-Oct	19	101,358	103,033	105,014	105,800	106,883	107,854	109,458	109,991	111,074	112,165	113,963

	AI	RI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	74,396	75,626	77,080	77,657	78,452	79,164	80,342	80,733	81,527	82,328	83,648
20-Oct	9	50,946	51,788	52,784	53,179	53,723	54,211	55,017	55,285	55,829	56,378	57,281
21-Oct	12	62,084	63,110	64,324	64,805	65,469	66,063	67,046	67,372	68,035	68,704	69,805
22-Oct	21	107,763	109,545	111,651	112,486	113,638	114,670	116,376	116,942	118,093	119,253	121,165
23-Oct	23	121,002	123,002	125,367	126,305	127,598	128,757	130,672	131,308	132,601	133,903	136,050
24-Oct	23	123,572	125,615	128,030	128,988	130,309	131,493	133,448	134,098	135,418	136,748	138,940
25-Oct	22	121,377	123,383	125,756	126,697	127,994	129,157	131,078	131,716	133,012	134,318	136,472
26-Oct	15	87,178	88,619	90,323	90,999	91,931	92,766	94,146	94,604	95,535	96,473	98,020
27-Oct	16	88,917	90,387	92,125	92,815	93,765	94,616	96,024	96,491	97,441	98,398	99,975
28-Oct	16	86,380	87,808	89,496	90,166	91,089	91,916	93,284	93,738	94,660	95,590	97,122
29-Oct	14	76,558	77,823	79,320	79,913	80,732	81,465	82,677	83,079	83,897	84,721	86,079
30-Oct	7	41,154	41,834	42,639	42,958	43,398	43,792	44,443	44,659	45,099	45,542	46,272
31-Oct	2	36,104	36,701	37,406	37,686	38,072	38,418	38,989	39,179	39,565	39,953	40,594
Nov	697	3,788,461	3,833,791	3,897,164	3,972,093	4,001,825	4,042,797	4,079,515	4,140,191	4,160,347	4,201,288	4,242,558
Dec	1,040	5,829,079	5,898,825	5,996,333	6,111,622	6,157,369	6,220,410	6,276,906	6,370,265	6,401,277	6,464,271	6,527,771
Jan	1,250	7,050,977	7,135,556	7,253,526	7,393,005	7,448,367	7,524,652	7,593,015	7,705,964	7,743,491	7,819,697	7,896,515
Feb	1,091	6,166,904	6,240,692	6,343,852	6,465,822	6,514,220	6,580,915	6,640,685	6,739,455	6,772,264	6,838,909	6,906,089
Mar	942	5,280,358	5,343,538	5,431,868	5,536,304	5,577,744	5,634,851	5,686,029	5,770,599	5,798,692	5,855,756	5,913,278
Apr	518	2,827,601	2,874,342	2,929,605	2,951,534	2,981,753	3,008,834	3,053,586	3,068,451	3,098,648	3,129,086	3,179,250
May	228	1,475,844	1,500,240	1,529,085	1,540,530	1,556,303	1,570,437	1,593,795	1,601,554	1,617,315	1,633,202	1,659,385
Jun	48	930,805	946,191	964,383	971,602	981,549	990,464	1,005,196	1,010,089	1,020,029	1,030,049	1,046,562
Jul	3	777,946	790,805	806,010	812,043	820,357	827,808	840,120	844,210	852,518	860,892	874,693
Aug	2	791,013	804,089	819,549	825,683	834,137	841,713	854,232	858,390	866,838	875,353	889,386
Sep	70	975,352	991,475	1,010,538	1,018,102	1,028,526	1,037,867	1,053,304	1,058,431	1,068,847	1,079,347	1,096,650
Oct	361	2,125,296	2,160,428	2,201,966	2,218,448	2,241,161	2,261,516	2,295,152	2,306,326	2,329,022	2,351,900	2,389,605
Total	6,250	38,019,636	38,519,973	39,183,878	39,816,787	40,143,311	40,542,265	40,971,534	41,473,925	41,729,286	42,139,750	42,621,743

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI FT2 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	10,426	10,551	10,912	11,281	11,340	11,462	11,566	11,726	11,782	11,894	11,995
2-Nov	9	6,260	6,334	6,551	6,773	6,808	6,881	6,944	7,040	7,074	7,141	7,201
3-Nov	14	10,232	10,354	10,709	11,071	11,129	11,248	11,350	11,508	11,563	11,672	11,771
4-Nov	13	9,402	9,515	9,841	10,173	10,226	10,336	10,430	10,574	10,625	10,725	10,817
5-Nov	20	14,622	14,797	15,304	15,821	15,904	16,075	16,221	16,445	16,524	16,680	16,822
6-Nov	19	13,974	14,141	14,625	15,119	15,199	15,362	15,501	15,716	15,791	15,940	16,076
7-Nov	16	11,900	12,043	12,455	12,876	12,944	13,083	13,202	13,384	13,448	13,576	13,691
8-Nov	14	10,530	10,656	11,021	11,394	11,454	11,577	11,682	11,843	11,900	12,013	12,115
9-Nov	20	14,799	14,976	15,489	16,012	16,096	16,269	16,417	16,644	16,723	16,882	17,025
10-Nov	15	11,473	11,610	12,008	12,414	12,479	12,613	12,727	12,904	12,965	13,088	13,199
11-Nov	15	11,532	11,670	12,070	12,477	12,543	12,678	12,793	12,970	13,032	13,155	13,267
12-Nov	14	10,526	10,652	11,017	11,389	11,449	11,572	11,677	11,838	11,895	12,007	12,110
13-Nov	20	14,450	14,623	15,124	15,635	15,717	15,886	16,030	16,252	16,330	16,484	16,625
14-Nov	19	13,743	13,907	14,384	14,870	14,948	15,108	15,245	15,456	15,530	15,677	15,811
15-Nov	24	17,887	18,101	18,721	19,353	19,455	19,664	19,843	20,117	20,213	20,405	20,578
16-Nov	27	20,548	20,794	21,506	22,232	22,349	22,589	22,794	23,110	23,220	23,440	23,640
17-Nov	19	15,321	15,504	16,036	16,577	16,664	16,843	16,996	17,231	17,314	17,478	17,626
18-Nov	28	21,436	21,693	22,436	23,194	23,316	23,566	23,780	24,109	24,225	24,454	24,662
19-Nov	30	22,920	23,194	23,988	24,799	24,929	25,197	25,425	25,777	25,901	26,146	26,368
20-Nov	31	23,989	24,276	25,108	25,956	26,092	26,372	26,612	26,980	27,109	27,366	27,599
21-Nov	31	23,876	24,162	24,990	25,833	25,969	26,248	26,486	26,853	26,981	27,237	27,469
22-Nov	37	28,497	28,838	29,826	30,833	30,995	31,328	31,613	32,050	32,203	32,508	32,785
23-Nov	41	31,988	32,371	33,480	34,610	34,792	35,166	35,485	35,976	36,148	36,490	36,801
24-Nov	43	34,000	34,407	35,586	36,787	36,981	37,378	37,717	38,239	38,422	38,786	39,116
25-Nov	45	35,777	36,205	37,446	38,710	38,914	39,332	39,688	40,238	40,430	40,813	41,160
26-Nov	27	23,194	23,471	24,275	25,095	25,227	25,498	25,729	26,085	26,210	26,458	26,683
27-Nov	17	14,842	15,020	15,534	16,059	16,143	16,317	16,465	16,693	16,773	16,931	17,075
28-Nov	20	15,043	15,223	15,745	16,276	16,362	16,538	16,688	16,919	17,000	17,160	17,307
29-Nov	24	17,769	17,982	18,598	19,226	19,327	19,535	19,712	19,985	20,081	20,271	20,443
30-Nov	29	22,031	22,295	23,058	23,837	23,962	24,220	24,440	24,778	24,896	25,132	25,346
1-Dec	20	14,687	14,863	14,976	15,173	15,098	15,160	15,191	15,355	15,395	15,507	15,623
2-Dec	28	19,654	19,889	20,040	20,304	20,204	20,287	20,328	20,547	20,601	20,751	20,906
3-Dec	29	20,248	20,491	20,646	20,918	20,815	20,900	20,943	21,168	21,224	21,378	21,538
4-Dec	34	23,705	23,988	24,170	24,488	24,368	24,468	24,517	24,781	24,847	25,027	25,215
5-Dec	25	17,934	18,148	18,286	18,526	18,435	18,511	18,549	18,798	18,798	18,934	19,076
6-Dec	39	27,050	27,373	27,580	27,943	27,806	27,920	27,977	28,278	28,353	28,558	28,773
7-Dec	28	20,456	20,701	20,858	21,132	21,028	21,115	21,158	21,386	21,442	21,597	21,760
8-Dec	19	14,788	14,965	15,078	15,277	15,202	15,264	15,295	15,460	15,501	15,613	15,730
9-Dec	29	20,195	20,437	20,591	20,862	20,760	20,845	20,887	21,112	21,168	21,321	21,482
10-Dec	23	16,363	16,559	16,684	16,903	16,820	16,890	16,924	17,106	17,151	17,276	17,405
11-Dec	20	14,371	14,543	14,653	14,846	14,773	14,833	14,863	15,024	15,063	15,172	15,286
12-Dec	27	18,160	18,377	18,516	18,760	18,668	18,744	18,782	18,985	19,034	19,173	19,317
13-Dec	27	18,637	18,860	19,002	19,252	19,158	19,237	19,275	19,483	19,534	19,676	19,824
14-Dec	41	28,341	28,680	28,897	29,277	29,133	29,253	29,312	29,628	29,706	29,921	30,146
15-Dec	45	31,680	32,059	32,301	32,726	32,566	32,699	32,765	33,119	33,206	33,447	33,698
16-Dec	39	28,756	29,100	29,321	29,706	29,561	29,682	29,742	30,063	30,142	30,360	30,588
17-Dec	32	24,116	24,405	24,589	24,913	24,791	24,892	24,943	25,212	25,278	25,461	25,652
18-Dec	41	28,986	29,333	29,555	29,944	29,797	29,919	29,980	30,303	30,383	30,603	30,833
19-Dec	32	23,002	23,277	23,453	23,762	23,645	23,742	23,790	24,047	24,110	24,285	24,467
20-Dec	49	34,274	34,684	34,947	35,407	35,233	35,377	35,449	35,831	35,925	36,186	36,458
21-Dec	51	36,260	36,694	36,972	37,458	37,274	37,427	37,503	37,907	38,007	38,283	38,570
22-Dec	32	24,971	25,270	25,462	25,797	25,670	25,775	25,828	26,106	26,174	26,364	26,562
23-Dec	21	16,939	17,142	17,271	17,499	17,413	17,484	17,520	17,708	17,755	17,884	18,018
24-Dec	27	19,221	19,451	19,598	19,856	19,758	19,839	19,879	20,094	20,147	20,293	20,445
25-Dec	41	27,757	28,089	28,301	28,674	28,533	28,650	28,708	29,018	29,094	29,305	29,525
26-Dec	42	29,210	29,560	29,784	30,176	30,027	30,151	30,212	30,537	30,618	30,840	31,071
27-Dec	51	36,104	36,536	36,813	37,297	37,114	37,266	37,342	37,744	37,843	38,118	38,404
28-Dec	51	36,902	37,343	37,626	38,121	37,934	38,090	38,167	38,578	38,680	38,960	39,253
29-Dec	32	25,078	25,378	25,571	25,907	25,780	25,886	25,938	26,218	26,287	26,477	26,676
30-Dec	35	26,005	26,317	26,516	26,865	26,733	26,843	26,897	27,187	27,258	27,456	27,662
31-Dec	30	21,912	22,174	22,342	22,636	22,525	22,617	22,663	22,907	22,967	23,134	23,308
1-Jan	61	39,394	39,865	39,771	39,950	39,667	39,683	39,691	40,079	40,123	40,387	40,660
2-Jan	38	26,362	26,677	26,614	26,734	26,544	26,555	26,561	26,820	26,849	27,026	27,209
3-Jan	23	17,820	18,034	17,991	18,072	17,944	17,951	17,955	18,130	18,150	18,270	18,393
4-Jan	28	19,211	19,441	19,395	19,483	19,344	19,353	19,356	19,546	19,567	19,696	19,829
5-Jan	19	13,188	13,346	13,315	13,375	13,280	13,285	13,288	13,418	13,432	13,521	13,612
6-Jan	28	18,503	18,724	18,680	18,764	18,631	18,639	18,643	18,825	18,845	18,969	19,098
7-Jan	38	24,633	24,928	24,869	24,981	24,803	24,814	24,819	25,061	25,089	25,254	25,425
8-Jan	41	27,433	27,762	27,696	27,821	27,623	27,635	27,641	27,911	27,941	28,125	28,315
9-Jan	41	27,593	27,923	27,858	27,983	27,784	27,796	27,802	28,073	28,104	28,289	28,480
10-Jan	30	21,251	21,505	21,455	21,551	21,398	21,407	21,412	21,621	21,644	21,787	21,934
11-Jan	43	28,913	29,258	29,190	29,321	29,113	29,125	29,131	29,415	29,448	29,641	29,842
12-Jan	50	33,305	33,703	33,624	33,775	33,535	33,550	33,556	33,884	33,921	34,144	34,375
13-Jan	41	28,800	29,145	29,076	29,207	28,999	29,012	29,017	29,301	29,333	29,526	29,726
14-Jan	46	31,764	32,144	32,068	32,212	31,984	31,997	32,004	32,316	32,352	32,564	32,785
15-Jan	43	29,473	29,826	29,756	29,890	29,677	29,690	29,696	29,986	30,019	30,216	30,421
16-Jan	30	21,356	21,612	21,561	21,658	21,504	21,513	21,518	21,728	21,752	21,895	22,043
17-Jan	40	26,926	27,248	27,184	27,306	27,112	27,124	27,129	27,394	27,424	27,604	27,791
18-Jan	55	36,218	36,651	36,565	36,730	36,469	36,484	36,491	36,848	36,888	37,131	37,382
19-Jan	68	45,452	45,996	45,888	46,094	45,767	45,786	45,795	46,243	46,293	46,598	46,913
20-Jan	54	38,287	38,745	38,654	38,828	38,552	38,569	38,576	38,953	38,996	39,252	39,518
21-Jan	44	32,107	32,491	32,414	32,560	32,329	32,343	32,349	32,665	32,701	32,916	33,139
22-Jan	34	24,513	24,806	24,748	24,859	24,683	24,693	24,698	24,939	24,967	25,131	25,301
23-Jan	32	22,026	22,289	22,237	22,337	22,178	22,188	22,192	22,409	22,433	22,581	22,734
24-Jan	44	29,023	29,371	29,302	29,433	29,224	29,237	29,243	29,528	29,561	29,755	29,956
25-Jan	24	17,518	17,728	17,686	17,766	17,640	17,647	17,651	17,823	17,843	17,960	18,082
26-Jan	41	27,535	27,864	27,799	27,924	27,725	27,737	27,743	28,014	28,044	28,229	28,420
27-Jan	46	30,448	30,812	30,740	30,878	30,659	30,672	30,678	30,977	31,011	31,215	31,427

	AI					RI FT2						
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	22,979	23,254	23,199	23,304	23,138	23,148	23,153	23,379	23,405	23,558	23,718
29-Jan	46	30,857	31,226	31,152	31,293	31,070	31,084	31,090	31,393	31,428	31,634	31,849
30-Jan	47	31,221	31,594	31,520	31,662	31,437	31,450	31,456	31,764	31,799	32,008	32,224
31-Jan	43	29,777	30,133	30,062	30,197	29,983	29,996	30,002	30,295	30,328	30,527	30,734
1-Feb	17	12,932	13,087	13,206	13,384	13,392	13,459	13,524	13,692	13,723	13,832	13,943
2-Feb	28	17,781	17,993	18,157	18,401	18,413	18,505	18,594	18,825	18,869	19,018	19,171
3-Feb	45	26,747	27,067	27,313	27,681	27,698	27,836	27,971	28,318	28,383	28,609	28,837
4-Feb	45	28,062	28,398	28,656	29,041	29,059	29,205	29,346	29,711	29,779	30,015	30,255
5-Feb	56	34,886	35,304	35,625	36,104	36,126	36,308	36,483	36,936	37,021	37,315	37,613
6-Feb	56	35,172	35,593	35,917	36,400	36,422	36,605	36,781	37,238	37,324	37,620	37,921
7-Feb	57	36,488	36,925	37,261	37,762	37,785	37,975	38,158	38,632	38,721	39,028	39,341
8-Feb	42	28,234	28,572	28,832	29,219	29,237	29,384	29,526	29,893	29,961	30,199	30,441
9-Feb	44	28,714	29,058	29,322	29,716	29,735	29,884	30,028	30,401	30,471	30,713	30,958
10-Feb	39	25,259	25,561	25,794	26,141	26,157	26,288	26,415	26,743	26,805	27,017	27,234
11-Feb	42	26,825	27,146	27,393	27,761	27,778	27,918	28,052	28,401	28,466	28,692	28,922
12-Feb	37	23,656	23,939	24,156	24,481	24,496	24,619	24,738	25,045	25,103	25,302	25,505
13-Feb	43	26,744	27,064	27,310	27,677	27,694	27,833	27,967	28,315	28,380	28,605	28,834
14-Feb	45	28,159	28,496	28,756	29,142	29,160	29,307	29,448	29,814	29,882	30,119	30,360
15-Feb	32	21,371	21,627	21,824	22,117	22,131	22,242	22,349	22,627	22,679	22,859	23,042
16-Feb	33	21,423	21,680	21,877	22,171	22,185	22,296	22,404	22,682	22,734	22,915	23,098
17-Feb	35	21,998	22,261	22,463	22,765	22,779	22,894	23,004	23,290	23,343	23,529	23,717
18-Feb	31	19,863	20,101	20,284	20,556	20,569	20,672	20,772	21,030	21,078	21,246	21,416
19-Feb	37	22,951	23,226	23,437	23,752	23,767	23,886	24,001	24,300	24,355	24,549	24,745
20-Feb	22	14,281	14,452	14,583	14,780	14,789	14,863	14,935	15,120	15,155	15,275	15,397
21-Feb	39	23,760	24,044	24,263	24,590	24,605	24,728	24,847	25,156	25,214	25,414	25,617
22-Feb	43	26,360	26,676	26,919	27,281	27,297	27,434	27,567	27,909	27,973	28,195	28,421
23-Feb	22	15,401	15,585	15,727	15,938	15,948	16,028	16,106	16,306	16,343	16,473	16,605
24-Feb	35	21,998	22,261	22,463	22,765	22,779	22,894	23,004	23,290	23,343	23,529	23,717
25-Feb	43	26,173	26,486	26,727	27,086	27,103	27,239	27,370	27,710	27,774	27,994	28,218
26-Feb	43	26,928	27,250	27,498	27,868	27,885	28,025	28,160	28,510	28,575	28,802	29,033
27-Feb	41	25,935	26,245	26,484	26,840	26,856	26,991	27,121	27,458	27,521	27,740	27,962
28-Feb	39	24,934	25,232	25,462	25,805	25,820	25,950	26,075	26,399	26,460	26,670	26,883
1-Mar	47	31,614	31,993	32,371	32,393	32,758	32,941	33,095	33,130	33,582	33,847	34,118
2-Mar	32	22,780	23,053	23,325	23,342	23,604	23,736	23,847	23,872	24,198	24,389	24,584
3-Mar	43	29,128	29,477	29,825	29,846	30,181	30,350	30,492	30,524	30,940	31,185	31,434
4-Mar	42	28,318	28,657	28,995	29,016	29,342	29,506	29,644	29,675	30,080	30,317	30,560
5-Mar	27	19,438	19,670	19,903	19,916	20,141	20,253	20,348	20,369	20,647	20,810	20,977
6-Mar	36	23,867	24,153	24,438	24,455	24,730	24,868	24,985	25,011	25,352	25,552	25,757
7-Mar	32	21,377	21,632	21,888	21,903	22,150	22,273	22,378	22,401	22,707	22,886	23,069
8-Mar	41	27,357	27,684	28,011	28,031	28,346	28,505	28,638	28,668	29,059	29,289	29,523
9-Mar	45	30,044	30,404	30,763	30,785	31,131	31,305	31,451	31,485	31,914	32,166	32,423
10-Mar	46	31,307	31,682	32,056	32,079	32,439	32,621	32,773	32,808	33,255	33,518	33,786
11-Mar	21	16,332	16,528	16,723	16,735	16,923	17,018	17,097	17,115	17,349	17,486	17,626
12-Mar	16	11,833	11,975	12,116	12,125	12,261	12,329	12,387	12,400	12,569	12,669	12,770
13-Mar	22	13,731	13,896	14,060	14,070	14,228	14,307	14,374	14,390	14,586	14,701	14,819
14-Mar	20	12,811	12,964	13,117	13,127	13,274	13,348	13,411	13,425	13,608	13,716	13,825
15-Mar	25	16,305	16,500	16,695	16,707	16,895	16,989	17,068	17,086	17,319	17,456	17,596
16-Mar	27	17,674	17,885	18,097	18,109	18,313	18,415	18,501	18,521	18,773	18,922	19,073
17-Mar	35	22,898	23,172	23,446	23,462	23,726	23,859	23,970	23,996	24,323	24,515	24,711
18-Mar	27	18,529	18,750	18,972	18,985	19,199	19,306	19,396	19,417	19,681	19,837	19,996
19-Mar	28	18,890	19,116	19,342	19,356	19,573	19,683	19,775	19,796	20,066	20,224	20,386
20-Mar	28	18,291	18,510	18,728	18,741	18,952	19,058	19,147	19,167	19,429	19,582	19,739
21-Mar	28	18,588	18,811	19,033	19,046	19,261	19,368	19,459	19,479	19,745	19,901	20,060
22-Mar	21	14,573	14,747	14,921	14,932	15,100	15,184	15,255	15,271	15,479	15,602	15,726
23-Mar	24	16,048	16,240	16,432	16,443	16,628	16,721	16,799	16,817	17,046	17,181	17,318
24-Mar	29	18,892	19,118	19,344	19,357	19,575	19,684	19,776	19,797	20,067	20,226	20,388
25-Mar	21	14,422	14,594	14,767	14,777	14,943	15,027	15,097	15,113	15,319	15,440	15,564
26-Mar	26	17,069	17,273	17,477	17,489	17,686	17,785	17,868	17,887	18,131	18,274	18,420
27-Mar	41	25,806	26,115	26,423	26,442	26,739	26,889	27,014	27,043	27,412	27,628	27,849
28-Mar	42	27,668	27,999	28,330	28,350	28,669	28,829	28,964	28,994	29,390	29,622	29,859
29-Mar	29	20,803	21,051	21,300	21,315	21,555	21,675	21,777	21,800	22,097	22,271	22,450
30-Mar	20	14,718	14,894	15,070	15,080	15,250	15,335	15,407	15,423	15,634	15,757	15,883
31-Mar	21	14,221	14,391	14,561	14,571	14,735	14,817	14,886	14,902	15,105	15,225	15,347
1-Apr	23	14,647	15,492	16,008	16,179	16,366	16,532	16,753	16,836	16,990	17,168	17,422
2-Apr	24	15,442	16,333	16,877	17,056	17,254	17,429	17,662	17,750	17,912	18,099	18,367
3-Apr	25	15,993	16,916	17,480	17,666	17,870	18,052	18,293	18,384	18,552	18,746	19,024
4-Apr	21	13,460	14,237	14,711	14,868	15,040	15,193	15,396	15,472	15,614	15,777	16,011
5-Apr	39	24,306	25,708	26,565	26,847	27,158	27,434	27,800	27,939	28,194	28,489	28,911
6-Apr	31	20,461	21,641	22,362	22,600	22,862	23,094	23,402	23,519	23,734	23,982	24,337
7-Apr	19	13,787	14,582	15,068	15,228	15,405	15,561	15,769	15,847	15,992	16,159	16,399
8-Apr	29	18,773	19,856	20,518	20,736	20,976	21,189	21,472	21,579	21,776	22,004	22,330
9-Apr	12	8,521	9,013	9,313	9,412	9,521	9,618	9,746	9,795	9,884	9,987	10,135
10-Apr	22	13,906	14,708	15,198	15,360	15,538	15,695	15,905	15,984	16,130	16,299	16,540
11-Apr	21	12,721	13,455	13,903	14,051	14,213	14,358	14,550	14,622	14,756	14,910	15,131
12-Apr	19	12,213	12,917	13,348	13,490	13,646	13,784	13,968	14,038	14,166	14,314	14,526
13-Apr	7	5,534	5,854	6,049	6,113	6,184	6,246	6,330	6,361	6,420	6,487	6,583
14-Apr	15	9,228	9,760	10,085	10,193	10,311	10,415	10,555	10,607	10,704	10,816	10,976
15-Apr	17	10,225	10,815	11,175	11,294	11,425	11,541	11,695	11,754	11,861	11,985	12,163
16-Apr	21	13,107	13,864	14,325	14,478	14,646	14,794	14,992	15,067	15,204	15,363	15,591
17-Apr	21	13,161	13,920	14,384	14,537	14,705	14,854	15,053	15,128	15,266	15,426	15,654
18-Apr	13	8,337	8,818	9,112	9,209	9,315	9,410	9,536	9,583	9,671	9,772	9,917
19-Apr	15	9,380	9,921	10,251	10,360	10,480	10,587	10,728	10,782	10,880	10,994	11,157
20-Apr	5	4,982	5,269	5,445	5,502	5,566	5,623	5,698	5,726	5,779	5,839	5,925
21-Apr	14	8,335	8,816	9,109	9,206	9,313	9,407	9,533	9,581	9,668	9,769	9,914
22-Apr	7	4,499	4,758	4,917	4,969	5,027	5,078	5,146	5,171	5,218	5,273	5,351
23-Apr	15	8,981	9,500	9,816	9,920	10,035	10,137	10,273	10,324	10,418	10,527	10,683
24-Apr	15	8,788	9,295	9,605	9,707	9,819	9,919	10,051	10,102	10,194	10,300	10,453
25-Apr	14	8,343	8,824	9,118	9,215	9,322	9,416	9,542	9,589	9,677	9,778	9,923

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI FT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	6,147	6,502	6,718	6,790	6,868	6,938	7,031	7,066	7,130	7,205	7,311
27-Apr	7	4,745	5,019	5,186	5,241	5,302	5,356	5,428	5,455	5,504	5,562	5,644
28-Apr	8	4,603	4,869	5,031	5,085	5,143	5,196	5,265	5,291	5,340	5,396	5,475
29-Apr	13	7,491	7,923	8,187	8,274	8,370	8,455	8,568	8,611	8,689	8,780	8,910
30-Apr	16	9,579	10,131	10,469	10,580	10,703	10,811	10,956	11,010	11,111	11,227	11,393
1-May	0	6,033	6,688	7,116	7,275	7,437	7,551	7,700	7,753	7,852	7,933	8,064
2-May	0	4,942	5,479	5,829	5,959	6,092	6,185	6,307	6,350	6,432	6,498	6,605
3-May	0	4,267	4,731	5,033	5,146	5,260	5,341	5,447	5,484	5,554	5,611	5,704
4-May	0	4,567	5,063	5,386	5,507	5,630	5,716	5,829	5,869	5,944	6,005	6,104
5-May	6	4,422	4,903	5,216	5,333	5,451	5,535	5,644	5,683	5,756	5,815	5,911
6-May	17	11,652	12,917	13,743	14,051	14,363	14,583	14,872	14,973	15,166	15,321	15,574
7-May	23	17,113	18,971	20,183	20,635	21,094	21,417	21,841	21,990	22,273	22,501	22,872
8-May	14	11,210	12,427	13,221	13,518	13,818	14,030	14,308	14,405	14,591	14,740	14,983
9-May	13	9,990	11,075	11,783	12,047	12,315	12,503	12,751	12,838	13,003	13,136	13,353
10-May	2	5,863	6,500	6,915	7,070	7,227	7,338	7,483	7,534	7,631	7,709	7,837
11-May	0	5,480	6,076	6,464	6,609	6,755	6,859	6,995	7,042	7,133	7,206	7,325
12-May	0	4,689	5,198	5,530	5,654	5,780	5,868	5,984	6,025	6,103	6,165	6,267
13-May	3	4,495	4,983	5,301	5,420	5,540	5,625	5,737	5,776	5,850	5,910	6,008
14-May	8	4,832	5,356	5,699	5,827	5,956	6,047	6,167	6,209	6,289	6,353	6,458
15-May	12	7,969	8,835	9,399	9,610	9,823	9,974	10,171	10,241	10,372	10,479	10,652
16-May	17	11,905	13,198	14,041	14,356	14,675	14,900	15,195	15,298	15,495	15,654	15,912
17-May	12	9,065	10,050	10,692	10,932	11,174	11,346	11,570	11,649	11,799	11,920	12,116
18-May	12	9,365	10,382	11,045	11,293	11,544	11,721	11,953	12,034	12,189	12,314	12,517
19-May	1	6,004	6,656	7,082	7,240	7,401	7,515	7,663	7,716	7,815	7,895	8,025
20-May	8	5,441	6,031	6,417	6,561	6,707	6,809	6,944	6,991	7,081	7,154	7,272
21-May	9	5,935	6,579	6,999	7,156	7,315	7,427	7,574	7,626	7,724	7,803	7,932
22-May	9	6,122	6,787	7,220	7,382	7,546	7,662	7,814	7,867	7,968	8,050	8,183
23-May	8	5,146	5,705	6,069	6,205	6,343	6,440	6,568	6,612	6,697	6,766	6,878
24-May	10	6,860	7,604	8,090	8,272	8,456	8,585	8,755	8,815	8,928	9,020	9,168
25-May	7	5,494	6,091	6,480	6,625	6,773	6,876	7,012	7,060	7,151	7,224	7,344
26-May	7	5,433	6,023	6,408	6,552	6,698	6,800	6,935	6,982	7,072	7,144	7,262
27-May	1	5,395	5,981	6,363	6,506	6,651	6,753	6,886	6,933	7,022	7,094	7,211
28-May	5	4,934	5,469	5,819	5,949	6,081	6,175	6,297	6,340	6,421	6,487	6,594
29-May	3	4,560	5,056	5,379	5,499	5,621	5,708	5,820	5,860	5,936	5,996	6,095
30-May	9	5,274	5,847	6,221	6,360	6,502	6,601	6,732	6,778	6,865	6,935	7,050
31-May	12	8,030	8,902	9,471	9,683	9,899	10,050	10,249	10,319	10,452	10,559	10,733
1-Jun	6	6,669	6,902	7,072	7,028	7,057	7,072	7,129	7,121	7,148	7,176	7,248
2-Jun	7	6,427	6,651	6,816	6,774	6,801	6,815	6,870	6,863	6,889	6,916	6,986
3-Jun	2	6,212	6,429	6,588	6,547	6,574	6,587	6,640	6,633	6,659	6,684	6,752
4-Jun	0	5,984	6,192	6,345	6,306	6,332	6,345	6,396	6,389	6,414	6,438	6,503
5-Jun	0	5,134	5,313	5,445	5,411	5,433	5,444	5,489	5,482	5,504	5,525	5,581
6-Jun	0	4,641	4,803	4,922	4,892	4,912	4,922	4,962	4,956	4,975	4,994	5,045
7-Jun	0	4,992	5,166	5,294	5,261	5,282	5,293	5,336	5,330	5,351	5,371	5,426
8-Jun	0	5,399	5,587	5,725	5,690	5,713	5,725	5,771	5,765	5,787	5,809	5,868
9-Jun	0	5,257	5,440	5,574	5,540	5,562	5,574	5,619	5,613	5,634	5,656	5,713
10-Jun	0	5,142	5,322	5,453	5,419	5,442	5,453	5,497	5,491	5,512	5,533	5,589
11-Jun	0	5,071	5,248	5,378	5,344	5,366	5,377	5,421	5,415	5,436	5,456	5,512
12-Jun	0	4,593	4,753	4,871	4,840	4,860	4,870	4,910	4,904	4,923	4,942	4,992
13-Jun	0	4,385	4,538	4,650	4,621	4,640	4,649	4,687	4,682	4,700	4,718	4,766
14-Jun	0	4,906	5,077	5,203	5,170	5,191	5,202	5,244	5,238	5,259	5,279	5,332
15-Jun	9	6,088	6,300	6,456	6,416	6,442	6,455	6,507	6,500	6,525	6,550	6,616
16-Jun	7	5,644	5,840	5,985	5,948	5,972	5,984	6,033	6,026	6,049	6,073	6,134
17-Jun	1	6,454	6,679	6,844	6,802	6,830	6,844	6,899	6,891	6,918	6,945	7,015
18-Jun	5	5,771	5,972	6,120	6,082	6,107	6,120	6,169	6,162	6,186	6,210	6,273
19-Jun	6	5,250	5,433	5,568	5,533	5,556	5,567	5,612	5,606	5,627	5,649	5,706
20-Jun	5	5,284	5,468	5,603	5,569	5,591	5,603	5,648	5,642	5,664	5,686	5,743
21-Jun	0	5,917	6,123	6,274	6,235	6,261	6,274	6,325	6,317	6,342	6,366	6,431
22-Jun	0	5,484	5,675	5,815	5,779	5,803	5,815	5,862	5,855	5,878	5,900	5,960
23-Jun	0	4,771	4,938	5,060	5,028	5,049	5,059	5,100	5,095	5,114	5,134	5,186
24-Jun	0	4,771	4,938	5,060	5,028	5,049	5,059	5,100	5,095	5,114	5,134	5,186
25-Jun	0	4,771	4,938	5,060	5,028	5,049	5,059	5,100	5,095	5,114	5,134	5,186
26-Jun	0	4,477	4,633	4,748	4,718	4,738	4,747	4,786	4,781	4,799	4,817	4,866
27-Jun	0	3,984	4,123	4,225	4,199	4,216	4,225	4,259	4,254	4,271	4,287	4,330
28-Jun	0	4,192	4,338	4,446	4,418	4,436	4,445	4,481	4,476	4,494	4,511	4,557
29-Jun	0	4,515	4,672	4,788	4,758	4,777	4,787	4,826	4,820	4,839	4,858	4,907
30-Jun	0	4,586	4,746	4,863	4,833	4,853	4,863	4,902	4,897	4,915	4,934	4,984
1-Jul	0	4,981	5,172	5,304	5,270	5,278	5,279	5,325	5,312	5,325	5,346	5,394
2-Jul	0	4,981	5,172	5,304	5,270	5,278	5,279	5,325	5,312	5,325	5,346	5,394
3-Jul	0	4,637	4,814	4,937	4,905	4,913	4,914	4,956	4,944	4,957	4,976	5,021
4-Jul	0	4,216	4,377	4,489	4,460	4,467	4,468	4,506	4,495	4,507	4,524	4,565
5-Jul	0	4,408	4,577	4,694	4,663	4,671	4,672	4,712	4,701	4,712	4,730	4,773
6-Jul	1	4,542	4,716	4,836	4,804	4,812	4,813	4,855	4,843	4,855	4,874	4,918
7-Jul	2	5,197	5,396	5,534	5,498	5,507	5,508	5,556	5,542	5,556	5,577	5,628
8-Jul	0	6,215	6,453	6,617	6,574	6,585	6,586	6,643	6,627	6,644	6,669	6,730
9-Jul	0	5,483	5,693	5,838	5,800	5,810	5,811	5,861	5,847	5,861	5,884	5,937
10-Jul	0	4,194	4,355	4,465	4,436	4,444	4,445	4,483	4,472	4,483	4,500	4,541
11-Jul	0	3,682	3,824	3,921	3,895	3,902	3,903	3,936	3,927	3,936	3,952	3,987
12-Jul	0	4,179	4,340	4,450	4,421	4,428	4,429	4,468	4,457	4,468	4,485	4,526
13-Jul	0	4,813	4,998	5,125	5,092	5,100	5,101	5,145	5,133	5,145	5,165	5,212
14-Jul	0	4,843	5,029	5,157	5,124	5,132	5,133	5,177	5,165	5,178	5,197	5,245
15-Jul	0	4,691	4,871	4,995	4,962	4,970	4,972	5,015	5,002	5,015	5,034	5,080
16-Jul	0	4,645	4,823	4,946	4,914	4,922	4,923	4,965	4,953	4,966	4,985	5,030
17-Jul	0	4,224	4,386	4,498	4,468	4,476	4,477	4,515	4,504	4,516	4,533	4,574
18-Jul	0	3,727	3,870	3,968	3,942	3,949	3,950	3,984	3,974	3,984	3,999	4,036
19-Jul	0	3,919	4,070	4,173	4,146	4,153	4,154	4,190	4,179	4,190	4,206	4,244
20-Jul	0	4,264	4,428	4,540	4,511	4,518	4,519	4,558	4,547	4,558	4,576	4,617
21-Jul	0	4,446	4,617	4,735	4,704	4,711	4,713	4,753	4,742	4,753	4,772	4,815
22-Jul	0	4,416	4,586	4,702	4,672	4,679	4,681	4,721	4,709	4,721	4,739	4,782

	AI					RI FT2						
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	4,386	4,554	4,670	4,640	4,647	4,649	4,689	4,677	4,689	4,707	4,750
24-Jul	0	4,164	4,323	4,433	4,405	4,412	4,413	4,451	4,440	4,451	4,468	4,509
25-Jul	0	3,865	4,013	4,115	4,088	4,095	4,096	4,132	4,121	4,132	4,147	4,185
26-Jul	0	4,210	4,371	4,482	4,453	4,460	4,461	4,500	4,489	4,500	4,517	4,558
27-Jul	0	4,691	4,871	4,995	4,962	4,970	4,972	5,015	5,002	5,015	5,034	5,080
28-Jul	0	4,691	4,871	4,995	4,962	4,970	4,972	5,015	5,002	5,015	5,034	5,080
29-Jul	0	4,615	4,792	4,914	4,882	4,890	4,891	4,933	4,921	4,933	4,952	4,997
30-Jul	0	4,615	4,792	4,914	4,882	4,890	4,891	4,933	4,921	4,933	4,952	4,997
31-Jul	0	4,210	4,371	4,482	4,453	4,460	4,461	4,500	4,489	4,500	4,517	4,558
1-Aug	0	4,054	4,219	4,308	4,274	4,293	4,293	4,328	4,315	4,323	4,344	4,382
2-Aug	0	4,390	4,569	4,665	4,628	4,649	4,649	4,686	4,672	4,682	4,704	4,745
3-Aug	0	4,539	4,724	4,824	4,786	4,807	4,807	4,846	4,831	4,841	4,864	4,906
4-Aug	0	4,462	4,643	4,741	4,704	4,725	4,725	4,763	4,749	4,758	4,781	4,822
5-Aug	0	4,431	4,611	4,708	4,671	4,692	4,692	4,730	4,716	4,725	4,748	4,789
6-Aug	0	4,447	4,628	4,725	4,688	4,709	4,710	4,747	4,733	4,742	4,765	4,807
7-Aug	0	4,298	4,472	4,567	4,531	4,551	4,551	4,588	4,574	4,583	4,605	4,645
8-Aug	0	4,101	4,268	4,358	4,324	4,343	4,343	4,378	4,365	4,374	4,395	4,433
9-Aug	0	4,406	4,585	4,682	4,645	4,666	4,666	4,704	4,689	4,699	4,721	4,762
10-Aug	0	4,711	4,903	5,006	4,967	4,989	4,989	5,029	5,014	5,024	5,048	5,092
11-Aug	0	4,711	4,903	5,006	4,967	4,989	4,989	5,029	5,014	5,024	5,048	5,092
12-Aug	0	4,650	4,839	4,941	4,902	4,924	4,924	4,963	4,948	4,958	4,982	5,025
13-Aug	0	4,836	5,033	5,139	5,098	5,121	5,121	5,162	5,147	5,157	5,182	5,227
14-Aug	0	4,531	4,715	4,815	4,777	4,798	4,798	4,837	4,822	4,832	4,855	4,897
15-Aug	0	4,040	4,204	4,292	4,259	4,278	4,278	4,312	4,299	4,308	4,329	4,366
16-Aug	0	4,531	4,715	4,815	4,777	4,798	4,798	4,837	4,822	4,832	4,855	4,897
17-Aug	0	4,914	5,114	5,221	5,180	5,204	5,204	5,245	5,230	5,240	5,265	5,311
18-Aug	1	4,559	4,744	4,844	4,806	4,828	4,828	4,866	4,852	4,861	4,885	4,927
19-Aug	0	5,474	5,697	5,817	5,771	5,797	5,797	5,844	5,826	5,838	5,866	5,917
20-Aug	0	5,630	5,859	5,982	5,935	5,962	5,962	6,010	5,992	6,004	6,033	6,085
21-Aug	1	4,487	4,670	4,768	4,731	4,752	4,752	4,790	4,775	4,785	4,808	4,850
22-Aug	0	4,864	5,062	5,169	5,128	5,151	5,151	5,193	5,177	5,187	5,212	5,258
23-Aug	0	5,216	5,429	5,543	5,499	5,524	5,524	5,568	5,552	5,563	5,590	5,638
24-Aug	0	5,132	5,341	5,454	5,411	5,435	5,435	5,479	5,462	5,473	5,500	5,547
25-Aug	0	5,210	5,422	5,536	5,493	5,518	5,518	5,562	5,545	5,556	5,583	5,631
26-Aug	0	5,241	5,454	5,569	5,525	5,550	5,550	5,595	5,578	5,589	5,616	5,665
27-Aug	0	5,194	5,405	5,519	5,476	5,501	5,501	5,545	5,528	5,539	5,566	5,614
28-Aug	0	4,686	4,877	4,980	4,941	4,963	4,963	5,003	4,988	4,998	5,022	5,065
29-Aug	0	4,087	4,253	4,342	4,308	4,328	4,328	4,362	4,349	4,358	4,379	4,417
30-Aug	0	4,516	4,700	4,799	4,761	4,783	4,783	4,821	4,807	4,816	4,839	4,881
31-Aug	0	5,132	5,341	5,454	5,411	5,435	5,435	5,479	5,462	5,473	5,500	5,547
1-Sep	0	5,148	5,277	5,399	5,350	5,362	5,365	5,400	5,401	5,415	5,430	5,435
2-Sep	0	5,225	5,357	5,480	5,430	5,443	5,445	5,481	5,483	5,497	5,512	5,517
3-Sep	0	5,302	5,436	5,561	5,511	5,523	5,526	5,562	5,564	5,578	5,593	5,598
4-Sep	0	4,922	5,046	5,162	5,115	5,127	5,129	5,163	5,164	5,178	5,192	5,197
5-Sep	0	4,511	4,624	4,731	4,688	4,699	4,701	4,732	4,733	4,745	4,758	4,763
6-Sep	0	4,969	5,094	5,211	5,164	5,176	5,178	5,212	5,213	5,227	5,241	5,246
7-Sep	0	5,426	5,563	5,691	5,640	5,653	5,655	5,692	5,694	5,708	5,724	5,729
8-Sep	0	5,396	5,532	5,659	5,608	5,621	5,623	5,660	5,662	5,676	5,692	5,697
9-Sep	0	5,473	5,611	5,740	5,688	5,701	5,704	5,741	5,743	5,758	5,773	5,778
10-Sep	3	5,397	5,533	5,661	5,609	5,622	5,625	5,662	5,663	5,678	5,693	5,698
11-Sep	3	5,403	5,539	5,667	5,616	5,629	5,631	5,668	5,670	5,684	5,700	5,705
12-Sep	0	5,532	5,671	5,802	5,749	5,762	5,765	5,803	5,804	5,819	5,835	5,841
13-Sep	0	5,634	5,776	5,909	5,855	5,869	5,871	5,910	5,911	5,927	5,943	5,948
14-Sep	0	5,628	5,769	5,902	5,849	5,862	5,865	5,904	5,905	5,920	5,936	5,942
15-Sep	1	5,458	5,596	5,725	5,673	5,686	5,689	5,726	5,727	5,742	5,758	5,763
16-Sep	3	5,629	5,771	5,904	5,850	5,864	5,866	5,905	5,907	5,922	5,938	5,943
17-Sep	0	6,108	6,261	6,406	6,348	6,362	6,365	6,407	6,408	6,425	6,443	6,448
18-Sep	0	5,650	5,792	5,925	5,872	5,885	5,888	5,927	5,928	5,944	5,960	5,965
19-Sep	2	4,976	5,101	5,219	5,172	5,184	5,186	5,220	5,221	5,235	5,249	5,254
20-Sep	7	5,358	5,493	5,620	5,569	5,582	5,584	5,621	5,622	5,637	5,652	5,657
21-Sep	5	6,341	6,501	6,650	6,590	6,605	6,608	6,652	6,653	6,671	6,689	6,695
22-Sep	0	6,726	6,895	7,054	6,990	7,006	7,009	7,056	7,057	7,076	7,095	7,101
23-Sep	6	6,001	6,152	6,294	6,237	6,251	6,254	6,295	6,297	6,313	6,330	6,336
24-Sep	12	10,112	10,366	10,605	10,509	10,533	10,538	10,608	10,610	10,637	10,667	10,676
25-Sep	1	6,779	6,949	7,110	7,045	7,061	7,064	7,111	7,113	7,131	7,151	7,157
26-Sep	0	6,042	6,194	6,337	6,280	6,294	6,297	6,339	6,340	6,357	6,374	6,380
27-Sep	1	5,465	5,602	5,731	5,679	5,692	5,695	5,733	5,734	5,749	5,764	5,770
28-Sep	5	5,723	5,867	6,002	5,947	5,961	5,964	6,003	6,005	6,020	6,037	6,042
29-Sep	8	6,366	6,527	6,677	6,616	6,632	6,635	6,678	6,680	6,697	6,716	6,722
30-Sep	13	11,589	11,881	12,155	12,045	12,072	12,078	12,157	12,160	12,192	12,225	12,236
1-Oct	0	7,101	7,143	7,234	7,140	7,139	7,135	7,175	7,143	7,169	7,197	7,178
2-Oct	7	5,940	5,975	6,052	5,973	5,972	5,968	6,003	5,975	5,997	6,020	6,004
3-Oct	9	6,333	6,370	6,452	6,368	6,367	6,363	6,399	6,370	6,394	6,418	6,401
4-Oct	1	6,338	6,375	6,457	6,373	6,372	6,368	6,404	6,375	6,399	6,423	6,406
5-Oct	3	6,199	6,236	6,316	6,234	6,233	6,229	6,265	6,236	6,259	6,283	6,267
6-Oct	0	5,843	5,878	5,953	5,876	5,875	5,871	5,905	5,878	5,900	5,922	5,907
7-Oct	2	5,711	5,745	5,818	5,743	5,742	5,738	5,771	5,745	5,766	5,788	5,773
8-Oct	0	5,696	5,729	5,802	5,727	5,727	5,723	5,755	5,729	5,750	5,772	5,757
9-Oct	14	10,806	10,870	11,009	10,867	10,865	10,858	10,920	10,870	10,910	10,952	10,923
10-Oct	23	19,393	19,507	19,757	19,501	19,498	19,485	19,597	19,508	19,580	19,654	19,603
11-Oct	19	17,874	17,980	18,210	17,974	17,972	17,960	18,062	17,980	18,047	18,115	18,068
12-Oct	16	15,921	16,015	16,219	16,009	16,007	15,996	16,088	16,015	16,074	16,135	16,093
13-Oct	9	9,132	9,186	9,303	9,183	9,182	9,175	9,228	9,186	9,220	9,255	9,231
14-Oct	6	7,221	7,264	7,356	7,261	7,260	7,255	7,297	7,264	7,290	7,318	7,299
15-Oct	5	6,511	6,549	6,633	6,547	6,546	6,542	6,579	6,549	6,573	6,598	6,581
16-Oct	15	12,368	12,441	12,600	12,437	12,435	12,427	12,498	12,441	12,487	12,535	12,502
17-Oct	20	17,149	17,250	17,471	17,245	17,242	17,231	17,329	17,251	17,314	17,380	17,335
18-Oct	19	17,726	17,831	18,059	17,825	17,823	17,811	17,913	17,832	17,897	17,965	17,919

	AI	RI FT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	13,011	13,088	13,255	13,084	13,082	13,073	13,148	13,088	13,136	13,187	13,152
20-Oct	9	8,910	8,962	9,077	8,960	8,958	8,952	9,004	8,963	8,996	9,030	9,006
21-Oct	12	10,858	10,922	11,062	10,918	10,917	10,910	10,972	10,922	10,962	11,004	10,976
22-Oct	21	18,847	18,958	19,200	18,952	18,949	18,937	19,045	18,958	19,028	19,101	19,051
23-Oct	23	21,162	21,287	21,559	21,280	21,277	21,263	21,384	21,287	21,366	21,447	21,391
24-Oct	23	21,612	21,739	22,017	21,732	21,729	21,715	21,839	21,740	21,820	21,903	21,846
25-Oct	22	21,228	21,353	21,626	21,346	21,343	21,329	21,451	21,354	21,432	21,514	21,458
26-Oct	15	15,247	15,337	15,533	15,332	15,330	15,319	15,407	15,337	15,393	15,452	15,412
27-Oct	16	15,551	15,643	15,843	15,638	15,635	15,625	15,714	15,643	15,701	15,760	15,719
28-Oct	16	15,107	15,196	15,390	15,191	15,189	15,179	15,266	15,197	15,253	15,311	15,271
29-Oct	14	13,389	13,468	13,640	13,464	13,462	13,453	13,530	13,469	13,518	13,570	13,534
30-Oct	7	7,197	7,240	7,332	7,238	7,237	7,232	7,273	7,240	7,267	7,294	7,275
31-Oct	2	6,314	6,351	6,433	6,349	6,349	6,344	6,381	6,352	6,375	6,399	6,383
Nov	697	532,987	539,365	557,844	576,682	579,714	585,940	591,257	599,442	602,309	608,008	613,184
Dec	1,040	745,761	754,685	760,399	770,404	766,621	769,768	771,326	779,640	781,688	787,361	793,273
Jan	1,250	853,886	864,128	862,095	865,977	859,830	860,199	860,370	868,777	869,731	875,451	881,378
Feb	1,091	693,033	701,326	707,709	717,228	717,668	721,267	724,745	733,753	735,433	741,273	747,204
Mar	942	635,329	642,931	650,529	650,984	658,308	661,986	665,080	665,783	674,863	680,192	685,634
Apr	518	329,694	348,717	360,332	364,166	368,384	372,122	377,094	378,972	382,438	386,435	392,159
May	228	212,491	235,563	250,614	256,237	261,928	265,938	271,202	273,052	276,566	279,398	284,009
Jun	48	156,772	162,235	166,249	165,219	165,894	166,235	167,583	167,392	168,039	168,687	170,391
Jul	3	140,147	145,525	149,227	148,259	148,497	148,532	149,819	149,451	149,823	150,397	151,762
Aug	2	145,481	151,399	154,588	153,377	154,065	154,068	155,303	154,834	155,144	155,892	157,241
Sep	70	178,288	182,777	186,989	185,293	185,720	185,804	187,031	187,073	187,558	188,072	188,238
Oct	361	371,694	373,887	378,666	373,767	373,718	373,466	375,601	373,898	375,274	376,706	375,721
Total	6,250	4,995,564	5,102,539	5,185,242	5,227,595	5,240,347	5,265,323	5,296,410	5,332,065	5,358,865	5,397,873	5,440,195

Date	AI HDDd	RI Sales 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	63,682	64,444	65,322	66,419	66,942	67,621	68,236	69,262	69,601	70,290	70,996
2-Nov	9	38,233	38,691	39,218	39,877	40,190	40,598	40,967	41,583	41,787	42,200	42,624
3-Nov	14	62,496	63,243	64,105	65,182	65,695	66,362	66,964	67,972	68,304	68,981	69,673
4-Nov	13	57,428	58,115	58,907	59,896	60,367	60,980	61,534	62,460	62,765	63,387	64,023
5-Nov	20	89,312	90,381	91,613	93,151	93,884	94,837	95,699	97,139	97,613	98,580	99,570
6-Nov	19	85,350	86,371	87,548	89,019	89,719	90,630	91,453	92,829	93,282	94,206	95,153
7-Nov	16	72,688	73,558	74,560	75,812	76,409	77,184	77,886	79,058	79,444	80,230	81,036
8-Nov	14	64,319	65,089	65,976	67,084	67,612	68,298	68,919	69,956	70,297	70,994	71,707
9-Nov	20	90,390	91,471	92,718	94,275	95,016	95,981	96,853	98,310	98,791	99,769	100,771
10-Nov	15	70,077	70,916	71,882	73,090	73,664	74,412	75,088	76,218	76,590	77,349	78,126
11-Nov	15	70,436	71,279	72,251	73,464	74,042	74,794	75,473	76,609	76,983	77,745	78,526
12-Nov	14	64,291	65,060	65,947	67,055	67,582	68,268	68,888	69,925	70,266	70,962	71,675
13-Nov	20	88,263	89,319	90,536	92,057	92,781	93,723	94,575	95,998	96,466	97,422	98,401
14-Nov	19	83,942	84,946	86,104	87,550	88,238	89,134	89,944	91,297	91,743	92,652	93,583
15-Nov	24	109,253	110,561	112,067	113,950	114,846	116,012	117,066	118,827	119,407	120,590	121,801
16-Nov	27	125,506	127,008	128,739	130,901	131,931	133,270	134,481	136,504	137,171	138,530	139,921
17-Nov	19	93,581	94,701	95,991	97,604	98,371	99,370	100,273	101,782	102,279	103,292	104,329
18-Nov	28	130,933	132,500	134,306	136,562	137,635	139,033	140,296	142,407	143,102	144,520	145,971
19-Nov	30	139,992	141,667	143,598	146,010	147,158	148,652	150,002	152,259	153,003	154,518	156,070
20-Nov	31	146,525	148,278	150,298	152,823	154,025	155,589	157,002	159,364	160,143	161,729	163,353
21-Nov	31	145,835	147,580	149,591	152,103	153,299	154,856	156,263	158,614	159,388	160,967	162,584
22-Nov	37	174,060	176,142	178,543	181,541	182,969	184,827	186,506	189,312	190,237	192,121	194,051
23-Nov	41	195,381	197,718	200,413	203,779	205,381	207,467	209,351	212,502	213,539	215,654	217,821
24-Nov	43	207,671	210,156	213,020	216,598	218,301	220,518	222,521	225,869	226,972	229,220	231,523
25-Nov	45	218,525	221,140	224,153	227,919	229,711	232,043	234,151	237,674	238,835	241,201	243,623
26-Nov	27	141,666	143,361	145,315	147,756	148,918	150,430	151,796	154,080	154,833	156,366	157,937
27-Nov	17	90,656	91,740	92,991	94,552	95,296	96,264	97,138	98,600	99,081	100,063	101,068
28-Nov	20	91,883	92,982	94,249	95,832	96,586	97,566	98,453	99,934	100,422	101,417	102,435
29-Nov	24	108,535	109,834	111,330	113,200	114,091	115,249	116,296	118,046	118,622	119,797	121,001
30-Nov	29	134,565	136,175	138,031	140,349	141,453	142,889	144,187	146,357	147,071	148,528	150,020
1-Dec	20	100,113	101,311	103,118	105,192	106,167	107,347	108,429	110,104	110,674	111,803	112,937
2-Dec	28	133,969	135,572	137,991	140,766	142,072	143,650	145,098	147,339	148,103	149,613	151,131
3-Dec	29	138,019	139,671	142,163	145,021	146,366	147,992	149,484	151,793	152,580	154,136	155,700
4-Dec	34	161,577	163,510	166,428	169,774	171,349	173,253	174,999	177,702	178,623	180,445	182,275
5-Dec	25	122,241	123,704	125,911	128,443	129,634	131,075	132,396	134,441	135,137	136,516	137,901
6-Dec	39	184,377	186,583	189,913	193,731	195,528	197,700	199,693	202,778	203,828	205,907	207,996
7-Dec	28	139,436	141,104	143,622	146,510	147,869	149,512	151,018	153,351	154,146	155,718	157,298
8-Dec	19	100,801	102,007	103,827	105,915	106,897	108,084	109,174	110,860	111,435	112,571	113,713
9-Dec	29	137,655	139,302	141,787	144,639	145,980	147,602	149,089	151,392	152,177	153,729	155,288
10-Dec	23	111,533	112,868	114,882	117,192	118,279	119,593	120,798	122,664	123,300	124,557	125,821
11-Dec	20	97,955	99,127	100,896	102,924	103,879	105,033	106,092	107,730	108,289	109,393	110,503
12-Dec	27	123,781	125,262	127,498	130,061	131,267	132,726	134,064	136,134	136,840	138,236	139,638
13-Dec	27	127,033	128,553	130,846	133,477	134,715	136,212	137,585	139,710	140,434	141,866	143,306
14-Dec	41	193,177	195,489	198,977	202,978	204,860	207,136	209,224	212,456	213,557	215,735	217,923
15-Dec	45	215,936	218,520	222,419	226,892	228,996	231,540	233,874	237,486	238,717	241,152	243,598
16-Dec	39	196,010	198,356	201,895	205,955	207,865	210,174	212,293	215,572	216,689	218,899	221,120
17-Dec	32	164,382	166,348	169,317	172,721	174,323	176,260	178,037	180,787	181,723	183,577	185,439
18-Dec	41	197,579	199,943	203,511	207,603	209,528	211,856	213,992	217,297	218,423	220,651	222,889
19-Dec	32	156,786	158,662	161,493	164,740	166,268	168,115	169,810	172,433	173,326	175,094	176,870
20-Dec	49	233,622	236,417	240,636	245,475	247,751	250,504	253,029	256,937	258,268	260,903	263,549
21-Dec	51	247,160	250,117	254,580	259,699	262,108	265,020	267,691	271,826	273,234	276,021	278,821
22-Dec	32	170,213	172,249	175,323	178,848	180,507	182,512	184,352	187,200	188,169	190,089	192,017
23-Dec	21	115,460	116,842	118,927	121,318	122,443	123,803	125,051	126,983	127,641	128,943	130,251
24-Dec	27	131,013	132,580	134,946	137,660	138,936	140,480	141,896	144,088	144,834	146,311	147,796
25-Dec	41	189,197	191,461	194,877	198,796	200,639	202,868	204,913	208,079	209,157	211,290	213,433
26-Dec	42	199,106	201,489	205,084	209,208	211,148	213,494	215,646	218,977	220,111	222,357	224,612
27-Dec	51	246,095	249,040	253,484	258,581	260,978	263,878	266,538	270,655	272,057	274,832	277,620
28-Dec	51	251,533	254,543	259,085	264,294	266,745	269,709	272,427	276,636	278,069	280,905	283,755
29-Dec	32	170,941	172,987	176,074	179,614	181,280	183,294	185,141	188,001	188,975	190,903	192,839
30-Dec	35	177,260	179,381	182,582	186,253	187,980	190,069	191,985	194,950	195,960	197,959	199,967
31-Dec	30	149,358	151,145	153,842	156,935	158,391	160,150	161,765	164,263	165,114	166,799	168,491
1-Jan	61	285,902	289,323	294,858	301,113	303,950	307,451	310,596	315,418	317,105	320,356	323,626
2-Jan	38	191,319	193,609	197,313	201,498	203,397	205,739	207,844	211,071	212,200	214,376	216,564
3-Jan	23	129,332	130,880	133,384	136,213	137,496	139,080	140,503	142,684	143,447	144,918	146,397
4-Jan	28	139,427	141,095	143,795	146,845	148,228	149,936	151,470	153,821	154,644	156,230	157,824
5-Jan	19	95,714	96,859	98,712	100,806	101,756	102,928	103,981	105,595	106,160	107,249	108,344
6-Jan	28	134,285	135,892	138,492	141,429	142,762	144,406	145,883	148,148	148,940	150,468	152,004
7-Jan	38	178,774	180,913	184,374	188,285	190,059	192,248	194,215	197,230	198,285	200,318	202,363
8-Jan	41	199,099	201,481	205,336	209,692	211,667	214,105	216,296	219,654	220,828	223,093	225,370
9-Jan	41	200,259	202,655	206,532	210,913	212,900	215,352	217,555	220,933	222,114	224,392	226,683
10-Jan	30	154,230	156,076	159,062	162,436	163,966	165,855	167,551	170,153	171,063	172,817	174,581
11-Jan	43	209,833	212,344	216,407	220,997	223,079	225,649	227,957	231,496	232,734	235,121	237,521
12-Jan	50	241,710	244,602	249,282	254,570	256,968	259,928	262,587	266,664	268,090	270,839	273,604
13-Jan	41	209,016	211,517	215,564	220,136	222,210	224,770	227,069	230,594	231,827	234,205	236,595
14-Jan	46	230,526	233,284	237,747	242,791	245,078	247,901	250,437	254,325	255,685	258,307	260,944
15-Jan	43	213,902	216,462	220,603	225,283	227,405	230,024	232,377	235,985	237,247	239,680	242,127
16-Jan	30	154,994	156,848	159,849	163,240	164,778	166,676	168,381	170,995	171,909	173,672	175,445
17-Jan	40	195,414	197,752	201,535	205,810	207,749	210,142	212,292	215,588	216,741	218,963	221,198
18-Jan	55	262,853	265,998	271,087	276,837	279,445	282,664	285,556	289,989	291,540	294,529	297,536
19-Jan	68	329,870	334,030	340,438	347,678	350,977	355,045	358,699	364,283	366,243	370,002	373,783
20-Jan	54	277,870	281,195	286,575	292,654	295,411	298,814	301,870	306,557	308,196	311,357	314,535
21-Jan	44	233,014	235,802	240,314	245,411	247,723	250,577	253,140	257,070	258,445	261,095	263,760
22-Jan	34	177,903	180,031	183,476	187,368	189,133	191,311	193,268	196,269	197,318	199,342	201,377
23-Jan	32	159,851	161,764	164,859	168,356	169,942	171,900	173,658	176,354	177,297	179,115	180,944
24-Jan	44	210,638	213,158	217,237	221,845	223,935	226,514	228,831	232,384	233,627	236,022	238,432
25-Jan	24	127,141	128,662	131,124	133,905	135,167	136,724	138,122	140,267	141,017	142,463	143,917
26-Jan	41	199,834	202,225	206,094	210,465	212,448	214,895	217,094	220,464	221,643	223,916	226,202
27-Jan	46	220,976	223,620	227,899	232,733	234,925	237,632	240,062	243,789	245,093	247,606	250,134

Date	AI HDDd	RI Sales 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	166,772	168,768	171,997	175,645	177,300	179,342	181,177	183,989	184,973	186,870	188,778
29-Jan	46	223,943	226,623	230,959	235,858	238,080	240,822	243,286	247,063	248,384	250,931	253,493
30-Jan	47	226,585	229,296	233,683	238,640	240,888	243,663	246,155	249,977	251,314	253,891	256,482
31-Jan	43	216,106	218,692	222,876	227,604	229,748	232,394	234,772	238,417	239,691	242,149	244,621
1-Feb	17	102,144	103,367	105,173	107,271	108,166	109,343	110,394	112,069	112,649	113,784	114,927
2-Feb	28	140,440	142,120	144,603	147,488	148,719	150,337	151,782	154,085	154,883	156,443	158,015
3-Feb	45	211,257	213,785	217,520	221,860	223,711	226,146	228,318	231,783	232,984	235,331	237,695
4-Feb	45	221,644	224,296	228,214	232,767	234,709	237,264	239,544	243,178	244,439	246,901	249,381
5-Feb	56	275,547	278,844	283,716	289,377	291,791	294,967	297,801	302,319	303,886	306,947	310,030
6-Feb	56	277,802	281,126	286,038	291,745	294,178	297,381	300,237	304,793	306,373	309,459	312,567
7-Feb	57	288,201	291,649	296,745	302,665	305,190	308,512	311,476	316,202	317,841	321,043	324,267
8-Feb	42	223,002	225,670	229,613	234,194	236,148	238,718	241,012	244,668	245,937	248,414	250,909
9-Feb	44	226,795	229,509	233,518	238,177	240,164	242,779	245,111	248,830	250,120	252,639	255,177
10-Feb	39	199,508	201,895	205,422	209,520	211,268	213,568	215,620	218,891	220,026	222,242	224,474
11-Feb	42	211,874	214,409	218,155	222,507	224,364	226,806	228,985	232,459	233,664	236,018	238,388
12-Feb	37	186,841	189,077	192,380	196,218	197,855	200,009	201,931	204,994	206,057	208,132	210,223
13-Feb	43	211,232	213,759	217,494	221,833	223,684	226,119	228,291	231,755	232,956	235,303	237,666
14-Feb	45	222,415	225,076	229,008	233,577	235,526	238,090	240,377	244,024	245,289	247,759	250,248
15-Feb	32	168,798	170,818	173,802	177,270	178,749	180,694	182,430	185,198	186,158	188,033	189,922
16-Feb	33	169,211	171,236	174,227	177,703	179,186	181,136	182,876	185,651	186,613	188,493	190,386
17-Feb	35	173,746	175,825	178,896	182,466	183,988	185,991	187,777	190,626	191,615	193,545	195,489
18-Feb	31	156,886	158,764	161,537	164,760	166,135	167,943	169,557	172,129	173,021	174,764	176,520
19-Feb	37	181,277	183,446	186,651	190,375	191,963	194,053	195,917	198,890	199,921	201,934	203,963
20-Feb	22	112,798	114,148	116,142	118,459	119,447	120,747	121,907	123,757	124,399	125,652	126,914
21-Feb	39	187,667	189,912	193,230	197,085	198,730	200,893	202,823	205,900	206,967	209,052	211,152
22-Feb	43	208,206	210,697	214,379	218,656	220,480	222,880	225,021	228,435	229,619	231,932	234,262
23-Feb	22	121,642	123,098	125,248	127,747	128,813	130,215	131,466	133,461	134,152	135,504	136,865
24-Feb	35	173,746	175,825	178,896	182,466	183,988	185,991	187,777	190,626	191,615	193,545	195,489
25-Feb	43	206,723	209,196	212,851	217,098	218,909	221,292	223,417	226,807	227,983	230,279	232,592
26-Feb	43	212,687	215,231	218,992	223,361	225,224	227,676	229,863	233,351	234,560	236,923	239,303
27-Feb	41	204,843	207,293	210,915	215,123	216,918	219,279	221,386	224,745	225,910	228,185	230,477
28-Feb	39	196,940	199,297	202,778	206,824	208,550	210,820	212,845	216,074	217,194	219,382	221,586
1-Mar	47	231,140	233,906	237,923	243,097	244,795	247,453	249,846	254,019	254,965	257,540	260,131
2-Mar	32	166,553	168,546	171,441	175,169	176,392	178,308	180,032	183,039	183,721	185,576	187,443
3-Mar	43	212,961	215,509	219,210	223,978	225,542	227,991	230,196	234,041	234,913	237,284	239,672
4-Mar	42	207,038	209,515	213,113	217,748	219,269	221,650	223,793	227,531	228,379	230,685	233,006
5-Mar	27	142,112	143,812	146,282	149,463	150,507	152,142	153,613	156,179	156,761	158,343	159,937
6-Mar	36	174,496	176,584	179,617	183,523	184,805	186,812	188,618	191,769	192,483	194,427	196,383
7-Mar	32	156,289	158,159	160,875	164,373	165,521	167,319	168,937	171,759	172,398	174,139	175,891
8-Mar	41	200,011	202,405	205,881	210,358	211,827	214,128	216,198	219,810	220,628	222,856	225,098
9-Mar	45	219,661	222,289	226,107	231,024	232,638	235,164	237,438	241,404	242,303	244,750	247,213
10-Mar	46	228,893	231,632	235,610	240,734	242,415	245,048	247,417	251,550	252,487	255,036	257,602
11-Mar	21	119,410	120,839	122,914	125,587	126,464	127,837	129,074	131,230	131,718	133,048	134,387
12-Mar	16	86,513	87,549	89,052	90,989	91,624	92,619	93,515	95,077	95,431	96,395	97,365
13-Mar	22	100,393	101,594	103,339	105,586	106,323	107,478	108,517	110,330	110,741	111,859	112,985
14-Mar	20	93,664	94,785	96,412	98,509	99,197	100,274	101,244	102,935	103,319	104,362	105,412
15-Mar	25	119,208	120,634	122,706	125,375	126,250	127,621	128,855	131,008	131,496	132,823	134,160
16-Mar	27	129,216	130,762	133,008	135,901	136,850	138,336	139,674	142,007	142,536	143,975	145,424
17-Mar	35	167,412	169,416	172,325	176,073	177,302	179,228	180,961	183,984	184,669	186,534	188,411
18-Mar	27	135,466	137,087	139,441	142,474	143,469	145,027	146,429	148,875	149,429	150,938	152,457
19-Mar	28	138,109	139,762	142,162	145,254	146,268	147,857	149,287	151,780	152,346	153,884	155,432
20-Mar	28	133,727	135,327	137,651	140,645	141,627	143,165	144,549	146,964	147,511	149,001	150,500
21-Mar	28	135,904	137,530	139,892	142,934	143,932	145,496	146,902	149,356	149,912	151,426	152,950
22-Mar	21	106,543	107,818	109,670	112,055	112,837	114,063	115,166	117,089	117,525	118,712	119,907
23-Mar	24	117,328	118,732	120,771	123,398	124,260	125,609	126,824	128,942	129,422	130,729	132,045
24-Mar	29	138,122	139,775	142,175	145,267	146,282	147,870	149,300	151,794	152,359	153,898	155,446
25-Mar	21	105,440	106,702	108,534	110,895	111,669	112,882	113,973	115,877	116,309	117,483	118,665
26-Mar	26	124,792	126,286	128,454	131,248	132,165	133,600	134,892	137,145	137,656	139,046	140,445
27-Mar	41	188,673	190,931	194,210	198,433	199,819	201,989	203,942	207,349	208,121	210,222	212,338
28-Mar	42	202,287	204,708	208,224	212,752	214,238	216,565	218,659	222,311	223,139	225,392	227,660
29-Mar	29	152,092	153,911	156,555	159,959	161,076	162,826	164,400	167,146	167,769	169,463	171,168
30-Mar	20	107,605	108,892	110,762	113,171	113,961	115,199	116,313	118,256	118,696	119,895	121,101
31-Mar	21	103,970	105,214	107,021	109,348	110,112	111,308	112,384	114,261	114,687	115,845	117,010
1-Apr	23	110,973	112,205	114,144	114,948	116,103	117,140	118,907	119,484	120,672	121,846	123,821
2-Apr	24	116,993	118,291	120,335	121,183	122,401	123,494	125,357	125,965	127,217	128,456	130,537
3-Apr	25	121,174	122,518	124,636	125,513	126,775	127,907	129,837	130,467	131,764	133,046	135,202
4-Apr	21	101,982	103,113	104,895	105,634	106,695	107,649	109,273	109,803	110,894	111,974	113,788
5-Apr	39	184,153	186,196	189,414	190,748	192,665	194,386	197,319	198,276	200,247	202,196	205,472
6-Apr	31	155,020	156,740	159,449	160,572	162,186	163,634	166,103	166,909	168,568	170,209	172,967
7-Apr	19	104,454	105,613	107,438	108,195	109,282	110,258	111,922	112,465	113,583	114,688	116,547
8-Apr	29	142,234	143,812	146,298	147,328	148,808	150,138	152,403	153,142	154,664	156,170	158,700
9-Apr	12	64,559	65,275	66,403	66,871	67,543	68,146	69,174	69,510	70,201	70,884	72,032
10-Apr	22	105,357	106,526	108,367	109,130	110,227	111,211	112,889	113,437	114,564	115,679	117,554
11-Apr	21	96,378	97,447	99,131	99,829	100,833	101,733	103,268	103,769	104,801	105,821	107,535
12-Apr	19	92,528	93,555	95,172	95,842	96,805	97,670	99,143	99,625	100,615	101,594	103,240
13-Apr	7	41,930	42,395	43,128	43,432	43,868	44,260	44,928	45,146	45,594	46,038	46,784
14-Apr	15	69,915	70,691	71,913	72,419	73,147	73,800	74,914	75,277	76,025	76,765	78,009
15-Apr	17	77,471	78,331	79,684	80,246	81,052	81,776	83,010	83,413	84,242	85,062	86,440
16-Apr	21	99,308	100,410	102,145	102,864	103,898	104,826	106,408	106,924	107,987	109,038	110,805
17-Apr	21	99,711	100,817	102,559	103,282	104,320	105,251	106,839	107,358	108,425	109,480	111,254
18-Apr	13	63,165	63,866	64,970	65,427	66,085	66,675	67,681	68,009	68,685	69,354	70,478
19-Apr	15	71,065	71,854	73,096	73,610	74,350	75,014	76,146	76,515	77,276	78,028	79,292
20-Apr	5	37,743	38,162	38,821	39,095	39,487	39,840	40,441	40,637	41,041	41,441	42,112
21-Apr	14	63,148	63,849	64,952	65,410	66,067	66,657	67,663	67,991	68,667	69,336	70,459
22-Apr	7	34,085	34,463	35,058	35,305	35,660	35,979	36,521	36,699	37,063	37,424	38,031
23-Apr	15	68,047	68,802	69,991	70,484	71,192	71,828	72,912	73,266	73,994	74,714	75,925
24-Apr	15	66,582	67,321	68,484	68,967	69,660	70,282	71,342	71,688	72,401	73,106	74,290
25-Apr	14	63,207	63,908	65,013	65,471	66,129	66,719	67,726	68,055	68,731	69,400	70,524

Date	AI HDDd	RI Sales 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	46,571	47,088	47,902	48,239	48,724	49,159	49,901	50,143	50,641	51,134	51,963
27-Apr	7	35,953	36,351	36,980	37,240	37,614	37,950	38,523	38,710	39,095	39,475	40,115
28-Apr	8	34,876	35,263	35,873	36,125	36,489	36,814	37,370	37,551	37,924	38,294	38,914
29-Apr	13	56,755	57,385	58,377	58,788	59,379	59,909	60,813	61,108	61,715	62,316	63,326
30-Apr	16	72,572	73,378	74,646	75,171	75,927	76,605	77,761	78,138	78,915	79,683	80,974
1-May	0	35,870	35,908	36,299	36,465	36,751	37,038	37,552	37,720	38,068	38,438	39,051
2-May	0	29,382	29,413	29,734	29,869	30,104	30,339	30,760	30,898	31,182	31,486	31,988
3-May	0	25,372	25,398	25,675	25,792	25,995	26,198	26,562	26,680	26,926	27,188	27,622
4-May	0	27,153	27,182	27,478	27,604	27,820	28,038	28,427	28,554	28,817	29,098	29,561
5-May	6	26,293	26,321	26,608	26,729	26,939	27,150	27,526	27,649	27,904	28,176	28,625
6-May	17	69,278	69,350	70,107	70,426	70,979	71,534	72,526	72,850	73,522	74,238	75,421
7-May	23	101,741	101,848	102,959	103,428	104,240	105,055	106,512	106,988	107,974	109,026	110,763
8-May	14	66,650	66,719	67,447	67,754	68,286	68,820	69,775	70,087	70,733	71,421	72,560
9-May	13	59,397	59,459	60,108	60,382	60,856	61,332	62,182	62,460	63,036	63,650	64,664
10-May	2	34,859	34,896	35,277	35,437	35,715	35,995	36,494	36,657	36,995	37,355	37,950
11-May	0	32,584	32,618	32,974	33,124	33,384	33,645	34,112	34,264	34,580	34,917	35,473
12-May	0	27,877	27,907	28,211	28,340	28,562	28,785	29,185	29,315	29,585	29,873	30,349
13-May	3	26,723	26,751	27,043	27,166	27,380	27,594	27,976	28,101	28,360	28,637	29,093
14-May	8	28,727	28,757	29,071	29,203	29,433	29,663	30,074	30,209	30,487	30,784	31,275
15-May	12	47,381	47,431	47,948	48,167	48,545	48,925	49,603	49,825	50,284	50,774	51,583
16-May	17	70,783	70,857	71,630	71,956	72,521	73,088	74,102	74,433	75,119	75,850	77,059
17-May	12	53,898	53,954	54,543	54,791	55,221	55,653	56,425	56,677	57,200	57,756	58,677
18-May	12	55,679	55,738	56,346	56,602	57,046	57,493	58,290	58,551	59,090	59,666	60,616
19-May	1	35,698	35,736	36,126	36,290	36,575	36,861	37,372	37,539	37,885	38,254	38,864
20-May	8	32,347	32,381	32,734	32,884	33,142	33,401	33,864	34,015	34,329	34,663	35,216
21-May	9	35,284	35,321	35,706	35,869	36,151	36,433	36,939	37,104	37,446	37,810	38,413
22-May	9	36,399	36,437	36,834	37,002	37,292	37,584	38,105	38,276	38,629	39,005	39,626
23-May	8	30,594	30,626	30,960	31,101	31,345	31,591	32,029	32,172	32,468	32,785	33,307
24-May	10	40,784	40,826	41,272	41,460	41,785	42,112	42,696	42,887	43,282	43,704	44,400
25-May	7	32,666	32,700	33,057	33,208	33,468	33,730	34,198	34,351	34,667	35,005	35,563
26-May	7	32,304	32,338	32,691	32,840	33,097	33,356	33,819	33,970	34,283	34,617	35,169
27-May	1	32,078	32,112	32,462	32,610	32,866	33,123	33,582	33,733	34,043	34,375	34,923
28-May	5	29,333	29,363	29,684	29,819	30,053	30,288	30,708	30,845	31,130	31,433	31,934
29-May	3	27,114	27,142	27,438	27,563	27,780	27,997	28,385	28,512	28,775	29,055	29,518
30-May	9	31,359	31,392	31,734	31,879	32,129	32,380	32,829	32,976	33,280	33,604	34,140
31-May	12	47,743	47,793	48,315	48,535	48,916	49,298	49,982	50,206	50,668	51,162	51,977
1-Jun	6	32,927	33,350	33,953	34,304	34,698	35,063	35,632	35,848	36,244	36,643	37,272
2-Jun	7	31,733	32,140	32,721	33,059	33,440	33,791	34,340	34,548	34,929	35,313	35,921
3-Jun	2	30,671	31,064	31,626	31,953	32,321	32,660	33,191	33,392	33,760	34,132	34,718
4-Jun	0	29,543	29,922	30,463	30,778	31,132	31,459	31,970	32,164	32,519	32,876	33,441
5-Jun	0	25,351	25,676	26,140	26,410	26,714	26,995	27,433	27,599	27,904	28,211	28,696
6-Jun	0	22,916	23,210	23,630	23,874	24,149	24,403	24,799	24,949	25,225	25,502	25,940
7-Jun	0	24,647	24,963	25,415	25,677	25,973	26,246	26,672	26,834	27,130	27,428	27,900
8-Jun	0	26,657	26,998	27,487	27,771	28,090	28,385	28,846	29,021	29,341	29,664	30,174
9-Jun	0	25,953	26,286	26,761	27,038	27,349	27,636	28,085	28,256	28,567	28,881	29,378
10-Jun	0	25,389	25,715	26,180	26,450	26,754	27,036	27,475	27,641	27,946	28,254	28,739
11-Jun	0	25,037	25,358	25,817	26,084	26,384	26,661	27,094	27,259	27,559	27,862	28,341
12-Jun	0	22,676	22,967	23,383	23,624	23,896	24,147	24,539	24,688	24,960	25,235	25,669
13-Jun	0	21,649	21,927	22,323	22,554	22,813	23,053	23,427	23,570	23,829	24,092	24,506
14-Jun	0	24,222	24,533	24,977	25,235	25,525	25,793	26,212	26,371	26,662	26,955	27,419
15-Jun	9	30,056	30,442	30,992	31,313	31,673	32,006	32,525	32,723	33,084	33,448	34,023
16-Jun	7	27,865	28,222	28,732	29,029	29,363	29,672	30,154	30,337	30,671	31,009	31,542
17-Jun	1	31,866	32,274	32,858	33,197	33,579	33,932	34,483	34,692	35,075	35,461	36,070
18-Jun	5	28,495	28,860	29,382	29,686	30,027	30,343	30,836	31,023	31,365	31,710	32,255
19-Jun	6	25,922	26,254	26,729	27,005	27,316	27,603	28,051	28,221	28,532	28,846	29,342
20-Jun	5	26,089	26,423	26,901	27,179	27,491	27,780	28,231	28,403	28,716	29,032	29,531
21-Jun	0	29,212	29,587	30,122	30,433	30,783	31,106	31,612	31,803	32,154	32,508	33,067
22-Jun	0	27,074	27,421	27,917	28,206	28,530	28,830	29,298	29,476	29,801	30,129	30,647
23-Jun	0	23,558	23,860	24,291	24,542	24,824	25,085	25,493	25,647	25,930	26,216	26,666
24-Jun	0	23,558	23,860	24,291	24,542	24,824	25,085	25,493	25,647	25,930	26,216	26,666
25-Jun	0	23,558	23,860	24,291	24,542	24,824	25,085	25,493	25,647	25,930	26,216	26,666
26-Jun	0	22,105	22,389	22,794	23,029	23,294	23,539	23,921	24,066	24,332	24,599	25,022
27-Jun	0	19,671	19,924	20,284	20,493	20,729	20,947	21,287	21,416	21,653	21,891	22,267
28-Jun	0	20,699	20,964	21,343	21,564	21,812	22,041	22,399	22,535	22,783	23,034	23,430
29-Jun	0	22,290	22,576	22,984	23,222	23,489	23,736	24,121	24,268	24,535	24,805	25,232
30-Jun	0	22,642	22,932	23,347	23,588	23,859	24,110	24,502	24,650	24,922	25,196	25,630
1-Jul	0	22,669	22,935	23,344	23,593	23,880	24,144	24,535	24,694	24,976	25,253	25,695
2-Jul	0	22,669	22,935	23,344	23,593	23,880	24,144	24,535	24,694	24,976	25,253	25,695
3-Jul	0	21,100	21,348	21,728	21,960	22,227	22,473	22,837	22,985	23,247	23,505	23,917
4-Jul	0	19,185	19,410	19,756	19,966	20,209	20,432	20,764	20,898	21,137	21,371	21,745
5-Jul	0	20,060	20,296	20,657	20,878	21,132	21,365	21,712	21,852	22,101	22,347	22,738
6-Jul	1	20,668	20,911	21,283	21,510	21,772	22,012	22,369	22,514	22,771	23,024	23,427
7-Jul	2	23,651	23,929	24,355	24,615	24,914	25,189	25,598	25,763	26,058	26,347	26,808
8-Jul	0	28,282	28,614	29,124	29,434	29,792	30,121	30,610	30,808	31,160	31,506	32,057
9-Jul	0	24,952	25,245	25,695	25,969	26,285	26,575	27,006	27,181	27,491	27,796	28,283
10-Jul	0	19,085	19,309	19,653	19,863	20,105	20,326	20,656	20,790	21,027	21,261	21,633
11-Jul	0	16,758	16,954	17,256	17,440	17,653	17,847	18,137	18,254	18,463	18,668	18,994
12-Jul	0	19,020	19,243	19,586	19,795	20,036	20,257	20,586	20,719	20,955	21,188	21,559
13-Jul	0	21,904	22,161	22,556	22,796	23,074	23,328	23,707	23,860	24,133	24,400	24,828
14-Jul	0	22,041	22,300	22,697	22,939	23,218	23,475	23,856	24,010	24,284	24,553	24,983
15-Jul	0	21,348	21,598	21,983	22,218	22,488	22,736	23,105	23,254	23,520	23,781	24,197
16-Jul	0	21,138	21,386	21,768	22,000	22,267	22,513	22,878	23,026	23,289	23,548	23,960
17-Jul	0	19,223	19,448	19,795	20,006	20,249	20,473	20,805	20,939	21,179	21,414	21,788
18-Jul	0	16,960	17,159	17,465	17,651	17,866	18,063	18,356	18,475	18,686	18,893	19,224
19-Jul	0	17,836	18,045	18,367	18,562	18,788	18,996	19,304	19,429	19,651	19,869	20,216
20-Jul	0	19,405	19,632	19,982	20,195	20,441	20,667	21,002	21,138	21,379	21,617	21,995
21-Jul	0	20,236	20,473	20,838	21,060	21,316	21,551	21,901	22,043	22,294	22,542	22,937
22-Jul	0	20,098	20,334	20,696	20,917	21,172	21,405	21,753	21,893	22,143	22,389	22,781

	AI	RI Sales										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	19,961	20,195	20,555	20,774	21,027	21,259	21,604	21,744	21,992	22,236	22,625
24-Jul	0	18,948	19,170	19,512	19,720	19,960	20,180	20,508	20,640	20,876	21,108	21,477
25-Jul	0	17,588	17,795	18,112	18,305	18,528	18,732	19,036	19,159	19,378	19,593	19,936
26-Jul	0	19,157	19,382	19,728	19,938	20,180	20,403	20,734	20,868	21,107	21,341	21,714
27-Jul	0	21,348	21,598	21,983	22,218	22,488	22,736	23,105	23,254	23,520	23,781	24,197
28-Jul	0	21,348	21,598	21,983	22,218	22,488	22,736	23,105	23,254	23,520	23,781	24,197
29-Jul	0	21,001	21,247	21,626	21,857	22,123	22,367	22,730	22,877	23,138	23,395	23,804
30-Jul	0	21,001	21,247	21,626	21,857	22,123	22,367	22,730	22,877	23,138	23,395	23,804
31-Jul	0	19,157	19,382	19,728	19,938	20,180	20,403	20,734	20,868	21,107	21,341	21,714
1-Aug	0	17,989	18,189	18,531	18,735	18,952	19,163	19,477	19,606	19,833	20,050	20,403
2-Aug	0	19,479	19,695	20,066	20,287	20,522	20,750	21,091	21,230	21,476	21,710	22,093
3-Aug	0	20,143	20,366	20,749	20,978	21,220	21,457	21,809	21,953	22,207	22,449	22,845
4-Aug	0	19,797	20,017	20,393	20,619	20,857	21,089	21,435	21,577	21,827	22,065	22,454
5-Aug	0	19,661	19,879	20,252	20,476	20,713	20,943	21,287	21,428	21,676	21,912	22,299
6-Aug	0	19,732	19,951	20,326	20,551	20,788	21,020	21,365	21,506	21,755	21,992	22,380
7-Aug	0	19,069	19,281	19,643	19,860	20,090	20,313	20,647	20,783	21,024	21,253	21,628
8-Aug	0	18,198	18,400	18,745	18,953	19,171	19,385	19,703	19,834	20,063	20,282	20,639
9-Aug	0	19,551	19,768	20,140	20,362	20,597	20,827	21,168	21,309	21,555	21,790	22,174
10-Aug	0	20,905	21,136	21,534	21,772	22,023	22,268	22,634	22,784	23,047	23,299	23,709
11-Aug	0	20,905	21,136	21,534	21,772	22,023	22,268	22,634	22,784	23,047	23,299	23,709
12-Aug	0	20,631	20,860	21,252	21,487	21,735	21,977	22,338	22,486	22,746	22,994	23,399
13-Aug	0	21,458	21,696	22,104	22,348	22,606	22,858	23,233	23,387	23,657	23,916	24,337
14-Aug	0	20,105	20,328	20,710	20,939	21,180	21,416	21,768	21,912	22,165	22,407	22,802
15-Aug	0	17,924	18,123	18,464	18,668	18,883	19,094	19,407	19,536	19,762	19,977	20,329
16-Aug	0	20,105	20,328	20,710	20,939	21,180	21,416	21,768	21,912	22,165	22,407	22,802
17-Aug	0	21,803	22,045	22,459	22,708	22,970	23,226	23,607	23,763	24,038	24,300	24,729
18-Aug	1	20,228	20,452	20,837	21,067	21,310	21,548	21,901	22,046	22,301	22,545	22,942
19-Aug	0	24,291	24,560	25,022	25,298	25,591	25,876	26,300	26,474	26,780	27,073	27,550
20-Aug	0	24,981	25,258	25,733	26,017	26,318	26,611	27,047	27,227	27,541	27,842	28,333
21-Aug	1	19,910	20,131	20,509	20,736	20,975	21,209	21,557	21,700	21,951	22,190	22,581
22-Aug	0	21,584	21,823	22,234	22,479	22,739	22,992	23,369	23,524	23,796	24,056	24,480
23-Aug	0	23,146	23,403	23,843	24,106	24,384	24,656	25,060	25,226	25,518	25,797	26,251
24-Aug	0	22,774	23,026	23,459	23,718	23,992	24,259	24,657	24,821	25,108	25,382	25,829
25-Aug	0	23,119	23,375	23,815	24,078	24,356	24,627	25,031	25,197	25,488	25,766	26,221
26-Aug	0	23,255	23,513	23,955	24,220	24,500	24,773	25,179	25,346	25,639	25,919	26,376
27-Aug	0	23,047	23,303	23,741	24,003	24,280	24,551	24,953	25,119	25,409	25,686	26,139
28-Aug	0	20,795	21,026	21,421	21,657	21,908	22,152	22,515	22,664	22,926	23,176	23,585
29-Aug	0	18,133	18,334	18,679	18,885	19,103	19,316	19,633	19,763	19,991	20,209	20,566
30-Aug	0	20,040	20,262	20,643	20,871	21,112	21,347	21,697	21,841	22,094	22,335	22,729
31-Aug	0	22,774	23,026	23,459	23,718	23,992	24,259	24,657	24,821	25,108	25,382	25,829
1-Sep	0	23,014	23,350	23,778	24,046	24,334	24,602	25,012	25,159	25,446	25,734	26,229
2-Sep	0	23,359	23,700	24,136	24,407	24,700	24,971	25,388	25,537	25,828	26,120	26,623
3-Sep	0	23,705	24,051	24,493	24,768	25,065	25,341	25,763	25,914	26,210	26,507	27,016
4-Sep	0	22,004	22,325	22,735	22,991	23,267	23,522	23,915	24,055	24,329	24,605	25,078
5-Sep	0	20,166	20,461	20,836	21,071	21,324	21,558	21,917	22,046	22,297	22,550	22,984
6-Sep	0	22,213	22,537	22,951	23,209	23,488	23,746	24,142	24,283	24,560	24,838	25,316
7-Sep	0	24,259	24,613	25,065	25,347	25,651	25,933	26,366	26,520	26,823	27,127	27,648
8-Sep	0	24,122	24,475	24,924	25,204	25,507	25,787	26,217	26,371	26,671	26,974	27,492
9-Sep	0	24,468	24,825	25,281	25,565	25,872	26,156	26,593	26,749	27,054	27,360	27,886
10-Sep	3	24,129	24,481	24,931	25,211	25,514	25,794	26,224	26,378	26,679	26,981	27,500
11-Sep	3	24,156	24,509	24,959	25,240	25,543	25,823	26,254	26,408	26,709	27,012	27,531
12-Sep	0	24,731	25,092	25,553	25,840	26,150	26,438	26,878	27,036	27,344	27,654	28,186
13-Sep	0	25,186	25,554	26,023	26,316	26,632	26,924	27,373	27,534	27,848	28,163	28,705
14-Sep	0	25,159	25,526	25,995	26,287	26,603	26,895	27,344	27,504	27,818	28,133	28,674
15-Sep	1	24,403	24,759	25,214	25,497	25,803	26,087	26,522	26,678	26,982	27,287	27,812
16-Sep	3	25,166	25,533	26,002	26,295	26,610	26,903	27,351	27,512	27,825	28,141	28,682
17-Sep	0	27,305	27,703	28,212	28,529	28,872	29,189	29,676	29,850	30,190	30,532	31,119
18-Sep	0	25,258	25,627	26,097	26,391	26,708	27,001	27,451	27,613	27,927	28,244	28,787
19-Sep	2	22,247	22,572	22,986	23,244	23,524	23,782	24,178	24,320	24,598	24,876	25,355
20-Sep	7	23,955	24,304	24,750	25,029	25,329	25,607	26,034	26,187	26,486	26,786	27,301
21-Sep	5	28,348	28,762	29,290	29,620	29,975	30,304	30,810	30,991	31,344	31,699	32,308
22-Sep	0	30,069	30,508	31,069	31,418	31,795	32,144	32,680	32,872	33,247	33,624	34,270
23-Sep	6	26,829	27,221	27,721	28,032	28,369	28,680	29,159	29,330	29,664	30,000	30,577
24-Sep	12	45,206	45,866	46,708	47,233	47,800	48,325	49,131	49,420	49,983	50,549	51,521
25-Sep	1	30,305	30,748	31,312	31,664	32,044	32,396	32,937	33,130	33,508	33,887	34,539
26-Sep	0	27,013	27,408	27,911	28,225	28,564	28,877	29,359	29,531	29,868	30,206	30,787
27-Sep	1	24,430	24,787	25,242	25,526	25,832	26,116	26,551	26,707	27,012	27,318	27,843
28-Sep	5	25,584	25,957	26,434	26,731	27,052	27,349	27,805	27,968	28,287	28,607	29,157
29-Sep	8	28,462	28,877	29,407	29,738	30,095	30,425	30,933	31,114	31,469	31,826	32,437
30-Sep	13	51,811	52,567	53,533	54,135	54,784	55,386	56,310	56,640	57,286	57,935	59,049
1-Oct	0	33,501	34,130	34,832	35,241	35,676	36,069	36,671	36,917	37,324	37,734	38,473
2-Oct	7	28,025	28,551	29,138	29,480	29,844	30,173	30,677	30,882	31,223	31,566	32,184
3-Oct	9	29,878	30,439	31,065	31,429	31,817	32,168	32,705	32,924	33,288	33,653	34,312
4-Oct	1	29,901	30,462	31,089	31,453	31,842	32,193	32,730	32,950	33,313	33,679	34,339
5-Oct	3	29,248	29,797	30,410	30,767	31,146	31,490	32,016	32,230	32,586	32,944	33,589
6-Oct	0	27,569	28,087	28,664	29,001	29,358	29,682	30,178	30,380	30,715	31,052	31,661
7-Oct	2	26,943	27,449	28,014	28,343	28,693	29,009	29,493	29,691	30,019	30,348	30,943
8-Oct	0	26,871	27,376	27,939	28,266	28,615	28,931	29,414	29,611	29,938	30,266	30,859
9-Oct	14	50,983	51,941	53,010	53,631	54,293	54,892	55,808	56,182	56,802	57,426	58,550
10-Oct	23	91,493	93,211	95,129	96,244	97,432	98,507	100,151	100,823	101,935	103,054	105,072
11-Oct	19	84,329	85,913	87,681	88,709	89,804	90,795	92,309	92,929	93,954	94,985	96,846
12-Oct	16	75,111	76,522	78,097	79,012	79,987	80,870	82,219	82,771	83,684	84,603	86,260
13-Oct	9	43,083	43,892	44,795	45,320	45,879	46,386	47,160	47,476	48,000	48,527	49,477
14-Oct	6	34,067	34,707	35,421	35,837	36,279	36,679	37,291	37,541	37,956	38,372	39,124
15-Oct	5	30,716	31,293	31,937	32,311	32,710	33,071	33,623	33,848	34,222	34,597	35,275
16-Oct	15	58,350	59,446	60,669	61,381	62,138	62,824	63,872	64,301	65,010	65,724	67,011
17-Oct	20	80,906	82,426	84,122	85,108	86,159	87,109	88,563	89,157	90,141	91,130	92,915
18-Oct	19	83,631	85,202	86,955	87,975	89,060	90,043	91,545	92,160	93,176	94,199	96,044

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI Sales 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	61,385	62,538	63,824	64,573	65,370	66,091	67,194	67,644	68,391	69,142	70,496
20-Oct	9	42,036	42,825	43,706	44,219	44,765	45,259	46,014	46,322	46,833	47,348	48,275
21-Oct	12	51,226	52,188	53,262	53,887	54,552	55,154	56,074	56,450	57,073	57,699	58,829
22-Oct	21	88,917	90,587	92,450	93,535	94,689	95,734	97,331	97,984	99,065	100,152	102,114
23-Oct	23	99,840	101,715	103,808	105,025	106,321	107,494	109,288	110,021	111,235	112,456	114,659
24-Oct	23	101,961	103,876	106,013	107,256	108,580	109,778	111,610	112,358	113,598	114,845	117,094
25-Oct	22	100,149	102,030	104,130	105,351	106,651	107,828	109,627	110,362	111,580	112,805	115,014
26-Oct	15	71,932	73,283	74,790	75,667	76,601	77,446	78,739	79,267	80,141	81,021	82,608
27-Oct	16	73,367	74,745	76,283	77,177	78,129	78,992	80,309	80,848	81,740	82,637	84,256
28-Oct	16	71,273	72,612	74,106	74,975	75,900	76,737	78,018	78,541	79,408	80,279	81,852
29-Oct	14	63,169	64,355	65,679	66,450	67,269	68,012	69,147	69,610	70,378	71,151	72,545
30-Oct	7	33,957	34,594	35,306	35,720	36,161	36,560	37,170	37,419	37,832	38,247	38,997
31-Oct	2	29,790	30,349	30,974	31,337	31,724	32,074	32,609	32,828	33,190	33,554	34,211
Nov	697	3,255,474	3,294,426	3,339,320	3,395,411	3,422,110	3,456,857	3,488,258	3,540,749	3,558,038	3,593,280	3,629,374
Dec	1,040	5,083,317	5,144,140	5,235,934	5,341,218	5,390,748	5,450,643	5,505,580	5,590,625	5,619,589	5,676,910	5,734,498
Jan	1,250	6,197,091	6,271,428	6,391,431	6,527,027	6,588,537	6,664,453	6,732,645	6,837,187	6,873,759	6,944,247	7,015,138
Feb	1,091	5,473,871	5,539,367	5,636,143	5,748,594	5,796,553	5,859,648	5,915,941	6,005,701	6,036,831	6,097,636	6,158,884
Mar	942	4,645,028	4,700,607	4,781,339	4,885,320	4,919,436	4,972,866	5,020,949	5,104,817	5,123,829	5,175,564	5,227,644
Apr	518	2,497,907	2,525,625	2,569,273	2,587,368	2,613,369	2,636,712	2,676,491	2,689,479	2,716,210	2,742,651	2,787,091
May	228	1,263,353	1,264,677	1,278,471	1,284,294	1,294,375	1,304,499	1,322,593	1,328,503	1,340,749	1,353,804	1,375,376
Jun	48	774,033	783,956	798,134	806,382	815,655	824,229	837,613	842,697	851,990	861,362	876,172
Jul	3	637,798	645,280	656,783	663,784	671,860	679,275	690,301	694,758	702,694	710,495	722,931
Aug	2	645,532	652,689	664,960	672,306	680,071	687,645	698,929	703,557	711,694	719,461	732,145
Sep	70	797,065	808,698	823,549	832,809	842,806	852,063	866,273	871,358	881,289	891,275	908,412
Oct	361	1,753,603	1,786,541	1,823,299	1,844,681	1,867,443	1,888,050	1,919,551	1,932,428	1,953,748	1,975,195	2,013,884
Total	6,250	33,024,072	33,417,434	33,998,637	34,589,192	34,902,964	35,276,941	35,675,124	36,141,860	36,370,421	36,741,878	37,181,548

Date	AI HDDd	RI FT-1 complete load 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	7,585	6,802	7,010	7,111	7,100	7,094	7,081	7,089	7,075	7,077	7,080
2-Nov	9	6,817	6,114	6,300	6,391	6,381	6,376	6,364	6,372	6,359	6,360	6,363
3-Nov	14	8,144	7,304	7,526	7,635	7,623	7,617	7,602	7,612	7,596	7,598	7,601
4-Nov	13	7,865	7,053	7,268	7,373	7,362	7,356	7,342	7,351	7,336	7,338	7,341
5-Nov	20	9,592	8,602	8,863	8,991	8,978	8,970	8,954	8,964	8,946	8,948	8,952
6-Nov	19	8,830	7,919	8,160	8,278	8,266	8,258	8,243	8,253	8,236	8,238	8,242
7-Nov	16	7,602	6,817	7,025	7,126	7,116	7,110	7,096	7,105	7,091	7,092	7,095
8-Nov	14	7,707	6,912	7,122	7,225	7,214	7,208	7,195	7,203	7,189	7,190	7,194
9-Nov	20	9,660	8,662	8,926	9,055	9,042	9,034	9,017	9,028	9,010	9,012	9,016
10-Nov	15	8,582	7,696	7,930	8,045	8,033	8,026	8,011	8,021	8,005	8,006	8,010
11-Nov	15	8,605	7,716	7,951	8,066	8,054	8,047	8,032	8,042	8,026	8,027	8,031
12-Nov	14	8,258	7,405	7,631	7,741	7,729	7,723	7,708	7,718	7,702	7,704	7,707
13-Nov	20	8,973	8,047	8,292	8,412	8,400	8,392	8,376	8,387	8,370	8,371	8,375
14-Nov	19	8,190	7,344	7,568	7,677	7,666	7,659	7,645	7,654	7,639	7,640	7,644
15-Nov	24	10,135	9,089	9,365	9,501	9,487	9,478	9,461	9,472	9,453	9,455	9,459
16-Nov	27	11,590	10,394	10,710	10,865	10,849	10,839	10,819	10,832	10,810	10,812	10,817
17-Nov	19	9,902	8,880	9,150	9,282	9,269	9,260	9,243	9,254	9,236	9,238	9,242
18-Nov	28	11,891	10,664	10,989	11,147	11,131	11,121	11,100	11,114	11,092	11,094	11,099
19-Nov	30	12,381	11,103	11,441	11,607	11,590	11,579	11,558	11,572	11,549	11,551	11,556
20-Nov	31	12,201	10,942	11,275	11,438	11,421	11,411	11,389	11,403	11,380	11,382	11,388
21-Nov	31	11,605	10,408	10,724	10,879	10,863	10,854	10,833	10,847	10,825	10,827	10,832
22-Nov	37	13,694	12,280	12,654	12,837	12,818	12,807	12,783	12,798	12,772	12,775	12,781
23-Nov	41	15,428	13,835	14,256	14,462	14,441	14,428	14,401	14,419	14,390	14,393	14,400
24-Nov	43	16,122	14,458	14,898	15,113	15,091	15,077	15,049	15,068	15,037	15,040	15,047
25-Nov	45	16,725	14,999	15,455	15,679	15,655	15,642	15,612	15,631	15,600	15,603	15,610
26-Nov	27	12,610	11,308	11,652	11,821	11,803	11,793	11,771	11,785	11,761	11,764	11,769
27-Nov	17	9,247	8,293	8,545	8,668	8,656	8,648	8,632	8,642	8,625	8,627	8,631
28-Nov	20	8,650	7,757	7,993	8,109	8,097	8,090	8,075	8,084	8,068	8,070	8,073
29-Nov	24	10,089	9,048	9,323	9,458	9,444	9,436	9,418	9,430	9,411	9,413	9,417
30-Nov	29	12,080	10,833	11,163	11,324	11,307	11,297	11,276	11,290	11,267	11,269	11,275
1-Dec	20	10,181	9,130	9,408	9,544	9,530	9,521	9,504	9,515	9,496	9,498	9,502
2-Dec	28	11,959	10,725	11,051	11,211	11,195	11,185	11,164	11,178	11,155	11,157	11,162
3-Dec	29	12,170	10,914	11,246	11,409	11,392	11,382	11,361	11,375	11,352	11,354	11,359
4-Dec	34	12,879	11,550	11,901	12,073	12,056	12,045	12,023	12,037	12,013	12,015	12,021
5-Dec	25	10,249	9,191	9,471	9,608	9,593	9,585	9,567	9,579	9,559	9,561	9,566
6-Dec	39	14,093	12,638	13,023	13,211	13,192	13,180	13,155	13,171	13,145	13,148	13,154
7-Dec	28	12,299	11,030	11,366	11,530	11,513	11,503	11,481	11,495	11,472	11,474	11,480
8-Dec	19	10,264	9,205	9,485	9,622	9,608	9,600	9,582	9,593	9,574	9,576	9,580
9-Dec	29	12,148	10,894	11,225	11,388	11,371	11,361	11,340	11,354	11,331	11,333	11,338
10-Dec	23	10,768	9,657	9,951	10,095	10,080	10,071	10,052	10,064	10,044	10,046	10,051
11-Dec	20	9,495	8,515	8,774	8,901	8,887	8,880	8,863	8,874	8,856	8,858	8,862
12-Dec	27	10,263	9,204	9,484	9,621	9,607	9,598	9,580	9,592	9,572	9,574	9,579
13-Dec	27	11,017	9,880	10,181	10,328	10,312	10,303	10,284	10,297	10,276	10,278	10,283
14-Dec	41	15,110	13,551	13,963	14,165	14,144	14,132	14,105	14,122	14,094	14,097	14,103
15-Dec	45	16,362	14,673	15,120	15,339	15,316	15,303	15,274	15,293	15,262	15,265	15,272
16-Dec	39	15,368	13,782	14,202	14,407	14,385	14,373	14,346	14,364	14,335	14,337	14,344
17-Dec	32	13,687	12,275	12,648	12,831	12,812	12,801	12,777	12,792	12,767	12,769	12,775
18-Dec	41	14,832	13,301	13,706	13,904	13,884	13,872	13,846	13,862	13,834	13,837	13,844
19-Dec	32	12,111	10,861	11,192	11,353	11,337	11,327	11,305	11,319	11,296	11,299	11,304
20-Dec	49	16,747	15,018	15,475	15,699	15,676	15,662	15,633	15,652	15,620	15,623	15,631
21-Dec	51	18,059	16,195	16,688	16,929	16,904	16,889	16,858	16,878	16,844	16,848	16,855
22-Dec	32	14,050	12,600	12,983	13,171	13,151	13,140	13,115	13,131	13,105	13,107	13,114
23-Dec	21	11,094	9,949	10,252	10,400	10,385	10,376	10,356	10,369	10,348	10,350	10,355
24-Dec	27	11,816	10,597	10,919	11,077	11,061	11,051	11,030	11,044	11,022	11,024	11,029
25-Dec	41	14,311	12,834	13,224	13,416	13,396	13,384	13,359	13,375	13,348	13,351	13,357
26-Dec	42	14,334	12,855	13,246	13,438	13,418	13,406	13,381	13,397	13,370	13,373	13,379
27-Dec	51	17,441	15,641	16,117	16,350	16,325	16,311	16,281	16,300	16,268	16,271	16,278
28-Dec	51	18,331	16,439	16,939	17,184	17,159	17,144	17,112	17,132	17,098	17,101	17,109
29-Dec	32	14,095	12,640	13,025	13,213	13,194	13,182	13,158	13,174	13,147	13,150	13,156
30-Dec	35	14,366	12,883	13,275	13,467	13,447	13,435	13,410	13,426	13,399	13,402	13,408
31-Dec	30	12,835	11,510	11,860	12,032	12,014	12,003	11,981	11,996	11,971	11,974	11,979
1-Jan	61	19,369	17,370	17,899	18,158	18,131	18,115	18,081	18,103	18,067	18,070	18,079
2-Jan	38	13,921	12,484	12,864	13,050	13,031	13,019	12,995	13,011	12,985	12,987	12,993
3-Jan	23	11,261	10,099	10,406	10,556	10,541	10,532	10,512	10,525	10,503	10,505	10,510
4-Jan	28	12,231	10,969	11,303	11,466	11,449	11,439	11,418	11,432	11,409	11,411	11,416
5-Jan	19	9,902	8,880	9,150	9,282	9,269	9,260	9,243	9,254	9,236	9,238	9,242
6-Jan	28	11,914	10,684	11,010	11,169	11,152	11,142	11,122	11,135	11,113	11,115	11,120
7-Jan	38	14,251	12,780	13,169	13,359	13,339	13,328	13,303	13,319	13,292	13,295	13,301
8-Jan	41	15,382	13,795	14,214	14,420	14,399	14,386	14,359	14,377	14,348	14,350	14,357
9-Jan	41	14,350	12,869	13,261	13,452	13,432	13,421	13,396	13,412	13,385	13,387	13,394
10-Jan	30	12,511	11,220	11,561	11,728	11,711	11,701	11,679	11,693	11,670	11,672	11,677
11-Jan	43	15,963	14,315	14,751	14,964	14,942	14,929	14,901	14,919	14,889	14,892	14,899
12-Jan	50	17,644	15,823	16,304	16,540	16,516	16,501	16,470	16,490	16,457	16,460	16,468
13-Jan	41	15,994	14,343	14,780	14,994	14,971	14,958	14,930	14,949	14,918	14,921	14,928
14-Jan	46	17,117	15,350	15,818	16,046	16,023	16,009	15,979	15,998	15,966	15,969	15,976
15-Jan	43	15,662	14,046	14,473	14,682	14,661	14,648	14,620	14,638	14,609	14,612	14,618
16-Jan	30	12,006	10,767	11,095	11,255	11,239	11,229	11,208	11,221	11,199	11,201	11,206
17-Jan	40	14,644	13,132	13,532	13,728	13,707	13,695	13,670	13,686	13,659	13,662	13,668
18-Jan	55	18,744	16,810	17,321	17,572	17,546	17,530	17,497	17,519	17,483	17,487	17,495
19-Jan	68	22,349	20,042	20,652	20,950	20,919	20,901	20,862	20,887	20,845	20,849	20,859
20-Jan	54	19,712	17,677	18,215	18,479	18,451	18,435	18,401	18,423	18,386	18,390	18,398
21-Jan	44	17,353	15,561	16,035	16,267	16,243	16,229	16,198	16,218	16,185	16,188	16,196
22-Jan	34	13,809	12,383	12,760	12,945	12,925	12,914	12,890	12,906	12,880	12,882	12,888
23-Jan	32	12,224	10,963	11,296	11,460	11,443	11,433	11,411	11,425	11,402	11,404	11,410
24-Jan	44	15,420	13,828	14,249	14,455	14,434	14,421	14,394	14,412	14,383	14,385	14,392
25-Jan	24	11,637	10,436	10,753	10,909	10,893	10,883	10,863	10,876	10,854	10,856	10,861
26-Jan	41	15,428	13,835	14,256	14,462	14,441	14,428	14,401	14,419	14,390	14,393	14,400
27-Jan	46	16,528	14,822	15,273	15,494	15,471	15,457	15,429	15,447	15,416	15,419	15,426

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI FT-1 complete load 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	13,755	12,336	12,711	12,895	12,876	12,864	12,840	12,856	12,830	12,833	12,839
29-Jan	46	16,159	14,491	14,932	15,148	15,126	15,113	15,084	15,103	15,072	15,075	15,082
30-Jan	47	15,729	14,106	14,535	14,745	14,723	14,711	14,683	14,701	14,671	14,674	14,681
31-Jan	43	15,798	14,168	14,599	14,810	14,788	14,775	14,747	14,765	14,735	14,738	14,745
1-Feb	17	10,318	9,253	9,535	9,673	9,658	9,650	9,632	9,644	9,624	9,626	9,631
2-Feb	28	12,209	10,949	11,282	11,445	11,428	11,418	11,397	11,411	11,387	11,390	11,395
3-Feb	45	15,841	14,206	14,638	14,850	14,828	14,815	14,787	14,805	14,775	14,778	14,785
4-Feb	45	16,476	14,775	15,225	15,445	15,422	15,409	15,380	15,398	15,367	15,370	15,378
5-Feb	56	18,768	16,831	17,343	17,594	17,568	17,552	17,519	17,541	17,505	17,509	17,517
6-Feb	56	18,354	16,459	16,960	17,205	17,180	17,165	17,133	17,154	17,119	17,122	17,130
7-Feb	57	19,500	17,487	18,020	18,280	18,253	18,237	18,203	18,225	18,188	18,192	18,200
8-Feb	42	16,681	14,959	15,415	15,638	15,614	15,601	15,572	15,591	15,559	15,562	15,570
9-Feb	44	16,831	15,094	15,553	15,778	15,755	15,741	15,712	15,731	15,699	15,702	15,710
10-Feb	39	15,368	13,782	14,202	14,407	14,385	14,373	14,346	14,364	14,335	14,337	14,344
11-Feb	42	16,001	14,350	14,786	15,000	14,978	14,965	14,937	14,955	14,925	14,928	14,935
12-Feb	37	14,124	12,666	13,052	13,240	13,221	13,209	13,185	13,201	13,174	13,177	13,183
13-Feb	43	14,817	13,288	13,692	13,890	13,870	13,858	13,832	13,849	13,821	13,823	13,830
14-Feb	45	15,971	14,322	14,758	14,972	14,949	14,936	14,908	14,927	14,896	14,899	14,906
15-Feb	32	13,778	12,356	12,732	12,916	12,897	12,886	12,862	12,877	12,851	12,854	12,860
16-Feb	33	13,762	12,342	12,717	12,901	12,882	12,871	12,847	12,863	12,837	12,839	12,845
17-Feb	35	13,958	12,517	12,898	13,084	13,065	13,054	13,029	13,045	13,019	13,021	13,028
18-Feb	31	13,091	11,740	12,097	12,272	12,254	12,243	12,220	12,235	12,210	12,213	12,219
19-Feb	37	13,784	12,361	12,738	12,922	12,903	12,891	12,867	12,883	12,857	12,860	12,866
20-Feb	22	9,661	8,664	8,928	9,057	9,043	9,035	9,019	9,029	9,011	9,013	9,017
21-Feb	39	14,093	12,638	13,023	13,211	13,192	13,180	13,155	13,171	13,145	13,148	13,154
22-Feb	43	15,736	14,112	14,542	14,752	14,730	14,717	14,690	14,707	14,678	14,681	14,688
23-Feb	22	11,305	10,138	10,447	10,598	10,582	10,573	10,553	10,566	10,545	10,547	10,552
24-Feb	35	13,958	12,517	12,898	13,084	13,065	13,054	13,029	13,045	13,019	13,021	13,028
25-Feb	43	15,646	14,031	14,458	14,667	14,645	14,632	14,605	14,623	14,593	14,596	14,603
26-Feb	43	15,458	13,863	14,285	14,491	14,470	14,457	14,430	14,447	14,418	14,421	14,428
27-Feb	41	14,509	13,011	13,407	13,601	13,581	13,569	13,544	13,560	13,533	13,535	13,542
28-Feb	39	14,660	13,146	13,547	13,742	13,722	13,710	13,684	13,701	13,673	13,676	13,683
1-Mar	47	17,102	15,336	15,803	16,032	16,008	15,994	15,964	15,983	15,951	15,954	15,962
2-Mar	32	13,733	12,315	12,690	12,873	12,854	12,843	12,819	12,835	12,809	12,811	12,817
3-Mar	43	16,144	14,478	14,919	15,134	15,112	15,099	15,070	15,089	15,058	15,061	15,068
4-Mar	42	15,820	14,187	14,619	14,830	14,808	14,795	14,768	14,786	14,756	14,759	14,766
5-Mar	27	11,878	10,652	10,976	11,135	11,119	11,109	11,088	11,102	11,079	11,081	11,087
6-Mar	36	12,955	11,618	11,972	12,145	12,127	12,116	12,093	12,108	12,084	12,086	12,092
7-Mar	32	12,548	11,253	11,595	11,763	11,745	11,735	11,713	11,728	11,704	11,706	11,712
8-Mar	41	15,428	13,835	14,256	14,462	14,441	14,428	14,401	14,419	14,390	14,393	14,400
9-Mar	45	16,476	14,775	15,225	15,445	15,422	15,409	15,380	15,398	15,367	15,370	15,378
10-Mar	46	17,004	15,249	15,713	15,940	15,916	15,903	15,873	15,892	15,860	15,863	15,871
11-Mar	21	11,276	10,112	10,420	10,570	10,555	10,545	10,526	10,538	10,517	10,519	10,524
12-Mar	16	8,900	7,981	8,224	8,343	8,331	8,324	8,308	8,318	8,301	8,303	8,307
13-Mar	22	8,959	8,034	8,278	8,398	8,386	8,378	8,363	8,373	8,356	8,358	8,362
14-Mar	20	9,177	8,230	8,481	8,603	8,590	8,583	8,567	8,577	8,560	8,562	8,566
15-Mar	25	11,100	9,954	10,257	10,405	10,390	10,381	10,361	10,374	10,353	10,355	10,360
16-Mar	27	11,635	10,434	10,752	10,907	10,891	10,882	10,861	10,874	10,852	10,855	10,860
17-Mar	35	13,663	12,253	12,626	12,808	12,789	12,778	12,754	12,770	12,744	12,747	12,752
18-Mar	27	12,020	10,780	11,108	11,268	11,252	11,242	11,221	11,234	11,212	11,214	11,219
19-Mar	28	11,591	10,394	10,711	10,865	10,849	10,840	10,820	10,833	10,811	10,813	10,818
20-Mar	28	10,768	9,657	9,951	10,095	10,080	10,071	10,052	10,064	10,044	10,046	10,051
21-Mar	28	11,455	10,272	10,585	10,738	10,722	10,713	10,693	10,706	10,684	10,686	10,691
22-Mar	21	10,482	9,400	9,687	9,827	9,812	9,803	9,785	9,797	9,777	9,779	9,784
23-Mar	24	11,025	9,887	10,188	10,335	10,320	10,311	10,291	10,304	10,283	10,285	10,290
24-Mar	29	12,102	10,853	11,184	11,345	11,328	11,319	11,297	11,311	11,288	11,291	11,296
25-Mar	21	10,414	9,340	9,624	9,763	9,748	9,740	9,722	9,734	9,714	9,716	9,720
26-Mar	26	10,851	9,731	10,027	10,172	10,157	10,148	10,130	10,142	10,121	10,123	10,128
27-Mar	41	13,625	12,218	12,590	12,772	12,753	12,742	12,718	12,734	12,708	12,711	12,717
28-Mar	42	14,975	13,430	13,838	14,038	14,017	14,005	13,979	13,996	13,968	13,971	13,977
29-Mar	29	12,964	11,626	11,979	12,153	12,135	12,124	12,101	12,116	12,092	12,094	12,100
30-Mar	20	10,589	9,496	9,785	9,926	9,912	9,903	9,884	9,896	9,876	9,878	9,883
31-Mar	21	10,324	9,258	9,540	9,678	9,664	9,655	9,637	9,649	9,629	9,631	9,636
1-Apr	23	9,474	9,762	9,903	9,889	9,880	9,862	9,874	9,854	9,856	9,860	9,902
2-Apr	24	9,765	10,062	10,208	10,192	10,184	10,165	10,177	10,156	10,158	10,163	10,206
3-Apr	25	9,461	9,749	9,890	9,875	9,866	9,848	9,860	9,840	9,842	9,847	9,888
4-Apr	21	8,068	8,314	8,434	8,421	8,414	8,398	8,409	8,392	8,393	8,397	8,433
5-Apr	39	12,374	12,751	12,935	12,916	12,905	12,880	12,896	12,870	12,873	12,879	12,933
6-Apr	31	11,577	11,930	12,102	12,084	12,074	12,051	12,066	12,041	12,044	12,049	12,100
7-Apr	19	9,266	9,548	9,686	9,672	9,663	9,645	9,657	9,637	9,639	9,644	9,684
8-Apr	29	10,955	11,288	11,451	11,435	11,425	11,403	11,417	11,394	11,396	11,402	11,450
9-Apr	12	7,352	7,576	7,685	7,674	7,667	7,653	7,662	7,647	7,648	7,652	7,684
10-Apr	22	8,710	8,975	9,105	9,092	9,084	9,067	9,078	9,059	9,061	9,065	9,104
11-Apr	21	7,763	8,000	8,115	8,103	8,096	8,081	8,091	8,075	8,076	8,080	8,114
12-Apr	19	8,122	8,369	8,490	8,478	8,470	8,455	8,465	8,448	8,449	8,453	8,489
13-Apr	7	6,142	6,329	6,420	6,411	6,405	6,393	6,401	6,388	6,389	6,392	6,419
14-Apr	15	7,533	7,763	7,875	7,863	7,856	7,842	7,851	7,835	7,837	7,841	7,874
15-Apr	17	7,871	8,111	8,228	8,216	8,209	8,193	8,203	8,187	8,188	8,192	8,227
16-Apr	21	8,913	9,184	9,317	9,303	9,295	9,277	9,289	9,270	9,272	9,276	9,315
17-Apr	21	8,440	8,697	8,822	8,809	8,801	8,785	8,796	8,778	8,780	8,784	8,821
18-Apr	13	6,250	6,440	6,533	6,523	6,518	6,505	6,513	6,500	6,501	6,504	6,532
19-Apr	15	7,101	7,317	7,423	7,412	7,406	7,392	7,401	7,386	7,387	7,391	7,422
20-Apr	5	5,479	5,645	5,727	5,719	5,714	5,703	5,710	5,698	5,699	5,702	5,726
21-Apr	14	7,202	7,421	7,528	7,517	7,511	7,497	7,506	7,491	7,492	7,496	7,527
22-Apr	7	5,715	5,889	5,974	5,965	5,960	5,949	5,956	5,944	5,945	5,948	5,973
23-Apr	15	7,432	7,658	7,769	7,757	7,750	7,736	7,745	7,730	7,731	7,735	7,767
24-Apr	15	6,857	7,066	7,168	7,157	7,151	7,138	7,146	7,132	7,133	7,137	7,167
25-Apr	14	6,215	6,404	6,497	6,487	6,482	6,470	6,477	6,464	6,466	6,469	6,496

	AI	RI FT-1 complete load										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	5,952	6,133	6,222	6,212	6,207	6,195	6,203	6,190	6,192	6,194	6,221
27-Apr	7	5,816	5,993	6,080	6,071	6,066	6,054	6,062	6,050	6,051	6,054	6,079
28-Apr	8	5,884	6,063	6,150	6,141	6,136	6,125	6,132	6,120	6,121	6,124	6,149
29-Apr	13	6,891	7,101	7,203	7,192	7,186	7,173	7,182	7,167	7,168	7,172	7,202
30-Apr	16	7,641	7,874	7,988	7,976	7,969	7,954	7,964	7,948	7,949	7,953	7,987
1-May	0	5,742	5,917	6,002	5,994	5,988	5,977	5,984	5,972	5,974	5,976	6,002
2-May	0	5,275	5,436	5,515	5,506	5,502	5,491	5,498	5,487	5,488	5,491	5,514
3-May	0	5,748	5,923	6,009	6,000	5,995	5,984	5,991	5,979	5,980	5,983	6,008
4-May	0	6,364	6,557	6,652	6,642	6,637	6,624	6,632	6,619	6,620	6,623	6,651
5-May	6	5,526	5,694	5,776	5,768	5,763	5,752	5,759	5,747	5,748	5,751	5,775
6-May	17	7,749	7,985	8,101	8,089	8,082	8,066	8,076	8,060	8,062	8,065	8,099
7-May	23	9,149	9,427	9,564	9,549	9,541	9,523	9,535	9,516	9,517	9,522	9,562
8-May	14	7,013	7,227	7,331	7,321	7,314	7,300	7,309	7,295	7,296	7,300	7,330
9-May	13	6,148	6,335	6,427	6,417	6,412	6,400	6,407	6,394	6,396	6,399	6,426
10-May	2	4,740	4,884	4,955	4,947	4,943	4,934	4,940	4,930	4,931	4,933	4,954
11-May	0	5,634	5,805	5,889	5,880	5,875	5,864	5,871	5,859	5,861	5,863	5,888
12-May	0	5,512	5,679	5,761	5,753	5,748	5,737	5,744	5,733	5,734	5,736	5,761
13-May	3	5,074	5,228	5,304	5,296	5,292	5,282	5,288	5,277	5,279	5,281	5,303
14-May	8	5,741	5,916	6,002	5,993	5,988	5,976	5,984	5,972	5,973	5,976	6,001
15-May	12	6,005	6,188	6,277	6,268	6,262	6,251	6,258	6,246	6,247	6,250	6,276
16-May	17	6,641	6,843	6,942	6,931	6,925	6,912	6,921	6,907	6,908	6,911	6,941
17-May	12	6,371	6,565	6,660	6,650	6,644	6,632	6,640	6,626	6,628	6,631	6,659
18-May	12	6,966	7,178	7,282	7,271	7,264	7,251	7,260	7,245	7,246	7,250	7,280
19-May	1	5,270	5,431	5,509	5,501	5,496	5,486	5,492	5,481	5,482	5,485	5,508
20-May	8	5,802	5,979	6,065	6,056	6,051	6,040	6,047	6,035	6,036	6,039	6,064
21-May	9	5,931	6,111	6,199	6,190	6,185	6,173	6,181	6,168	6,170	6,173	6,199
22-May	9	5,498	5,666	5,748	5,739	5,734	5,723	5,730	5,719	5,720	5,723	5,747
23-May	8	4,714	4,858	4,928	4,920	4,916	4,907	4,913	4,903	4,904	4,906	4,927
24-May	10	5,708	5,882	5,967	5,958	5,953	5,941	5,949	5,937	5,938	5,941	5,966
25-May	7	5,695	5,868	5,953	5,944	5,939	5,928	5,935	5,923	5,924	5,927	5,952
26-May	7	5,674	5,847	5,931	5,923	5,917	5,906	5,914	5,902	5,903	5,906	5,930
27-May	1	5,067	5,221	5,297	5,289	5,284	5,274	5,281	5,270	5,271	5,274	5,296
28-May	5	5,072	5,227	5,302	5,294	5,290	5,280	5,286	5,275	5,277	5,279	5,301
29-May	3	4,316	4,448	4,512	4,505	4,502	4,493	4,499	4,490	4,490	4,493	4,511
30-May	9	4,720	4,864	4,934	4,927	4,923	4,914	4,920	4,910	4,911	4,913	4,934
31-May	12	6,025	6,209	6,298	6,289	6,284	6,272	6,279	6,267	6,268	6,271	6,297
1-Jun	6	5,546	5,715	5,797	5,789	5,784	5,773	5,780	5,768	5,769	5,772	5,796
2-Jun	7	5,695	5,868	5,953	5,944	5,939	5,928	5,935	5,923	5,924	5,927	5,952
3-Jun	2	5,050	5,204	5,279	5,271	5,267	5,257	5,263	5,253	5,254	5,256	5,278
4-Jun	0	4,965	5,116	5,190	5,183	5,178	5,168	5,175	5,164	5,165	5,168	5,190
5-Jun	0	4,248	4,378	4,441	4,434	4,430	4,422	4,428	4,419	4,420	4,422	4,440
6-Jun	0	3,637	3,747	3,801	3,796	3,793	3,785	3,790	3,782	3,783	3,785	3,801
7-Jun	0	4,248	4,378	4,441	4,434	4,430	4,422	4,428	4,419	4,420	4,422	4,440
8-Jun	0	4,833	4,980	5,052	5,044	5,040	5,030	5,036	5,026	5,027	5,030	5,051
9-Jun	0	4,751	4,896	4,967	4,959	4,955	4,946	4,952	4,942	4,943	4,945	4,966
10-Jun	0	4,687	4,829	4,899	4,892	4,888	4,878	4,884	4,875	4,876	4,878	4,898
11-Jun	0	4,666	4,808	4,878	4,871	4,866	4,857	4,863	4,853	4,854	4,857	4,877
12-Jun	0	4,058	4,182	4,242	4,236	4,232	4,224	4,229	4,221	4,222	4,224	4,242
13-Jun	0	3,504	3,611	3,663	3,657	3,654	3,647	3,652	3,644	3,645	3,647	3,662
14-Jun	0	4,136	4,262	4,323	4,317	4,313	4,305	4,310	4,302	4,303	4,305	4,323
15-Jun	9	5,687	5,860	5,945	5,936	5,931	5,919	5,927	5,915	5,916	5,919	5,944
16-Jun	7	5,471	5,637	5,719	5,710	5,705	5,695	5,702	5,690	5,691	5,694	5,718
17-Jun	1	5,108	5,263	5,339	5,331	5,327	5,317	5,323	5,312	5,313	5,316	5,338
18-Jun	5	5,072	5,227	5,302	5,294	5,290	5,280	5,286	5,275	5,277	5,279	5,301
19-Jun	6	4,646	4,787	4,857	4,849	4,845	4,836	4,842	4,832	4,833	4,836	4,856
20-Jun	5	3,943	4,063	4,122	4,116	4,112	4,105	4,110	4,101	4,102	4,104	4,121
21-Jun	0	4,389	4,523	4,588	4,582	4,578	4,569	4,575	4,565	4,566	4,568	4,588
22-Jun	0	4,761	4,906	4,977	4,969	4,965	4,956	4,962	4,952	4,953	4,955	4,976
23-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
24-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
25-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
26-Jun	0	3,955	4,076	4,135	4,129	4,125	4,117	4,122	4,114	4,115	4,117	4,134
27-Jun	0	3,320	3,421	3,470	3,465	3,462	3,456	3,460	3,453	3,453	3,455	3,470
28-Jun	0	3,874	3,992	4,050	4,044	4,040	4,033	4,037	4,029	4,030	4,032	4,049
29-Jun	0	4,473	4,609	4,675	4,668	4,664	4,656	4,661	4,652	4,653	4,655	4,675
30-Jun	0	4,493	4,630	4,697	4,690	4,686	4,677	4,683	4,673	4,674	4,676	4,696
1-Jul	0	4,513	4,651	4,718	4,711	4,707	4,698	4,704	4,694	4,695	4,697	4,717
2-Jul	0	4,513	4,651	4,718	4,711	4,707	4,698	4,704	4,694	4,695	4,697	4,717
3-Jul	0	3,915	4,034	4,092	4,086	4,083	4,075	4,080	4,072	4,072	4,074	4,092
4-Jul	0	3,296	3,396	3,445	3,440	3,437	3,431	3,435	3,428	3,429	3,430	3,445
5-Jul	0	3,854	3,971	4,028	4,022	4,019	4,011	4,016	4,008	4,009	4,011	4,028
6-Jul	1	4,477	4,614	4,680	4,673	4,669	4,661	4,666	4,657	4,658	4,660	4,680
7-Jul	2	4,664	4,806	4,875	4,868	4,864	4,855	4,861	4,851	4,852	4,854	4,875
8-Jul	0	4,807	4,954	5,025	5,018	5,013	5,004	5,010	5,000	5,001	5,003	5,025
9-Jul	0	4,601	4,741	4,809	4,802	4,798	4,789	4,795	4,785	4,786	4,788	4,808
10-Jul	0	3,762	3,876	3,932	3,926	3,923	3,916	3,920	3,912	3,913	3,915	3,932
11-Jul	0	3,154	3,250	3,296	3,292	3,289	3,283	3,287	3,280	3,281	3,282	3,296
12-Jul	0	3,793	3,908	3,965	3,959	3,955	3,948	3,953	3,945	3,946	3,947	3,964
13-Jul	0	4,445	4,580	4,647	4,640	4,636	4,627	4,633	4,623	4,624	4,626	4,646
14-Jul	0	4,442	4,577	4,643	4,636	4,632	4,623	4,629	4,620	4,620	4,623	4,642
15-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
16-Jul	0	4,377	4,510	4,575	4,569	4,565	4,556	4,562	4,552	4,553	4,555	4,575
17-Jul	0	3,758	3,872	3,928	3,923	3,919	3,912	3,917	3,909	3,909	3,911	3,928
18-Jul	0	3,119	3,214	3,260	3,255	3,253	3,246	3,250	3,244	3,244	3,246	3,260
19-Jul	0	3,677	3,789	3,843	3,838	3,834	3,827	3,832	3,824	3,825	3,827	3,843
20-Jul	0	4,275	4,405	4,469	4,463	4,459	4,450	4,456	4,447	4,448	4,450	4,468
21-Jul	0	4,312	4,444	4,508	4,501	4,497	4,489	4,494	4,485	4,486	4,488	4,507
22-Jul	0	4,316	4,447	4,512	4,505	4,501	4,493	4,498	4,489	4,490	4,492	4,511

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI FT-1 complete load										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	4,320	4,451	4,515	4,509	4,505	4,496	4,502	4,493	4,494	4,496	4,515
24-Jul	0	3,765	3,880	3,936	3,930	3,927	3,919	3,924	3,916	3,917	3,919	3,935
25-Jul	0	3,191	3,288	3,335	3,330	3,327	3,321	3,325	3,318	3,319	3,321	3,335
26-Jul	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
27-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
28-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
29-Jul	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
30-Jul	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
31-Jul	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
1-Aug	0	3,207	3,305	3,353	3,348	3,345	3,339	3,343	3,336	3,337	3,338	3,352
2-Aug	0	3,778	3,893	3,950	3,944	3,940	3,933	3,938	3,930	3,931	3,932	3,949
3-Aug	0	4,312	4,444	4,508	4,501	4,497	4,489	4,494	4,485	4,486	4,488	4,507
4-Aug	0	4,292	4,423	4,487	4,480	4,476	4,468	4,473	4,464	4,465	4,467	4,486
5-Aug	0	4,296	4,426	4,490	4,484	4,480	4,471	4,477	4,468	4,469	4,471	4,490
6-Aug	0	4,323	4,455	4,519	4,512	4,509	4,500	4,506	4,496	4,497	4,499	4,518
7-Aug	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
8-Aug	0	3,231	3,330	3,378	3,373	3,370	3,363	3,368	3,361	3,361	3,363	3,377
9-Aug	0	3,806	3,922	3,978	3,973	3,969	3,962	3,966	3,958	3,959	3,961	3,978
10-Aug	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
11-Aug	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
12-Aug	0	4,388	4,521	4,587	4,580	4,576	4,567	4,573	4,564	4,565	4,567	4,586
13-Aug	0	4,425	4,559	4,625	4,619	4,614	4,606	4,611	4,602	4,603	4,605	4,625
14-Aug	0	3,850	3,967	4,025	4,019	4,015	4,008	4,013	4,004	4,005	4,007	4,024
15-Aug	0	3,238	3,337	3,385	3,380	3,377	3,371	3,375	3,368	3,369	3,370	3,385
16-Aug	0	3,850	3,967	4,025	4,019	4,015	4,008	4,013	4,004	4,005	4,007	4,024
17-Aug	0	4,445	4,580	4,647	4,640	4,636	4,627	4,633	4,623	4,624	4,626	4,646
18-Aug	1	4,457	4,593	4,659	4,652	4,648	4,640	4,645	4,636	4,637	4,639	4,658
19-Aug	0	4,615	4,755	4,824	4,817	4,813	4,804	4,810	4,800	4,801	4,803	4,823
20-Aug	0	4,656	4,797	4,867	4,859	4,855	4,846	4,852	4,842	4,843	4,845	4,866
21-Aug	1	3,943	4,063	4,122	4,116	4,113	4,105	4,110	4,102	4,102	4,104	4,122
22-Aug	0	3,466	3,571	3,623	3,617	3,614	3,607	3,612	3,605	3,605	3,607	3,622
23-Aug	0	4,064	4,188	4,248	4,242	4,238	4,230	4,236	4,227	4,228	4,230	4,248
24-Aug	0	4,537	4,675	4,743	4,736	4,732	4,723	4,729	4,719	4,720	4,722	4,742
25-Aug	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
26-Aug	0	4,554	4,693	4,760	4,753	4,749	4,740	4,746	4,736	4,737	4,740	4,760
27-Aug	0	4,530	4,668	4,735	4,728	4,724	4,715	4,721	4,712	4,713	4,715	4,735
28-Aug	0	3,891	4,009	4,067	4,061	4,058	4,050	4,055	4,047	4,048	4,049	4,067
29-Aug	0	3,262	3,362	3,410	3,405	3,402	3,396	3,400	3,393	3,394	3,395	3,410
30-Aug	0	3,881	3,999	4,057	4,051	4,048	4,040	4,045	4,037	4,038	4,040	4,057
31-Aug	0	4,537	4,675	4,743	4,736	4,732	4,723	4,729	4,719	4,720	4,722	4,742
1-Sep	0	4,561	4,700	4,768	4,761	4,757	4,748	4,754	4,744	4,745	4,747	4,767
2-Sep	0	4,581	4,721	4,789	4,782	4,778	4,769	4,775	4,765	4,766	4,768	4,788
3-Sep	0	4,602	4,742	4,810	4,803	4,799	4,790	4,796	4,786	4,787	4,789	4,810
4-Sep	0	4,007	4,129	4,188	4,182	4,179	4,171	4,176	4,167	4,168	4,170	4,188
5-Sep	0	3,415	3,519	3,570	3,565	3,562	3,555	3,559	3,552	3,553	3,555	3,570
6-Sep	0	4,031	4,153	4,213	4,207	4,204	4,196	4,201	4,192	4,193	4,195	4,213
7-Sep	0	4,646	4,787	4,857	4,849	4,845	4,836	4,842	4,832	4,833	4,835	4,856
8-Sep	0	4,650	4,791	4,860	4,853	4,849	4,840	4,846	4,836	4,837	4,839	4,860
9-Sep	0	4,670	4,812	4,882	4,874	4,870	4,861	4,867	4,857	4,858	4,860	4,881
10-Sep	3	4,708	4,852	4,922	4,914	4,910	4,901	4,907	4,897	4,898	4,900	4,921
11-Sep	3	4,215	4,343	4,406	4,399	4,396	4,387	4,393	4,384	4,385	4,387	4,405
12-Sep	0	3,707	3,820	3,875	3,869	3,866	3,859	3,864	3,856	3,856	3,858	3,875
13-Sep	0	4,217	4,346	4,408	4,402	4,398	4,390	4,395	4,386	4,387	4,389	4,408
14-Sep	0	4,711	4,854	4,924	4,917	4,913	4,903	4,909	4,899	4,900	4,903	4,923
15-Sep	1	4,701	4,844	4,914	4,907	4,903	4,893	4,899	4,889	4,890	4,893	4,913
16-Sep	3	4,769	4,914	4,985	4,978	4,974	4,964	4,970	4,960	4,961	4,964	4,985
17-Sep	0	4,864	5,012	5,084	5,077	5,072	5,063	5,069	5,059	5,060	5,062	5,083
18-Sep	0	4,269	4,399	4,462	4,456	4,452	4,443	4,449	4,440	4,441	4,443	4,461
19-Sep	2	3,637	3,747	3,801	3,796	3,793	3,785	3,790	3,782	3,783	3,785	3,801
20-Sep	7	4,795	4,941	5,012	5,005	5,000	4,991	4,997	4,987	4,988	4,990	5,011
21-Sep	5	5,092	5,247	5,323	5,315	5,311	5,301	5,307	5,297	5,298	5,300	5,322
22-Sep	0	5,026	5,179	5,254	5,246	5,242	5,232	5,238	5,228	5,229	5,231	5,253
23-Sep	6	5,241	5,401	5,479	5,471	5,466	5,456	5,462	5,451	5,452	5,455	5,478
24-Sep	12	6,519	6,717	6,814	6,804	6,798	6,785	6,794	6,780	6,781	6,784	6,813
25-Sep	1	4,553	4,692	4,760	4,753	4,748	4,740	4,745	4,736	4,737	4,739	4,759
26-Sep	0	3,864	3,981	4,039	4,033	4,029	4,022	4,027	4,019	4,019	4,021	4,038
27-Sep	1	4,269	4,399	4,462	4,456	4,452	4,443	4,449	4,440	4,441	4,443	4,461
28-Sep	5	4,991	5,143	5,217	5,209	5,205	5,195	5,201	5,191	5,192	5,194	5,216
29-Sep	8	5,660	5,832	5,917	5,908	5,903	5,892	5,899	5,887	5,888	5,891	5,916
30-Sep	13	6,850	7,059	7,161	7,150	7,144	7,130	7,139	7,125	7,126	7,130	7,160
1-Oct	0	5,755	5,931	6,016	6,007	6,002	5,991	5,998	5,986	5,987	5,990	6,015
2-Oct	7	5,140	5,297	5,373	5,365	5,361	5,351	5,357	5,346	5,347	5,350	5,372
3-Oct	9	4,842	4,990	5,062	5,054	5,050	5,040	5,047	5,036	5,037	5,040	5,061
4-Oct	1	4,513	4,650	4,717	4,710	4,706	4,697	4,703	4,693	4,694	4,697	4,716
5-Oct	3	4,993	5,145	5,219	5,211	5,207	5,197	5,203	5,193	5,194	5,196	5,218
6-Oct	0	5,619	5,791	5,874	5,866	5,860	5,849	5,857	5,845	5,846	5,849	5,873
7-Oct	2	5,009	5,162	5,237	5,229	5,224	5,215	5,221	5,210	5,211	5,214	5,236
8-Oct	0	5,951	6,132	6,221	6,212	6,206	6,195	6,202	6,190	6,191	6,194	6,220
9-Oct	14	6,424	6,620	6,715	6,705	6,699	6,687	6,695	6,682	6,683	6,686	6,714
10-Oct	23	7,959	8,201	8,320	8,307	8,300	8,285	8,295	8,278	8,280	8,283	8,318
11-Oct	19	8,000	8,244	8,363	8,351	8,343	8,328	8,338	8,321	8,323	8,326	8,362
12-Oct	16	8,068	8,314	8,434	8,421	8,414	8,398	8,409	8,392	8,393	8,397	8,433
13-Oct	9	6,459	6,656	6,752	6,742	6,736	6,723	6,732	6,718	6,719	6,723	6,751
14-Oct	6	5,627	5,799	5,882	5,874	5,868	5,858	5,865	5,853	5,854	5,857	5,881
15-Oct	5	5,214	5,373	5,451	5,443	5,438	5,428	5,434	5,423	5,425	5,427	5,450
16-Oct	15	6,634	6,835	6,934	6,924	6,918	6,905	6,913	6,900	6,901	6,904	6,933
17-Oct	20	7,269	7,491	7,599	7,588	7,581	7,567	7,576	7,561	7,562	7,566	7,598
18-Oct	19	7,960	8,202	8,320	8,308	8,301	8,285	8,295	8,279	8,280	8,284	8,319

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI FT-1 complete load 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	7,379	7,603	7,713	7,702	7,695	7,681	7,690	7,674	7,676	7,680	7,712
20-Oct	9	6,398	6,593	6,688	6,678	6,672	6,660	6,668	6,655	6,656	6,659	6,687
21-Oct	12	6,824	7,031	7,133	7,122	7,116	7,103	7,111	7,097	7,098	7,102	7,132
22-Oct	21	8,689	8,954	9,083	9,070	9,062	9,045	9,056	9,037	9,039	9,043	9,082
23-Oct	23	8,757	9,024	9,154	9,141	9,133	9,115	9,127	9,108	9,110	9,114	9,153
24-Oct	23	8,386	8,641	8,766	8,753	8,745	8,729	8,739	8,722	8,724	8,728	8,764
25-Oct	22	8,812	9,080	9,211	9,198	9,190	9,172	9,184	9,165	9,167	9,171	9,210
26-Oct	15	7,920	8,161	8,279	8,266	8,259	8,244	8,254	8,237	8,239	8,243	8,277
27-Oct	16	7,967	8,209	8,328	8,315	8,308	8,293	8,303	8,286	8,288	8,291	8,326
28-Oct	16	7,845	8,083	8,200	8,188	8,181	8,166	8,176	8,159	8,161	8,165	8,199
29-Oct	14	7,446	7,672	7,783	7,772	7,765	7,751	7,760	7,744	7,746	7,750	7,782
30-Oct	7	5,343	5,506	5,586	5,577	5,573	5,562	5,569	5,558	5,559	5,561	5,585
31-Oct	2	4,023	4,145	4,205	4,199	4,195	4,187	4,193	4,184	4,185	4,187	4,204
Nov	697	310,759	278,683	287,165	291,316	290,885	290,631	290,088	290,441	289,854	289,912	290,048
Dec	1,040	412,737	370,135	381,401	386,914	386,341	386,004	385,283	385,752	384,973	385,050	385,230
Jan	1,250	468,769	420,383	433,178	439,439	438,789	438,406	437,587	438,120	437,235	437,322	437,527
Feb	1,091	414,659	371,859	383,177	388,715	388,140	387,801	387,077	387,548	386,765	386,842	387,024
Mar	942	386,983	347,039	357,602	362,770	362,234	361,918	361,241	361,681	360,951	361,023	361,192
Apr	518	236,221	243,410	246,929	246,563	246,348	245,888	246,187	245,690	245,739	245,854	246,890
May	228	180,891	186,396	189,091	188,811	188,646	188,294	188,523	188,142	188,180	188,268	189,061
Jun	48	136,888	141,054	143,093	142,881	142,757	142,490	142,663	142,375	142,404	142,470	143,070
Jul	3	126,886	130,748	132,638	132,442	132,326	132,079	132,240	131,973	131,999	132,061	132,617
Aug	2	126,944	130,807	132,698	132,502	132,386	132,139	132,299	132,032	132,059	132,121	132,677
Sep	70	139,820	144,075	146,158	145,941	145,814	145,542	145,719	145,424	145,453	145,522	146,135
Oct	361	207,225	213,532	216,618	216,298	216,109	215,705	215,968	215,532	215,575	215,676	216,584
Total	6,250	3,148,781	2,978,123	3,049,746	3,074,592	3,070,775	3,066,895	3,064,874	3,064,709	3,061,186	3,062,122	3,068,057

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI FT-1 (Pipeline only) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	7,585	6,802	7,010	7,111	7,100	7,094	7,081	7,089	7,075	7,077	7,080
2-Nov	9	6,817	6,114	6,300	6,391	6,381	6,376	6,364	6,372	6,359	6,360	6,363
3-Nov	14	8,144	7,304	7,526	7,635	7,623	7,617	7,602	7,612	7,596	7,598	7,601
4-Nov	13	7,865	7,053	7,268	7,373	7,362	7,356	7,342	7,351	7,336	7,338	7,341
5-Nov	20	9,592	8,602	8,863	8,991	8,978	8,970	8,954	8,964	8,946	8,948	8,952
6-Nov	19	8,830	7,919	8,160	8,278	8,266	8,258	8,243	8,253	8,236	8,238	8,242
7-Nov	16	7,602	6,817	7,025	7,126	7,116	7,110	7,096	7,105	7,091	7,092	7,095
8-Nov	14	7,707	6,912	7,122	7,225	7,214	7,208	7,195	7,203	7,189	7,190	7,194
9-Nov	20	9,660	8,662	8,926	9,055	9,042	9,034	9,017	9,028	9,010	9,012	9,016
10-Nov	15	8,582	7,696	7,930	8,045	8,033	8,026	8,011	8,021	8,005	8,006	8,010
11-Nov	15	8,605	7,716	7,951	8,066	8,054	8,047	8,032	8,042	8,026	8,027	8,031
12-Nov	14	8,258	7,405	7,631	7,741	7,729	7,723	7,708	7,718	7,702	7,704	7,707
13-Nov	20	8,973	8,047	8,292	8,412	8,400	8,392	8,376	8,387	8,370	8,371	8,375
14-Nov	19	8,190	7,344	7,568	7,677	7,666	7,659	7,645	7,654	7,639	7,640	7,644
15-Nov	24	10,135	9,089	9,365	9,501	9,487	9,478	9,461	9,472	9,453	9,455	9,459
16-Nov	27	11,590	10,394	10,710	10,865	10,849	10,839	10,819	10,832	10,810	10,812	10,817
17-Nov	19	9,902	8,880	9,150	9,282	9,269	9,260	9,243	9,254	9,236	9,238	9,242
18-Nov	28	11,891	10,664	10,989	11,147	11,131	11,121	11,100	11,114	11,092	11,094	11,099
19-Nov	30	12,381	11,103	11,441	11,607	11,590	11,579	11,558	11,572	11,549	11,551	11,556
20-Nov	31	12,201	10,942	11,275	11,438	11,421	11,411	11,389	11,403	11,380	11,382	11,388
21-Nov	31	11,605	10,408	10,724	10,879	10,863	10,854	10,833	10,847	10,825	10,827	10,832
22-Nov	37	13,694	12,280	12,654	12,837	12,818	12,807	12,783	12,798	12,772	12,775	12,781
23-Nov	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
24-Nov	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
25-Nov	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
26-Nov	27	12,610	11,308	11,652	11,821	11,803	11,793	11,771	11,785	11,761	11,764	11,769
27-Nov	17	9,247	8,293	8,545	8,668	8,656	8,648	8,632	8,642	8,625	8,627	8,631
28-Nov	20	8,650	7,757	7,993	8,109	8,097	8,090	8,075	8,084	8,068	8,070	8,073
29-Nov	24	10,089	9,048	9,323	9,458	9,444	9,436	9,418	9,430	9,411	9,413	9,417
30-Nov	29	12,080	10,833	11,163	11,324	11,307	11,297	11,276	11,290	11,267	11,269	11,275
1-Dec	20	10,181	9,130	9,408	9,544	9,530	9,521	9,504	9,515	9,496	9,498	9,502
2-Dec	28	11,959	10,725	11,051	11,211	11,195	11,185	11,164	11,178	11,155	11,157	11,162
3-Dec	29	12,170	10,914	11,246	11,409	11,392	11,382	11,361	11,375	11,352	11,354	11,359
4-Dec	34	12,879	11,550	11,901	12,073	12,056	12,045	12,023	12,037	12,013	12,015	12,021
5-Dec	25	10,249	9,191	9,471	9,608	9,593	9,585	9,567	9,579	9,559	9,561	9,566
6-Dec	39	14,093	12,638	13,023	13,211	13,192	13,180	13,155	13,171	13,145	13,148	13,154
7-Dec	28	12,299	11,030	11,366	11,530	11,513	11,503	11,481	11,495	11,472	11,474	11,480
8-Dec	19	10,264	9,205	9,485	9,622	9,608	9,600	9,582	9,593	9,574	9,576	9,580
9-Dec	29	12,148	10,894	11,225	11,388	11,371	11,361	11,340	11,354	11,331	11,333	11,338
10-Dec	23	10,768	9,657	9,951	10,095	10,080	10,071	10,052	10,064	10,044	10,046	10,051
11-Dec	20	9,495	8,515	8,774	8,901	8,887	8,880	8,863	8,874	8,856	8,858	8,862
12-Dec	27	10,263	9,204	9,484	9,621	9,607	9,598	9,580	9,592	9,572	9,574	9,579
13-Dec	27	11,017	9,880	10,181	10,328	10,312	10,303	10,284	10,297	10,276	10,278	10,283
14-Dec	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
15-Dec	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
16-Dec	39	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
17-Dec	32	13,687	12,275	12,648	12,831	12,812	12,801	12,777	12,792	12,767	12,769	12,775
18-Dec	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
19-Dec	32	12,111	10,861	11,192	11,353	11,337	11,327	11,305	11,319	11,296	11,299	11,304
20-Dec	49	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
21-Dec	51	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
22-Dec	32	14,050	12,600	12,983	13,171	13,151	13,140	13,115	13,131	13,105	13,107	13,114
23-Dec	21	11,094	9,949	10,252	10,400	10,385	10,376	10,356	10,369	10,348	10,350	10,355
24-Dec	27	11,816	10,597	10,919	11,077	11,061	11,051	11,030	11,044	11,022	11,024	11,029
25-Dec	41	14,311	12,834	13,224	13,416	13,396	13,384	13,359	13,375	13,348	13,351	13,357
26-Dec	42	14,334	12,855	13,246	13,438	13,418	13,406	13,381	13,397	13,370	13,373	13,379
27-Dec	51	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
28-Dec	51	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
29-Dec	32	14,095	12,640	13,025	13,213	13,194	13,182	13,158	13,174	13,147	13,150	13,156
30-Dec	35	14,366	12,883	13,275	13,467	13,447	13,435	13,410	13,426	13,399	13,402	13,408
31-Dec	30	12,835	11,510	11,860	12,032	12,014	12,003	11,981	11,996	11,971	11,974	11,979
1-Jan	61	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
2-Jan	38	13,921	12,484	12,864	13,050	13,031	13,019	12,995	13,011	12,985	12,987	12,993
3-Jan	23	11,261	10,099	10,406	10,556	10,541	10,532	10,512	10,525	10,503	10,505	10,510
4-Jan	28	12,231	10,969	11,303	11,466	11,449	11,439	11,418	11,432	11,409	11,411	11,416
5-Jan	19	9,902	8,880	9,150	9,282	9,269	9,260	9,243	9,254	9,236	9,238	9,242
6-Jan	28	11,914	10,684	11,010	11,169	11,152	11,142	11,122	11,135	11,113	11,115	11,120
7-Jan	38	14,251	12,780	13,169	13,359	13,339	13,328	13,303	13,319	13,292	13,295	13,301
8-Jan	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
9-Jan	41	14,350	12,869	13,261	13,452	13,432	13,421	13,396	13,412	13,385	13,387	13,394
10-Jan	30	12,511	11,220	11,561	11,728	11,711	11,701	11,679	11,693	11,670	11,672	11,677
11-Jan	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
12-Jan	50	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
13-Jan	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
14-Jan	46	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
15-Jan	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
16-Jan	30	12,006	10,767	11,095	11,255	11,239	11,229	11,208	11,221	11,199	11,201	11,206
17-Jan	40	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
18-Jan	55	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
19-Jan	68	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
20-Jan	54	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
21-Jan	44	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
22-Jan	34	13,809	12,383	12,760	12,945	12,925	12,914	12,890	12,906	12,880	12,882	12,888
23-Jan	32	12,224	10,963	11,296	11,460	11,443	11,433	11,411	11,425	11,402	11,404	11,410
24-Jan	44	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
25-Jan	24	11,637	10,436	10,753	10,909	10,893	10,883	10,863	10,876	10,854	10,856	10,861
26-Jan	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
27-Jan	46	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582

	AI	RI FT-1 (Pipeline only)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	13,755	12,336	12,711	12,895	12,876	12,864	12,840	12,856	12,830	12,833	12,839
29-Jan	46	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
30-Jan	47	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
31-Jan	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
1-Feb	17	10,318	9,253	9,535	9,673	9,658	9,650	9,632	9,644	9,624	9,626	9,631
2-Feb	28	12,209	10,949	11,282	11,445	11,428	11,418	11,397	11,411	11,387	11,390	11,395
3-Feb	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
4-Feb	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
5-Feb	56	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
6-Feb	56	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
7-Feb	57	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
8-Feb	42	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
9-Feb	44	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
10-Feb	39	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
11-Feb	42	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
12-Feb	37	14,124	12,666	13,052	13,240	13,221	13,209	13,185	13,201	13,174	13,177	13,183
13-Feb	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
14-Feb	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
15-Feb	32	13,778	12,356	12,732	12,916	12,897	12,886	12,862	12,877	12,851	12,854	12,860
16-Feb	33	13,762	12,342	12,717	12,901	12,882	12,871	12,847	12,863	12,837	12,839	12,845
17-Feb	35	13,958	12,517	12,898	13,084	13,065	13,054	13,029	13,045	13,019	13,021	13,028
18-Feb	31	13,091	11,740	12,097	12,272	12,254	12,243	12,220	12,235	12,210	12,213	12,219
19-Feb	37	13,784	12,361	12,738	12,922	12,903	12,891	12,867	12,883	12,857	12,860	12,866
20-Feb	22	9,661	8,664	8,928	9,057	9,043	9,035	9,019	9,029	9,011	9,013	9,017
21-Feb	39	14,093	12,638	13,023	13,211	13,192	13,180	13,155	13,171	13,145	13,148	13,154
22-Feb	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
23-Feb	22	11,305	10,138	10,447	10,598	10,582	10,573	10,553	10,566	10,545	10,547	10,552
24-Feb	35	13,958	12,517	12,898	13,084	13,065	13,054	13,029	13,045	13,019	13,021	13,028
25-Feb	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
26-Feb	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
27-Feb	41	14,509	13,011	13,407	13,601	13,581	13,569	13,544	13,560	13,533	13,535	13,542
28-Feb	39	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
1-Mar	47	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
2-Mar	32	13,733	12,315	12,690	12,873	12,854	12,843	12,819	12,835	12,809	12,811	12,817
3-Mar	43	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
4-Mar	42	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
5-Mar	27	11,878	10,652	10,976	11,135	11,119	11,109	11,088	11,102	11,079	11,081	11,087
6-Mar	36	12,955	11,618	11,972	12,145	12,127	12,116	12,093	12,108	12,084	12,086	12,092
7-Mar	32	12,548	11,253	11,595	11,763	11,745	11,735	11,713	11,728	11,704	11,706	11,712
8-Mar	41	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
9-Mar	45	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
10-Mar	46	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
11-Mar	21	11,276	10,112	10,420	10,570	10,555	10,545	10,526	10,538	10,517	10,519	10,524
12-Mar	16	8,900	7,981	8,224	8,343	8,331	8,324	8,308	8,318	8,301	8,303	8,307
13-Mar	22	8,959	8,034	8,278	8,398	8,386	8,378	8,363	8,373	8,356	8,358	8,362
14-Mar	20	9,177	8,230	8,481	8,603	8,590	8,583	8,567	8,577	8,560	8,562	8,566
15-Mar	25	11,100	9,954	10,257	10,405	10,390	10,381	10,361	10,374	10,353	10,355	10,360
16-Mar	27	11,635	10,434	10,752	10,907	10,891	10,882	10,861	10,874	10,852	10,855	10,860
17-Mar	35	13,663	12,253	12,626	12,808	12,789	12,778	12,754	12,770	12,744	12,747	12,752
18-Mar	27	12,020	10,780	11,108	11,268	11,252	11,242	11,221	11,234	11,212	11,214	11,219
19-Mar	28	11,591	10,394	10,711	10,865	10,849	10,840	10,820	10,833	10,811	10,813	10,818
20-Mar	28	10,768	9,657	9,951	10,095	10,080	10,071	10,052	10,064	10,044	10,046	10,051
21-Mar	28	11,455	10,272	10,585	10,738	10,722	10,713	10,693	10,706	10,684	10,686	10,691
22-Mar	21	10,482	9,400	9,687	9,827	9,812	9,803	9,785	9,797	9,777	9,779	9,784
23-Mar	24	11,025	9,887	10,188	10,335	10,320	10,311	10,291	10,304	10,283	10,285	10,290
24-Mar	29	12,102	10,853	11,184	11,345	11,328	11,319	11,297	11,311	11,288	11,291	11,296
25-Mar	21	10,414	9,340	9,624	9,763	9,748	9,740	9,722	9,734	9,714	9,716	9,720
26-Mar	26	10,851	9,731	10,027	10,172	10,157	10,148	10,130	10,142	10,121	10,123	10,128
27-Mar	41	13,625	12,218	12,590	12,772	12,753	12,742	12,718	12,734	12,708	12,711	12,717
28-Mar	42	14,552	13,050	13,447	13,642	13,622	13,610	13,584	13,601	13,573	13,576	13,582
29-Mar	29	12,964	11,626	11,979	12,153	12,135	12,124	12,101	12,116	12,092	12,094	12,100
30-Mar	20	10,589	9,496	9,785	9,926	9,912	9,903	9,884	9,896	9,876	9,878	9,883
31-Mar	21	10,324	9,258	9,540	9,678	9,664	9,655	9,637	9,649	9,629	9,631	9,636
1-Apr	23	9,474	9,762	9,903	9,889	9,880	9,862	9,874	9,854	9,856	9,860	9,902
2-Apr	24	9,765	10,062	10,208	10,192	10,184	10,165	10,177	10,156	10,158	10,163	10,206
3-Apr	25	9,461	9,749	9,890	9,875	9,866	9,848	9,860	9,840	9,842	9,847	9,888
4-Apr	21	8,068	8,314	8,434	8,421	8,414	8,398	8,409	8,392	8,393	8,397	8,433
5-Apr	39	12,374	12,751	12,935	12,916	12,905	12,880	12,896	12,870	12,873	12,879	12,933
6-Apr	31	11,577	11,930	12,102	12,084	12,074	12,051	12,066	12,041	12,044	12,049	12,100
7-Apr	19	9,266	9,548	9,686	9,672	9,663	9,645	9,657	9,637	9,639	9,644	9,684
8-Apr	29	10,955	11,288	11,451	11,435	11,425	11,403	11,417	11,394	11,396	11,402	11,450
9-Apr	12	7,352	7,576	7,685	7,674	7,667	7,653	7,662	7,647	7,648	7,652	7,684
10-Apr	22	8,710	8,975	9,105	9,092	9,084	9,067	9,078	9,059	9,061	9,065	9,104
11-Apr	21	7,763	8,000	8,115	8,103	8,096	8,081	8,091	8,075	8,076	8,080	8,114
12-Apr	19	8,122	8,369	8,490	8,478	8,470	8,455	8,465	8,448	8,449	8,453	8,489
13-Apr	7	6,142	6,329	6,420	6,411	6,405	6,393	6,401	6,388	6,389	6,392	6,419
14-Apr	15	7,533	7,763	7,875	7,863	7,856	7,842	7,851	7,835	7,837	7,841	7,874
15-Apr	17	7,871	8,111	8,228	8,216	8,209	8,193	8,203	8,187	8,188	8,192	8,227
16-Apr	21	8,913	9,184	9,317	9,303	9,295	9,277	9,289	9,270	9,272	9,276	9,315
17-Apr	21	8,440	8,697	8,822	8,809	8,801	8,785	8,796	8,778	8,780	8,784	8,821
18-Apr	13	6,250	6,440	6,533	6,523	6,518	6,505	6,513	6,500	6,501	6,504	6,532
19-Apr	15	7,101	7,317	7,423	7,412	7,406	7,392	7,401	7,386	7,387	7,391	7,422
20-Apr	5	5,479	5,645	5,727	5,719	5,714	5,703	5,710	5,698	5,699	5,702	5,726
21-Apr	14	7,202	7,421	7,528	7,517	7,511	7,497	7,506	7,491	7,492	7,496	7,527
22-Apr	7	5,715	5,889	5,974	5,965	5,960	5,949	5,956	5,944	5,945	5,948	5,973
23-Apr	15	7,432	7,658	7,769	7,757	7,750	7,736	7,745	7,730	7,731	7,735	7,767
24-Apr	15	6,857	7,066	7,168	7,157	7,151	7,138	7,146	7,132	7,133	7,137	7,167
25-Apr	14	6,215	6,404	6,497	6,487	6,482	6,470	6,477	6,464	6,466	6,469	6,496

Date	AI HDDd	RI FT-1 (Pipeline only) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	5,952	6,133	6,222	6,212	6,207	6,195	6,203	6,190	6,192	6,194	6,221
27-Apr	7	5,816	5,993	6,080	6,071	6,066	6,054	6,062	6,050	6,051	6,054	6,079
28-Apr	8	5,884	6,063	6,150	6,141	6,136	6,125	6,132	6,120	6,121	6,124	6,149
29-Apr	13	6,891	7,101	7,203	7,192	7,186	7,173	7,182	7,167	7,168	7,172	7,202
30-Apr	16	7,641	7,874	7,988	7,976	7,969	7,954	7,964	7,948	7,949	7,953	7,987
1-May	0	5,742	5,917	6,002	5,994	5,988	5,977	5,984	5,972	5,974	5,976	6,002
2-May	0	5,275	5,436	5,515	5,506	5,502	5,491	5,498	5,487	5,488	5,491	5,514
3-May	0	5,748	5,923	6,009	6,000	5,995	5,984	5,991	5,979	5,980	5,983	6,008
4-May	0	6,364	6,557	6,652	6,642	6,637	6,624	6,632	6,619	6,620	6,623	6,651
5-May	6	5,526	5,694	5,776	5,768	5,763	5,752	5,759	5,747	5,748	5,751	5,775
6-May	17	7,749	7,985	8,101	8,089	8,082	8,066	8,076	8,060	8,062	8,065	8,099
7-May	23	9,149	9,427	9,564	9,549	9,541	9,523	9,535	9,516	9,517	9,522	9,562
8-May	14	7,013	7,227	7,331	7,321	7,314	7,300	7,309	7,295	7,296	7,300	7,330
9-May	13	6,148	6,335	6,427	6,417	6,412	6,400	6,407	6,394	6,396	6,399	6,426
10-May	2	4,740	4,884	4,955	4,947	4,943	4,934	4,940	4,930	4,931	4,933	4,954
11-May	0	5,634	5,805	5,889	5,880	5,875	5,864	5,871	5,859	5,861	5,863	5,888
12-May	0	5,512	5,679	5,761	5,753	5,748	5,737	5,744	5,733	5,734	5,736	5,761
13-May	3	5,074	5,228	5,304	5,296	5,292	5,282	5,288	5,277	5,279	5,281	5,303
14-May	8	5,741	5,916	6,002	5,993	5,988	5,976	5,984	5,972	5,973	5,976	6,001
15-May	12	6,005	6,188	6,277	6,268	6,262	6,251	6,258	6,246	6,247	6,250	6,276
16-May	17	6,641	6,843	6,942	6,931	6,925	6,912	6,921	6,907	6,908	6,911	6,941
17-May	12	6,371	6,565	6,660	6,650	6,644	6,632	6,640	6,626	6,628	6,631	6,659
18-May	12	6,966	7,178	7,282	7,271	7,264	7,251	7,260	7,245	7,246	7,250	7,280
19-May	1	5,270	5,431	5,509	5,501	5,496	5,486	5,492	5,481	5,482	5,485	5,508
20-May	8	5,802	5,979	6,065	6,056	6,051	6,040	6,047	6,035	6,036	6,039	6,064
21-May	9	5,931	6,111	6,199	6,190	6,185	6,173	6,181	6,168	6,170	6,173	6,199
22-May	9	5,498	5,666	5,748	5,739	5,734	5,723	5,730	5,719	5,720	5,723	5,747
23-May	8	4,714	4,858	4,928	4,920	4,916	4,907	4,913	4,903	4,904	4,906	4,927
24-May	10	5,708	5,882	5,967	5,958	5,953	5,941	5,949	5,937	5,938	5,941	5,966
25-May	7	5,695	5,868	5,953	5,944	5,939	5,928	5,935	5,923	5,924	5,927	5,952
26-May	7	5,674	5,847	5,931	5,923	5,917	5,906	5,914	5,902	5,903	5,906	5,930
27-May	1	5,067	5,221	5,297	5,289	5,284	5,274	5,281	5,270	5,271	5,274	5,296
28-May	5	5,072	5,227	5,302	5,294	5,290	5,280	5,286	5,275	5,277	5,279	5,301
29-May	3	4,316	4,448	4,512	4,505	4,502	4,493	4,499	4,490	4,490	4,493	4,511
30-May	9	4,720	4,864	4,934	4,927	4,923	4,914	4,920	4,910	4,911	4,913	4,934
31-May	12	6,025	6,209	6,298	6,289	6,284	6,272	6,279	6,267	6,268	6,271	6,297
1-Jun	6	5,546	5,715	5,797	5,789	5,784	5,773	5,780	5,768	5,769	5,772	5,796
2-Jun	7	5,695	5,868	5,953	5,944	5,939	5,928	5,935	5,923	5,924	5,927	5,952
3-Jun	2	5,050	5,204	5,279	5,271	5,267	5,257	5,263	5,253	5,254	5,256	5,278
4-Jun	0	4,965	5,116	5,190	5,183	5,178	5,168	5,175	5,164	5,165	5,168	5,190
5-Jun	0	4,248	4,378	4,441	4,434	4,430	4,422	4,428	4,419	4,420	4,422	4,440
6-Jun	0	3,637	3,747	3,801	3,796	3,793	3,785	3,790	3,782	3,783	3,785	3,801
7-Jun	0	4,248	4,378	4,441	4,434	4,430	4,422	4,428	4,419	4,420	4,422	4,440
8-Jun	0	4,833	4,980	5,052	5,044	5,040	5,030	5,036	5,026	5,027	5,030	5,051
9-Jun	0	4,751	4,896	4,967	4,959	4,955	4,946	4,952	4,942	4,943	4,945	4,966
10-Jun	0	4,687	4,829	4,899	4,892	4,888	4,878	4,884	4,875	4,876	4,878	4,898
11-Jun	0	4,666	4,808	4,878	4,871	4,866	4,857	4,863	4,853	4,854	4,857	4,877
12-Jun	0	4,058	4,182	4,242	4,236	4,232	4,224	4,229	4,221	4,222	4,224	4,242
13-Jun	0	3,504	3,611	3,663	3,657	3,654	3,647	3,652	3,644	3,645	3,647	3,662
14-Jun	0	4,136	4,262	4,323	4,317	4,313	4,305	4,310	4,302	4,303	4,305	4,323
15-Jun	9	5,687	5,860	5,945	5,936	5,931	5,919	5,927	5,915	5,916	5,919	5,944
16-Jun	7	5,471	5,637	5,719	5,710	5,705	5,695	5,702	5,690	5,691	5,694	5,718
17-Jun	1	5,108	5,263	5,339	5,331	5,327	5,317	5,323	5,312	5,313	5,316	5,338
18-Jun	5	5,072	5,227	5,302	5,294	5,290	5,280	5,286	5,275	5,277	5,279	5,301
19-Jun	6	4,646	4,787	4,857	4,849	4,845	4,836	4,842	4,832	4,833	4,836	4,856
20-Jun	5	3,943	4,063	4,122	4,116	4,112	4,105	4,110	4,101	4,102	4,104	4,121
21-Jun	0	4,389	4,523	4,588	4,582	4,578	4,569	4,575	4,565	4,566	4,568	4,588
22-Jun	0	4,761	4,906	4,977	4,969	4,965	4,956	4,962	4,952	4,953	4,955	4,976
23-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
24-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
25-Jun	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
26-Jun	0	3,955	4,076	4,135	4,129	4,125	4,117	4,122	4,114	4,115	4,117	4,134
27-Jun	0	3,320	3,421	3,470	3,465	3,462	3,456	3,460	3,453	3,453	3,455	3,470
28-Jun	0	3,874	3,992	4,050	4,044	4,040	4,033	4,037	4,029	4,030	4,032	4,049
29-Jun	0	4,473	4,609	4,675	4,668	4,664	4,656	4,661	4,652	4,653	4,655	4,675
30-Jun	0	4,493	4,630	4,697	4,690	4,686	4,677	4,683	4,673	4,674	4,676	4,696
1-Jul	0	4,513	4,651	4,718	4,711	4,707	4,698	4,704	4,694	4,695	4,697	4,717
2-Jul	0	4,513	4,651	4,718	4,711	4,707	4,698	4,704	4,694	4,695	4,697	4,717
3-Jul	0	3,915	4,034	4,092	4,086	4,083	4,075	4,080	4,072	4,072	4,074	4,092
4-Jul	0	3,296	3,396	3,445	3,440	3,437	3,431	3,435	3,428	3,429	3,430	3,445
5-Jul	0	3,854	3,971	4,028	4,022	4,019	4,011	4,016	4,008	4,009	4,011	4,028
6-Jul	1	4,477	4,614	4,680	4,673	4,669	4,661	4,666	4,657	4,658	4,660	4,680
7-Jul	2	4,664	4,806	4,875	4,868	4,864	4,855	4,861	4,851	4,852	4,854	4,875
8-Jul	0	4,807	4,954	5,025	5,018	5,013	5,004	5,010	5,000	5,001	5,003	5,025
9-Jul	0	4,601	4,741	4,809	4,802	4,798	4,789	4,795	4,785	4,786	4,788	4,808
10-Jul	0	3,762	3,876	3,932	3,926	3,923	3,916	3,920	3,912	3,913	3,915	3,932
11-Jul	0	3,154	3,250	3,296	3,292	3,289	3,283	3,287	3,280	3,281	3,282	3,296
12-Jul	0	3,793	3,908	3,965	3,959	3,955	3,948	3,953	3,945	3,946	3,947	3,964
13-Jul	0	4,445	4,580	4,647	4,640	4,636	4,627	4,633	4,623	4,624	4,626	4,646
14-Jul	0	4,442	4,577	4,643	4,636	4,632	4,623	4,629	4,620	4,620	4,623	4,642
15-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
16-Jul	0	4,377	4,510	4,575	4,569	4,565	4,556	4,562	4,552	4,553	4,555	4,575
17-Jul	0	3,758	3,872	3,928	3,923	3,919	3,912	3,917	3,909	3,909	3,911	3,928
18-Jul	0	3,119	3,214	3,260	3,255	3,253	3,246	3,250	3,244	3,244	3,246	3,260
19-Jul	0	3,677	3,789	3,843	3,838	3,834	3,827	3,832	3,824	3,825	3,827	3,843
20-Jul	0	4,275	4,405	4,469	4,463	4,459	4,450	4,456	4,447	4,448	4,450	4,468
21-Jul	0	4,312	4,444	4,508	4,501	4,497	4,489	4,494	4,485	4,486	4,488	4,507
22-Jul	0	4,316	4,447	4,512	4,505	4,501	4,493	4,498	4,489	4,490	4,492	4,511

Date	AI HDDd	RI FT-1 (Pipeline only) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	4,320	4,451	4,515	4,509	4,505	4,496	4,502	4,493	4,494	4,496	4,515
24-Jul	0	3,765	3,880	3,936	3,930	3,927	3,919	3,924	3,916	3,917	3,919	3,935
25-Jul	0	3,191	3,288	3,335	3,330	3,327	3,321	3,325	3,318	3,319	3,321	3,335
26-Jul	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
27-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
28-Jul	0	4,401	4,535	4,600	4,594	4,590	4,581	4,587	4,577	4,578	4,580	4,600
29-Jul	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
30-Jul	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
31-Jul	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
1-Aug	0	3,207	3,305	3,353	3,348	3,345	3,339	3,343	3,336	3,337	3,338	3,352
2-Aug	0	3,778	3,893	3,950	3,944	3,940	3,933	3,938	3,930	3,931	3,932	3,949
3-Aug	0	4,312	4,444	4,508	4,501	4,497	4,489	4,494	4,485	4,486	4,488	4,507
4-Aug	0	4,292	4,423	4,487	4,480	4,476	4,468	4,473	4,464	4,465	4,467	4,486
5-Aug	0	4,296	4,426	4,490	4,484	4,480	4,471	4,477	4,468	4,469	4,471	4,490
6-Aug	0	4,323	4,455	4,519	4,512	4,509	4,500	4,506	4,496	4,497	4,499	4,518
7-Aug	0	3,789	3,904	3,961	3,955	3,952	3,944	3,949	3,941	3,942	3,944	3,960
8-Aug	0	3,231	3,330	3,378	3,373	3,370	3,363	3,368	3,361	3,361	3,363	3,377
9-Aug	0	3,806	3,922	3,978	3,973	3,969	3,962	3,966	3,958	3,959	3,961	3,978
10-Aug	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
11-Aug	0	4,381	4,514	4,579	4,572	4,568	4,560	4,565	4,556	4,557	4,559	4,578
12-Aug	0	4,388	4,521	4,587	4,580	4,576	4,567	4,573	4,564	4,565	4,567	4,586
13-Aug	0	4,425	4,559	4,625	4,619	4,614	4,606	4,611	4,602	4,603	4,605	4,625
14-Aug	0	3,850	3,967	4,025	4,019	4,015	4,008	4,013	4,004	4,005	4,007	4,024
15-Aug	0	3,238	3,337	3,385	3,380	3,377	3,371	3,375	3,368	3,369	3,370	3,385
16-Aug	0	3,850	3,967	4,025	4,019	4,015	4,008	4,013	4,004	4,005	4,007	4,024
17-Aug	0	4,445	4,580	4,647	4,640	4,636	4,627	4,633	4,623	4,624	4,626	4,646
18-Aug	1	4,457	4,593	4,659	4,652	4,648	4,640	4,645	4,636	4,637	4,639	4,658
19-Aug	0	4,615	4,755	4,824	4,817	4,813	4,804	4,810	4,800	4,801	4,803	4,823
20-Aug	0	4,656	4,797	4,867	4,859	4,855	4,846	4,852	4,842	4,843	4,845	4,866
21-Aug	1	3,943	4,063	4,122	4,116	4,113	4,105	4,110	4,102	4,102	4,104	4,122
22-Aug	0	3,466	3,571	3,623	3,617	3,614	3,607	3,612	3,605	3,605	3,607	3,622
23-Aug	0	4,064	4,188	4,248	4,242	4,238	4,230	4,236	4,227	4,228	4,230	4,248
24-Aug	0	4,537	4,675	4,743	4,736	4,732	4,723	4,729	4,719	4,720	4,722	4,742
25-Aug	0	4,558	4,696	4,764	4,757	4,753	4,744	4,750	4,740	4,741	4,743	4,763
26-Aug	0	4,554	4,693	4,760	4,753	4,749	4,740	4,746	4,736	4,737	4,740	4,760
27-Aug	0	4,530	4,668	4,735	4,728	4,724	4,715	4,721	4,712	4,713	4,715	4,735
28-Aug	0	3,891	4,009	4,067	4,061	4,058	4,050	4,055	4,047	4,048	4,049	4,067
29-Aug	0	3,262	3,362	3,410	3,405	3,402	3,396	3,400	3,393	3,394	3,395	3,410
30-Aug	0	3,881	3,999	4,057	4,051	4,048	4,040	4,045	4,037	4,038	4,040	4,057
31-Aug	0	4,537	4,675	4,743	4,736	4,732	4,723	4,729	4,719	4,720	4,722	4,742
1-Sep	0	4,561	4,700	4,768	4,761	4,757	4,748	4,754	4,744	4,745	4,747	4,767
2-Sep	0	4,581	4,721	4,789	4,782	4,778	4,769	4,775	4,765	4,766	4,768	4,788
3-Sep	0	4,602	4,742	4,810	4,803	4,799	4,790	4,796	4,786	4,787	4,789	4,810
4-Sep	0	4,007	4,129	4,188	4,182	4,179	4,171	4,176	4,167	4,168	4,170	4,188
5-Sep	0	3,415	3,519	3,570	3,565	3,562	3,555	3,559	3,552	3,553	3,555	3,570
6-Sep	0	4,031	4,153	4,213	4,207	4,204	4,196	4,201	4,192	4,193	4,195	4,213
7-Sep	0	4,646	4,787	4,857	4,849	4,845	4,836	4,842	4,832	4,833	4,835	4,856
8-Sep	0	4,650	4,791	4,860	4,853	4,849	4,840	4,846	4,836	4,837	4,839	4,860
9-Sep	0	4,670	4,812	4,882	4,874	4,870	4,861	4,867	4,857	4,858	4,860	4,881
10-Sep	3	4,708	4,852	4,922	4,914	4,910	4,901	4,907	4,897	4,898	4,900	4,921
11-Sep	3	4,215	4,343	4,406	4,399	4,396	4,387	4,393	4,384	4,385	4,387	4,405
12-Sep	0	3,707	3,820	3,875	3,869	3,866	3,859	3,864	3,856	3,856	3,858	3,875
13-Sep	0	4,217	4,346	4,408	4,402	4,398	4,390	4,395	4,386	4,387	4,389	4,408
14-Sep	0	4,711	4,854	4,924	4,917	4,913	4,903	4,909	4,899	4,900	4,903	4,923
15-Sep	1	4,701	4,844	4,914	4,907	4,903	4,893	4,899	4,889	4,890	4,893	4,913
16-Sep	3	4,769	4,914	4,985	4,978	4,974	4,964	4,970	4,960	4,961	4,964	4,985
17-Sep	0	4,864	5,012	5,084	5,077	5,072	5,063	5,069	5,059	5,060	5,062	5,083
18-Sep	0	4,269	4,399	4,462	4,456	4,452	4,443	4,449	4,440	4,441	4,443	4,461
19-Sep	2	3,637	3,747	3,801	3,796	3,793	3,785	3,790	3,782	3,783	3,785	3,801
20-Sep	7	4,795	4,941	5,012	5,005	5,000	4,991	4,997	4,987	4,988	4,990	5,011
21-Sep	5	5,092	5,247	5,323	5,315	5,311	5,301	5,307	5,297	5,298	5,300	5,322
22-Sep	0	5,026	5,179	5,254	5,246	5,242	5,232	5,238	5,228	5,229	5,231	5,253
23-Sep	6	5,241	5,401	5,479	5,471	5,466	5,456	5,462	5,451	5,452	5,455	5,478
24-Sep	12	6,519	6,717	6,814	6,804	6,798	6,785	6,794	6,780	6,781	6,784	6,813
25-Sep	1	4,553	4,692	4,760	4,753	4,748	4,740	4,745	4,736	4,737	4,739	4,759
26-Sep	0	3,864	3,981	4,039	4,033	4,029	4,022	4,027	4,019	4,019	4,021	4,038
27-Sep	1	4,269	4,399	4,462	4,456	4,452	4,443	4,449	4,440	4,441	4,443	4,461
28-Sep	5	4,991	5,143	5,217	5,209	5,205	5,195	5,201	5,191	5,192	5,194	5,216
29-Sep	8	5,660	5,832	5,917	5,908	5,903	5,892	5,899	5,887	5,888	5,891	5,916
30-Sep	13	6,850	7,059	7,161	7,150	7,144	7,130	7,139	7,125	7,126	7,130	7,160
1-Oct	0	5,755	5,931	6,016	6,007	6,002	5,991	5,998	5,986	5,987	5,990	6,015
2-Oct	7	5,140	5,297	5,373	5,365	5,361	5,351	5,357	5,346	5,347	5,350	5,372
3-Oct	9	4,842	4,990	5,062	5,054	5,050	5,040	5,047	5,036	5,037	5,040	5,061
4-Oct	1	4,513	4,650	4,717	4,710	4,706	4,697	4,703	4,693	4,694	4,697	4,716
5-Oct	3	4,993	5,145	5,219	5,211	5,207	5,197	5,203	5,193	5,194	5,196	5,218
6-Oct	0	5,619	5,791	5,874	5,866	5,860	5,849	5,857	5,845	5,846	5,849	5,873
7-Oct	2	5,009	5,162	5,237	5,229	5,224	5,215	5,221	5,210	5,211	5,214	5,236
8-Oct	0	5,951	6,132	6,221	6,212	6,206	6,195	6,202	6,190	6,191	6,194	6,220
9-Oct	14	6,424	6,620	6,715	6,705	6,699	6,687	6,695	6,682	6,683	6,686	6,714
10-Oct	23	7,959	8,201	8,320	8,307	8,300	8,285	8,295	8,278	8,280	8,283	8,318
11-Oct	19	8,000	8,244	8,363	8,351	8,343	8,328	8,338	8,321	8,323	8,326	8,362
12-Oct	16	8,068	8,314	8,434	8,421	8,414	8,398	8,409	8,392	8,393	8,397	8,433
13-Oct	9	6,459	6,656	6,752	6,742	6,736	6,723	6,732	6,718	6,719	6,723	6,751
14-Oct	6	5,627	5,799	5,882	5,874	5,868	5,858	5,865	5,853	5,854	5,857	5,881
15-Oct	5	5,214	5,373	5,451	5,443	5,438	5,428	5,434	5,423	5,425	5,427	5,450
16-Oct	15	6,634	6,835	6,934	6,924	6,918	6,905	6,913	6,900	6,901	6,904	6,933
17-Oct	20	7,269	7,491	7,599	7,588	7,581	7,567	7,576	7,561	7,562	7,566	7,598
18-Oct	19	7,960	8,202	8,320	8,308	8,301	8,285	8,295	8,279	8,280	8,284	8,319

	AI	RI FT-1 (Pipeline only)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	7,379	7,603	7,713	7,702	7,695	7,681	7,690	7,674	7,676	7,680	7,712
20-Oct	9	6,398	6,593	6,688	6,678	6,672	6,660	6,668	6,655	6,656	6,659	6,687
21-Oct	12	6,824	7,031	7,133	7,122	7,116	7,103	7,111	7,097	7,098	7,102	7,132
22-Oct	21	8,689	8,954	9,083	9,070	9,062	9,045	9,056	9,037	9,039	9,043	9,082
23-Oct	23	8,757	9,024	9,154	9,141	9,133	9,115	9,127	9,108	9,110	9,114	9,153
24-Oct	23	8,386	8,641	8,766	8,753	8,745	8,729	8,739	8,722	8,724	8,728	8,764
25-Oct	22	8,812	9,080	9,211	9,198	9,190	9,172	9,184	9,165	9,167	9,171	9,210
26-Oct	15	7,920	8,161	8,279	8,266	8,259	8,244	8,254	8,237	8,239	8,243	8,277
27-Oct	16	7,967	8,209	8,328	8,315	8,308	8,293	8,303	8,286	8,288	8,291	8,326
28-Oct	16	7,845	8,083	8,200	8,188	8,181	8,166	8,176	8,159	8,161	8,165	8,199
29-Oct	14	7,446	7,672	7,783	7,772	7,765	7,751	7,760	7,744	7,746	7,750	7,782
30-Oct	7	5,343	5,506	5,586	5,577	5,573	5,562	5,569	5,558	5,559	5,561	5,585
31-Oct	2	4,023	4,145	4,205	4,199	4,195	4,187	4,193	4,184	4,185	4,187	4,204
Nov	697	306,141	274,542	282,898	286,987	286,563	286,312	285,777	286,125	285,547	285,604	285,738
Dec	1,040	396,905	355,937	366,770	372,071	371,521	371,197	370,503	370,954	370,205	370,279	370,453
Jan	1,250	425,713	381,772	393,391	399,077	398,487	398,139	397,395	397,879	397,076	397,155	397,341
Feb	1,091	386,834	346,906	357,464	362,631	362,095	361,779	361,103	361,542	360,812	360,884	361,054
Mar	942	375,900	337,100	347,360	352,381	351,860	351,553	350,896	351,323	350,613	350,683	350,848
Apr	518	236,221	243,410	246,929	246,563	246,348	245,888	246,187	245,690	245,739	245,854	246,890
May	228	180,891	186,396	189,091	188,811	188,646	188,294	188,523	188,142	188,180	188,268	189,061
Jun	48	136,888	141,054	143,093	142,881	142,757	142,490	142,663	142,375	142,404	142,470	143,070
Jul	3	126,886	130,748	132,638	132,442	132,326	132,079	132,240	131,973	131,999	132,061	132,617
Aug	2	126,944	130,807	132,698	132,502	132,386	132,139	132,299	132,032	132,059	132,121	132,677
Sep	70	139,820	144,075	146,158	145,941	145,814	145,542	145,719	145,424	145,453	145,522	146,135
Oct	361	207,225	213,532	216,618	216,298	216,109	215,705	215,968	215,532	215,575	215,676	216,584
Total	6,250	3,046,367	2,886,280	2,955,108	2,978,586	2,974,911	2,971,115	2,969,273	2,968,991	2,965,662	2,966,578	2,972,469

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI SFT2 plus FT-1 pipeline (excludes FT-1 Storage and Peaking)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	81,694	81,797	83,244	84,811	85,382	86,177	86,882	88,078	88,458	89,260	90,071
2-Nov	9	51,310	51,139	52,069	53,040	53,380	53,855	54,275	54,995	55,219	55,701	56,189
3-Nov	14	80,872	80,901	82,340	83,887	84,447	85,227	85,917	87,091	87,463	88,250	89,046
4-Nov	13	74,695	74,683	76,015	77,442	77,956	78,672	79,306	80,385	80,726	81,450	82,181
5-Nov	20	113,526	113,780	115,780	117,964	118,766	119,882	120,873	122,549	123,083	124,208	125,345
6-Nov	19	108,154	108,431	110,333	112,416	113,183	114,250	115,197	116,798	117,310	118,385	119,471
7-Nov	16	92,190	92,418	94,040	95,815	96,468	97,377	98,183	99,547	99,982	100,898	101,823
8-Nov	14	82,557	82,657	84,120	85,703	86,280	87,083	87,795	89,002	89,386	90,196	91,015
9-Nov	20	114,848	115,109	117,133	119,342	120,154	121,284	122,287	123,982	124,524	125,662	126,812
10-Nov	15	90,132	90,222	91,821	93,548	94,176	95,051	95,827	97,143	97,560	98,443	99,335
11-Nov	15	90,573	90,666	92,272	94,008	94,639	95,518	96,298	97,620	98,040	98,928	99,824
12-Nov	14	83,074	83,117	84,594	86,184	86,760	87,562	88,273	89,481	89,863	90,673	91,492
13-Nov	20	111,687	111,990	113,953	116,104	116,898	118,002	118,981	120,637	121,166	122,278	123,401
14-Nov	19	105,874	106,198	108,055	110,097	110,852	111,902	112,834	114,408	114,912	115,969	117,037
15-Nov	24	137,275	137,750	140,154	142,804	143,787	145,154	146,369	148,416	149,074	150,450	151,839
16-Nov	27	157,644	158,195	160,955	163,998	165,129	166,699	168,094	170,446	171,202	172,782	174,378
17-Nov	19	118,804	119,085	121,177	123,463	124,304	125,474	126,512	128,268	128,828	130,007	131,198
18-Nov	28	164,261	164,857	167,730	170,903	172,082	173,720	175,176	177,630	178,418	180,067	181,732
19-Nov	30	175,293	175,964	179,027	182,415	183,676	185,428	186,985	189,609	190,452	192,215	193,995
20-Nov	31	182,715	183,495	186,681	190,216	191,538	193,372	195,003	197,748	198,632	200,477	202,340
21-Nov	31	181,316	182,149	185,305	188,816	190,132	191,958	193,582	196,314	197,195	199,031	200,885
22-Nov	37	216,250	217,260	221,023	225,212	226,782	228,962	230,901	234,161	235,213	237,404	239,617
23-Nov	41	241,921	243,139	247,340	252,031	253,795	256,242	258,420	262,078	263,261	265,721	268,204
24-Nov	43	256,223	257,613	262,053	267,027	268,903	271,505	273,822	277,709	278,967	281,582	284,221
25-Nov	45	268,855	270,395	275,046	280,270	282,246	284,984	287,424	291,513	292,839	295,590	298,366
26-Nov	27	177,470	178,141	181,242	184,672	185,948	187,721	189,296	191,951	192,804	194,588	196,390
27-Nov	17	114,745	115,053	117,070	119,280	120,095	121,228	122,235	123,935	124,479	125,620	126,774
28-Nov	20	115,575	115,962	117,987	120,217	121,044	122,194	123,215	124,937	125,490	126,647	127,815
29-Nov	24	136,394	136,864	139,252	141,885	142,862	144,220	145,426	147,461	148,114	149,480	150,861
30-Nov	29	168,676	169,303	172,252	175,510	176,723	178,406	179,903	182,425	183,235	184,930	186,641
1-Dec	20	124,981	125,304	127,502	129,908	130,795	132,028	133,123	134,974	135,565	136,808	138,063
2-Dec	28	165,583	166,187	169,083	172,281	173,470	175,122	176,590	179,064	179,859	181,521	183,200
3-Dec	29	170,438	171,075	174,055	177,348	178,573	180,275	181,788	184,336	185,155	186,868	188,597
4-Dec	34	198,161	199,048	202,499	206,336	207,772	209,765	211,539	214,521	215,482	217,487	219,511
5-Dec	25	150,424	151,043	153,668	156,577	157,663	159,171	160,511	162,768	163,494	165,011	166,543
6-Dec	39	225,520	226,595	230,516	234,886	236,526	238,801	240,825	244,228	245,326	247,613	249,923
7-Dec	28	172,191	172,835	175,845	179,172	180,410	182,129	183,657	186,232	187,060	188,790	190,537
8-Dec	19	125,853	126,177	128,390	130,814	131,707	132,948	134,051	135,914	136,509	137,760	139,024
9-Dec	29	169,997	170,632	173,604	176,889	178,111	179,808	181,316	183,858	184,675	186,383	188,108
10-Dec	23	138,665	139,083	141,517	144,190	145,179	146,553	147,774	149,835	150,495	151,879	153,277
11-Dec	20	121,820	122,184	124,322	126,671	127,539	128,746	129,818	131,628	132,208	133,423	134,651
12-Dec	27	152,204	152,843	155,497	158,442	159,541	161,068	162,426	164,711	165,447	166,983	168,533
13-Dec	27	156,686	157,292	160,029	163,058	164,186	165,752	167,145	169,490	170,244	171,821	173,412
14-Dec	41	236,070	237,218	241,321	245,897	247,615	249,999	252,120	255,685	256,836	259,232	261,652
15-Dec	45	262,168	263,629	268,168	273,260	275,183	277,849	280,224	284,206	285,496	288,174	290,878
16-Dec	39	239,319	240,506	244,663	249,303	251,047	253,466	255,619	259,235	260,404	262,835	265,290
17-Dec	32	202,185	203,028	206,554	210,465	211,926	213,953	215,756	218,791	219,768	221,807	223,867
18-Dec	41	241,118	242,326	246,514	251,189	252,947	255,385	257,556	261,201	262,379	264,830	267,305
19-Dec	32	191,898	192,800	196,138	199,855	201,249	203,184	204,905	207,799	208,732	210,677	212,641
20-Dec	49	282,448	284,152	289,030	294,523	296,606	299,491	302,062	306,369	307,767	310,665	313,590
21-Dec	51	297,972	299,861	305,000	310,799	313,004	316,057	318,778	323,334	324,814	327,880	330,974
22-Dec	32	209,234	210,119	213,768	217,816	219,328	221,428	223,295	226,437	227,449	229,561	231,693
23-Dec	21	143,493	143,932	146,450	149,217	150,240	151,663	152,927	155,060	155,744	157,177	158,624
24-Dec	27	162,050	162,628	165,463	168,592	169,755	171,370	172,806	175,225	176,002	177,628	179,270
25-Dec	41	231,264	232,383	236,403	240,885	242,568	244,903	246,980	250,471	251,599	253,946	256,315
26-Dec	42	242,651	243,903	248,114	252,821	254,593	257,051	259,238	262,911	264,099	266,569	269,063
27-Dec	51	296,751	298,626	303,744	309,519	311,714	314,754	317,464	322,000	323,474	326,526	329,607
28-Dec	51	302,987	304,936	310,158	316,057	318,301	321,408	324,178	328,814	330,322	333,441	336,590
29-Dec	32	210,115	211,006	214,669	218,735	220,253	222,362	224,237	227,393	228,409	230,530	232,671
30-Dec	35	217,631	218,580	222,373	226,585	228,160	230,347	232,292	235,564	236,618	238,817	241,038
31-Dec	30	184,104	184,829	188,044	191,603	192,929	194,771	196,409	199,166	200,053	201,906	203,778
1-Jan	61	339,848	342,238	348,077	354,705	357,238	360,744	363,871	369,098	370,801	374,319	377,869
2-Jan	38	231,602	232,770	236,791	241,282	242,971	245,314	247,400	250,902	252,034	254,389	256,766
3-Jan	23	158,413	159,012	161,781	164,841	165,981	167,563	168,970	171,339	172,101	173,693	175,301
4-Jan	28	170,870	171,505	174,493	177,794	179,022	180,728	182,244	184,798	185,619	187,336	189,070
5-Jan	19	118,804	119,085	121,177	123,463	124,304	125,474	126,512	128,268	128,828	130,007	131,198
6-Jan	28	164,702	165,300	168,181	171,362	172,545	174,188	175,648	178,108	178,898	180,552	182,221
7-Jan	38	217,657	218,620	222,412	226,625	228,202	230,390	232,336	235,610	236,666	238,867	241,089
8-Jan	41	241,085	242,293	246,480	251,155	252,912	255,350	257,520	261,165	262,343	264,794	267,268
9-Jan	41	242,202	243,447	247,650	252,348	254,117	256,569	258,752	262,418	263,603	266,068	268,557
10-Jan	30	187,993	188,801	192,078	195,716	197,075	198,963	200,642	203,467	204,377	206,275	208,193
11-Jan	43	253,298	254,653	259,044	263,960	265,813	268,383	270,672	274,512	275,755	278,338	280,945
12-Jan	50	289,567	291,356	296,353	301,987	304,125	307,087	309,727	314,149	315,584	318,559	321,561
13-Jan	41	252,368	253,712	258,087	262,985	264,831	267,391	269,671	273,496	274,734	277,307	279,904
14-Jan	46	276,842	278,478	283,263	288,645	290,683	293,508	296,024	300,242	301,610	304,447	307,311
15-Jan	43	257,928	259,338	263,806	268,814	270,704	273,324	275,657	279,572	280,839	283,472	286,130
16-Jan	30	188,356	189,227	192,505	196,153	197,520	199,418	201,106	203,944	204,860	206,768	208,694
17-Jan	40	236,891	238,050	242,166	246,758	248,483	250,875	253,005	256,582	257,738	260,143	262,572
18-Jan	55	313,623	315,699	321,099	327,209	329,536	332,758	335,631	340,438	342,001	345,236	348,501
19-Jan	68	389,875	393,077	399,773	407,414	410,366	414,441	418,078	424,126	426,110	430,176	434,279
20-Jan	54	330,710	332,991	338,676	345,124	347,585	350,992	354,031	359,111	360,766	364,185	367,635
21-Jan	44	279,673	281,343	286,175	291,613	293,674	296,529	299,073	303,336	304,719	307,587	310,481
22-Jan	34	216,224	217,221	220,983	225,171	226,741	228,919	230,856	234,114	235,165	237,355	239,566
23-Jan	32	194,101	195,016	198,392	202,152	203,563	205,520	207,261	210,188	211,133	213,100	215,087
24-Jan	44	254,214	255,579	259,985	264,920	266,781	269,361	271,658	275,513	276,761	279,353	281,970
25-Jan	24	156,296	156,826	159,563	162,580	163,699	165,254	166,636	168,966	169,713	171,279	172,860
26-Jan	41	241,921	243,139	247,340	252,031	253,795	256,242	258,420	262,078	263,261	265,721	268,204
27-Jan	46	265,976	267,483	272,086	277,253	279,206	281,913	284,324	288,368	289,678	292,398	295,143

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI SFT2 plus FT-1 pipeline (excludes FT-1 Storage and Peaking)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	203,507	204,357	207,907	211,844	213,314	215,355	217,170	220,224	221,208	223,261	225,334
29-Jan	46	269,352	270,899	275,558	280,792	282,772	285,516	287,960	292,057	293,385	296,142	298,924
30-Jan	47	272,357	273,940	278,650	283,943	285,946	288,723	291,196	295,341	296,685	299,474	302,289
31-Jan	43	260,435	261,875	266,385	271,443	273,352	276,000	278,357	282,312	283,593	286,253	288,938
1-Feb	17	125,395	125,707	127,914	130,327	131,216	132,452	133,550	135,404	135,997	137,243	138,501
2-Feb	28	170,429	171,062	174,042	177,335	178,559	180,260	181,773	184,321	185,139	186,851	188,580
3-Feb	45	252,556	253,902	258,281	263,182	265,030	267,592	269,873	273,702	274,941	277,515	280,114
4-Feb	45	264,258	265,743	270,318	275,451	277,390	280,079	282,474	286,489	287,790	290,492	293,218
5-Feb	56	324,986	327,198	332,789	339,123	341,539	344,884	347,868	352,856	354,480	357,838	361,226
6-Feb	56	327,526	329,769	335,402	341,786	344,222	347,595	350,603	355,632	357,270	360,655	364,070
7-Feb	57	339,242	341,625	347,453	354,069	356,597	360,097	363,218	368,435	370,135	373,647	377,190
8-Feb	42	265,788	267,292	271,892	277,055	279,007	281,712	284,122	288,162	289,471	292,189	294,932
9-Feb	44	270,061	271,616	276,288	281,536	283,521	286,272	288,723	292,832	294,164	296,928	299,717
10-Feb	39	239,319	240,506	244,663	249,303	251,047	253,466	255,619	259,235	260,404	262,835	265,290
11-Feb	42	253,251	254,605	258,995	263,910	265,764	268,333	270,621	274,461	275,703	278,286	280,892
12-Feb	37	224,621	225,682	229,588	233,940	235,573	237,838	239,853	243,241	244,334	246,611	248,910
13-Feb	43	252,528	253,873	258,251	263,152	265,000	267,562	269,843	273,671	274,909	277,484	280,083
14-Feb	45	265,126	266,622	271,211	276,361	278,308	281,006	283,409	287,439	288,744	291,455	294,191
15-Feb	32	203,947	204,801	208,358	212,303	213,776	215,822	217,641	220,702	221,688	223,746	225,823
16-Feb	33	204,397	205,257	208,822	212,776	214,253	216,303	218,127	221,196	222,184	224,247	226,329
17-Feb	35	209,701	210,602	214,258	218,316	219,832	221,938	223,811	226,962	227,977	230,095	232,233
18-Feb	31	189,840	190,604	193,918	197,589	198,958	200,858	202,549	205,394	206,310	208,223	210,154
19-Feb	37	218,012	219,033	222,826	227,049	228,633	230,830	232,786	236,072	237,133	239,342	241,573
20-Feb	22	136,740	137,263	139,653	142,295	143,279	144,646	145,860	147,907	148,565	149,940	151,328
21-Feb	39	225,520	226,595	230,516	234,886	236,526	238,801	240,825	244,228	245,326	247,613	249,923
22-Feb	43	249,119	250,424	254,745	259,578	261,399	263,924	266,172	269,945	271,166	273,703	276,265
23-Feb	22	148,348	148,821	151,422	154,284	155,344	156,816	158,125	160,333	161,040	162,523	164,021
24-Feb	35	209,701	210,602	214,258	218,316	219,832	221,938	223,811	226,962	227,977	230,095	232,233
25-Feb	43	247,447	248,732	253,025	257,826	259,633	262,140	264,372	268,118	269,330	271,850	274,393
26-Feb	43	254,167	255,532	259,937	264,871	266,731	269,310	271,607	275,462	276,709	279,301	281,918
27-Feb	41	245,286	246,550	250,806	255,564	257,355	259,839	262,051	265,763	266,964	269,460	271,981
28-Feb	39	236,426	237,579	241,688	246,271	247,992	250,379	252,504	256,074	257,227	259,628	262,051
1-Mar	47	277,307	278,949	283,741	289,132	291,174	294,004	296,525	300,750	302,120	304,963	307,831
2-Mar	32	203,066	203,914	207,456	211,384	212,851	214,887	216,699	219,746	220,728	222,777	224,845
3-Mar	43	256,641	258,036	262,483	267,465	269,345	271,951	274,272	278,166	279,426	282,045	284,689
4-Mar	42	249,908	251,222	255,556	260,405	262,232	264,766	267,021	270,807	272,032	274,578	277,148
5-Mar	27	173,428	174,135	177,161	180,515	181,766	183,504	185,049	187,650	188,487	190,235	192,000
6-Mar	36	211,318	212,355	216,027	220,123	221,662	223,796	225,696	228,888	229,919	232,065	234,232
7-Mar	32	190,213	191,044	194,358	198,040	199,416	201,328	203,028	205,887	206,809	208,731	210,672
8-Mar	41	241,921	243,139	247,340	252,031	253,795	256,242	258,420	262,078	263,261	265,721	268,204
9-Mar	45	264,258	265,743	270,318	275,451	277,390	280,079	282,474	286,489	287,790	290,492	293,218
10-Mar	46	274,752	276,363	281,113	286,454	288,476	291,278	293,774	297,958	299,315	302,130	304,971
11-Mar	21	147,018	147,478	150,057	152,892	153,942	155,401	156,696	158,883	159,584	161,053	162,537
12-Mar	16	107,246	107,504	109,393	111,457	112,216	113,272	114,210	115,795	116,302	117,366	118,441
13-Mar	22	123,083	123,523	125,677	128,054	128,937	130,164	131,254	133,092	133,683	134,918	136,165
14-Mar	20	115,652	115,979	118,011	120,239	121,062	122,206	123,222	124,938	125,487	126,639	127,803
15-Mar	25	146,612	147,088	149,658	152,486	153,535	154,991	156,285	158,468	159,168	160,635	162,116
16-Mar	27	158,525	159,082	161,857	164,917	166,054	167,633	169,036	171,402	172,162	173,751	175,356
17-Mar	35	203,974	204,840	208,397	212,343	213,818	215,865	217,686	220,749	221,736	223,795	225,874
18-Mar	27	166,015	166,617	169,521	172,727	173,919	175,575	177,046	179,526	180,323	181,989	183,672
19-Mar	28	168,590	169,272	172,215	175,475	176,691	178,380	179,881	182,409	183,222	184,921	186,636
20-Mar	28	162,786	163,493	166,330	169,481	170,659	172,294	173,749	176,196	176,984	178,629	180,290
21-Mar	28	165,947	166,613	169,510	172,719	173,915	175,577	177,054	179,541	180,342	182,013	183,701
22-Mar	21	131,598	131,965	134,277	136,813	137,749	139,050	140,206	142,157	142,782	144,093	145,417
23-Mar	24	144,401	144,859	147,391	150,176	151,207	152,641	153,914	156,063	156,752	158,195	159,653
24-Mar	29	169,116	169,746	172,703	175,970	177,185	178,873	180,374	182,903	183,715	185,414	187,130
25-Mar	21	130,276	130,636	132,925	135,435	136,361	137,649	138,792	140,724	141,342	142,639	143,949
26-Mar	26	152,712	153,290	155,959	158,910	160,008	161,533	162,889	165,174	165,908	167,443	168,993
27-Mar	41	228,104	229,264	233,223	237,647	239,312	241,620	243,675	247,126	248,241	250,561	252,904
28-Mar	42	244,508	245,757	250,001	254,744	256,528	259,003	261,206	264,906	266,102	268,590	271,101
29-Mar	29	185,858	186,588	189,834	193,427	194,766	196,625	198,278	201,062	201,957	203,828	205,717
30-Mar	20	132,911	133,282	135,617	138,178	139,123	140,437	141,604	143,575	144,206	145,530	146,867
31-Mar	21	128,514	128,863	131,122	133,597	134,510	135,780	136,908	138,812	139,422	140,701	141,993
1-Apr	23	135,094	137,459	140,056	141,015	142,349	143,534	145,534	146,174	147,518	148,875	151,145
2-Apr	24	142,199	144,686	147,419	148,431	149,838	151,087	153,196	153,871	155,288	156,718	159,110
3-Apr	25	146,628	149,183	152,005	153,054	154,511	155,807	157,990	158,691	160,158	161,639	164,114
4-Apr	21	123,510	125,664	128,040	128,923	130,150	131,239	133,077	133,667	134,901	136,148	138,231
5-Apr	39	220,833	224,655	228,914	230,511	232,728	234,700	238,015	239,085	241,314	243,564	247,316
6-Apr	31	187,058	190,311	193,913	195,256	197,121	198,779	201,571	202,469	204,346	206,241	209,404
7-Apr	19	127,506	129,743	132,192	133,095	134,350	135,464	137,347	137,949	139,214	140,491	142,630
8-Apr	29	171,962	174,957	178,267	179,498	181,209	182,730	185,292	186,115	187,837	189,576	192,480
9-Apr	12	80,431	81,863	83,401	83,956	84,731	85,416	86,582	86,951	87,733	88,523	89,852
10-Apr	22	127,973	130,209	132,670	133,581	134,848	135,973	137,872	138,480	139,756	141,044	143,198
11-Apr	21	116,862	118,901	121,149	121,983	123,142	124,172	125,909	126,466	127,632	128,811	130,780
12-Apr	19	112,863	114,842	117,010	117,809	118,921	119,909	121,577	122,110	123,231	124,362	126,256
13-Apr	7	53,606	54,577	55,597	55,955	56,457	56,899	57,658	57,895	58,403	58,917	59,786
14-Apr	15	86,676	88,214	89,873	90,475	91,314	92,057	93,319	93,720	94,566	95,422	96,859
15-Apr	17	95,568	97,257	99,088	99,756	100,686	101,511	102,908	103,353	104,291	105,239	106,829
16-Apr	21	121,328	123,457	125,787	126,645	127,838	128,898	130,688	131,260	132,463	133,677	135,711
17-Apr	21	121,311	123,434	125,765	126,628	127,826	128,891	130,688	131,263	132,471	133,690	135,729
18-Apr	13	77,752	79,124	80,614	81,159	81,918	82,590	83,730	84,092	84,857	85,630	86,926
19-Apr	15	87,546	89,092	90,770	91,383	92,236	92,993	94,275	94,683	95,543	96,413	97,871
20-Apr	5	48,203	49,076	49,993	50,316	50,767	51,166	51,849	52,062	52,519	52,982	53,764
21-Apr	14	78,685	80,086	81,590	82,134	82,891	83,562	84,702	85,063	85,827	86,601	87,900
22-Apr	7	44,298	45,110	45,949	46,239	46,647	47,005	47,623	47,814	48,227	48,645	49,355
23-Apr	15	84,460	85,960	87,576	88,162	88,978	89,702	90,930	91,319	92,144	92,976	94,375
24-Apr	15	82,227	83,682	85,257	85,831	86,630	87,339	88,540	88,922	89,728	90,543	91,910
25-Apr	14	77,765	79,137	80,628	81,173	81,932	82,605	83,745	84,108	84,874	85,647	86,944

	AI	RI SFT2 plus FT-1 pipeline (excludes FT-1 Storage and Peaking)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	58,670	59,722	60,841	61,241	61,799	62,292	63,134	63,399	63,963	64,533	65,495
27-Apr	7	46,514	47,364	48,246	48,553	48,982	49,361	50,012	50,214	50,650	51,091	51,838
28-Apr	8	45,363	46,195	47,054	47,351	47,768	48,135	48,767	48,962	49,385	49,813	50,539
29-Apr	13	71,137	72,409	73,767	74,255	74,935	75,537	76,562	76,886	77,573	78,268	79,438
30-Apr	16	89,792	91,383	93,102	93,728	94,599	95,370	96,680	97,096	97,975	98,863	100,354
1-May	0	47,646	48,513	49,418	49,734	50,176	50,566	51,237	51,445	51,894	52,348	53,116
2-May	0	39,600	40,328	41,077	41,335	41,697	42,016	42,566	42,735	43,103	43,475	44,107
3-May	0	35,388	36,053	36,718	36,939	37,250	37,523	37,999	38,143	38,461	38,782	39,333
4-May	0	38,084	38,802	39,517	39,753	40,087	40,378	40,888	41,041	41,381	41,726	42,317
5-May	6	36,241	36,917	37,600	37,829	38,153	38,436	38,929	39,079	39,408	39,742	40,311
6-May	17	88,679	90,253	91,950	92,566	93,423	94,183	95,474	95,883	96,749	97,624	99,094
7-May	23	128,003	130,246	132,705	133,613	134,875	135,995	137,888	138,493	139,764	141,048	143,197
8-May	14	84,873	86,374	88,000	88,593	89,419	90,151	91,392	91,786	92,619	93,461	94,873
9-May	13	75,535	76,869	78,317	78,846	79,582	80,234	81,340	81,692	82,434	83,184	84,442
10-May	2	45,462	46,280	47,146	47,455	47,886	48,266	48,917	49,121	49,557	49,998	50,741
11-May	0	43,698	44,498	45,326	45,613	46,014	46,368	46,977	47,166	47,573	47,986	48,686
12-May	0	38,078	38,784	39,503	39,747	40,090	40,391	40,913	41,073	41,422	41,775	42,377
13-May	3	36,292	36,963	37,648	37,883	38,212	38,501	39,001	39,155	39,489	39,828	40,404
14-May	8	39,301	40,030	40,771	41,023	41,376	41,686	42,225	42,389	42,749	43,113	43,733
15-May	12	61,356	62,453	63,625	64,045	64,631	65,149	66,033	66,311	66,904	67,502	68,511
16-May	17	89,329	90,897	92,612	93,243	94,121	94,900	96,217	96,638	97,522	98,416	99,912
17-May	12	69,334	70,569	71,894	72,372	73,040	73,630	74,635	74,952	75,626	76,307	77,452
18-May	12	72,010	73,297	74,672	75,166	75,855	76,464	77,502	77,830	78,526	79,229	80,414
19-May	1	46,973	47,823	48,716	49,031	49,472	49,861	50,528	50,736	51,183	51,634	52,397
20-May	8	43,591	44,392	45,217	45,501	45,899	46,250	46,855	47,042	47,447	47,856	48,552
21-May	9	47,150	48,011	48,905	49,216	49,651	50,034	50,694	50,898	51,340	51,786	52,544
22-May	9	48,019	48,889	49,802	50,124	50,573	50,969	51,649	51,861	52,317	52,777	53,555
23-May	8	40,454	41,188	41,957	42,227	42,605	42,938	43,509	43,687	44,070	44,457	45,112
24-May	10	53,351	54,312	55,329	55,689	56,193	56,638	57,400	57,638	58,148	58,664	59,534
25-May	7	43,855	44,659	45,490	45,777	46,179	46,534	47,145	47,334	47,742	48,156	48,858
26-May	7	43,412	44,208	45,030	45,314	45,712	46,063	46,667	46,854	47,258	47,667	48,361
27-May	1	42,541	43,314	44,122	44,405	44,801	45,150	45,749	45,936	46,337	46,743	47,430
28-May	5	39,339	40,059	40,805	41,062	41,424	41,742	42,291	42,461	42,828	43,199	43,829
29-May	3	35,991	36,646	37,329	37,568	37,903	38,197	38,704	38,862	39,201	39,544	40,125
30-May	9	41,354	42,103	42,889	43,166	43,553	43,895	44,481	44,663	45,056	45,452	46,123
31-May	12	61,799	62,904	64,084	64,507	65,098	65,620	66,511	66,791	67,388	67,991	69,007
1-Jun	6	45,143	45,966	46,822	47,121	47,539	47,907	48,541	48,738	49,162	49,591	50,317
2-Jun	7	43,855	44,659	45,490	45,777	46,179	46,534	47,145	47,334	47,742	48,156	48,858
3-Jun	2	41,933	42,697	43,493	43,771	44,161	44,504	45,094	45,278	45,673	46,072	46,748
4-Jun	0	40,492	41,230	41,999	42,266	42,642	42,972	43,541	43,717	44,098	44,482	45,134
5-Jun	0	34,733	35,367	36,026	36,256	36,577	36,861	37,349	37,500	37,827	38,157	38,717
6-Jun	0	31,195	31,761	32,354	32,562	32,853	33,110	33,550	33,688	33,983	34,281	34,786
7-Jun	0	33,888	34,507	35,149	35,373	35,686	35,961	36,436	36,583	36,900	37,221	37,766
8-Jun	0	36,888	37,565	38,264	38,505	38,843	39,140	39,654	39,812	40,156	40,503	41,093
9-Jun	0	35,961	36,621	37,302	37,537	37,866	38,156	38,656	38,810	39,144	39,482	40,057
10-Jun	0	35,218	35,865	36,532	36,761	37,084	37,367	37,856	38,007	38,334	38,665	39,227
11-Jun	0	34,775	35,415	36,073	36,299	36,616	36,896	37,378	37,527	37,849	38,175	38,730
12-Jun	0	31,328	31,902	32,495	32,700	32,988	33,241	33,678	33,813	34,105	34,401	34,902
13-Jun	0	29,538	30,075	30,636	30,832	31,107	31,350	31,766	31,896	32,174	32,456	32,934
14-Jun	0	33,264	33,872	34,503	34,722	35,030	35,301	35,767	35,911	36,223	36,539	37,074
15-Jun	9	41,831	42,601	43,393	43,664	44,045	44,380	44,959	45,138	45,525	45,917	46,583
16-Jun	7	38,979	39,700	40,436	40,688	41,041	41,351	41,888	42,053	42,412	42,775	43,394
17-Jun	1	43,427	44,216	45,041	45,330	45,735	46,092	46,705	46,896	47,306	47,721	48,423
18-Jun	5	39,339	40,059	40,805	41,062	41,424	41,742	42,291	42,461	42,828	43,199	43,829
19-Jun	6	35,818	36,475	37,153	37,388	37,716	38,006	38,505	38,659	38,993	39,331	39,904
20-Jun	5	35,316	35,954	36,626	36,863	37,195	37,488	37,989	38,146	38,482	38,821	39,395
21-Jun	0	39,518	40,232	40,984	41,250	41,621	41,949	42,511	42,686	43,062	43,443	44,085
22-Jun	0	37,319	38,002	38,709	38,954	39,298	39,600	40,122	40,283	40,632	40,984	41,583
23-Jun	0	32,887	33,494	34,115	34,328	34,626	34,889	35,343	35,482	35,786	36,093	36,615
24-Jun	0	32,887	33,494	34,115	34,328	34,626	34,889	35,343	35,482	35,786	36,093	36,615
25-Jun	0	32,887	33,494	34,115	34,328	34,626	34,889	35,343	35,482	35,786	36,093	36,615
26-Jun	0	30,538	31,098	31,676	31,876	32,157	32,404	32,829	32,961	33,246	33,534	34,023
27-Jun	0	26,975	27,467	27,979	28,157	28,407	28,627	29,006	29,123	29,377	29,633	30,067
28-Jun	0	28,765	29,294	29,839	30,026	30,288	30,519	30,918	31,041	31,307	31,577	32,036
29-Jun	0	31,278	31,857	32,447	32,648	32,931	33,179	33,608	33,740	34,027	34,318	34,813
30-Jun	0	31,721	32,308	32,907	33,111	33,398	33,650	34,086	34,220	34,512	34,807	35,310
1-Jul	0	32,164	32,758	33,366	33,574	33,865	34,121	34,564	34,700	34,996	35,296	35,807
2-Jul	0	32,164	32,758	33,366	33,574	33,865	34,121	34,564	34,700	34,996	35,296	35,807
3-Jul	0	29,652	30,196	30,757	30,951	31,223	31,461	31,874	32,001	32,276	32,555	33,029
4-Jul	0	26,696	27,183	27,690	27,866	28,113	28,331	28,705	28,821	29,072	29,325	29,755
5-Jul	0	28,322	28,844	29,379	29,563	29,821	30,048	30,440	30,561	30,823	31,088	31,539
6-Jul	1	29,687	30,240	30,799	30,988	31,253	31,486	31,891	32,014	32,284	32,558	33,024
7-Jul	2	33,512	34,131	34,764	34,981	35,285	35,552	36,015	36,156	36,465	36,778	37,310
8-Jul	0	39,304	40,021	40,766	41,027	41,391	41,712	42,264	42,435	42,805	43,178	43,811
9-Jul	0	35,036	35,679	36,342	36,571	36,892	37,175	37,662	37,813	38,138	38,468	39,028
10-Jul	0	27,041	27,540	28,051	28,226	28,471	28,687	29,060	29,174	29,424	29,676	30,106
11-Jul	0	23,593	24,027	24,474	24,627	24,843	25,033	25,360	25,461	25,680	25,901	26,278
12-Jul	0	26,992	27,491	28,001	28,175	28,420	28,634	29,006	29,120	29,369	29,620	30,049
13-Jul	0	31,162	31,739	32,327	32,528	32,809	33,056	33,485	33,616	33,902	34,192	34,685
14-Jul	0	31,326	31,906	32,497	32,699	32,982	33,231	33,662	33,794	34,082	34,374	34,870
15-Jul	0	30,440	31,004	31,578	31,773	32,048	32,289	32,706	32,834	33,113	33,395	33,877
16-Jul	0	30,160	30,720	31,289	31,482	31,753	31,992	32,405	32,532	32,808	33,088	33,564
17-Jul	0	27,205	27,707	28,221	28,397	28,644	28,861	29,237	29,352	29,604	29,858	30,290
18-Jul	0	23,806	24,243	24,693	24,849	25,067	25,259	25,591	25,693	25,914	26,139	26,519
19-Jul	0	25,432	25,903	26,383	26,546	26,775	26,976	27,325	27,432	27,665	27,901	28,303
20-Jul	0	27,944	28,465	28,992	29,169	29,418	29,636	30,016	30,131	30,385	30,642	31,081
21-Jul	0	28,994	29,534	30,080	30,265	30,525	30,753	31,149	31,270	31,534	31,802	32,259
22-Jul	0	28,831	29,367	29,910	30,094	30,352	30,578	30,972	31,092	31,354	31,620	32,074

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI SFT2 plus FT-1 pipeline (excludes FT-1 Storage and Peaking)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	28,667	29,201	29,741	29,923	30,179	30,404	30,795	30,914	31,175	31,439	31,890
24-Jul	0	26,877	27,373	27,881	28,055	28,298	28,512	28,883	28,996	29,244	29,495	29,921
25-Jul	0	24,644	25,095	25,562	25,724	25,950	26,149	26,493	26,599	26,829	27,061	27,456
26-Jul	0	27,156	27,658	28,171	28,346	28,592	28,809	29,183	29,298	29,549	29,802	30,233
27-Jul	0	30,440	31,004	31,578	31,773	32,048	32,289	32,706	32,834	33,113	33,395	33,877
28-Jul	0	30,440	31,004	31,578	31,773	32,048	32,289	32,706	32,834	33,113	33,395	33,877
29-Jul	0	29,996	30,553	31,119	31,311	31,581	31,817	32,228	32,354	32,628	32,906	33,380
30-Jul	0	29,996	30,553	31,119	31,311	31,581	31,817	32,228	32,354	32,628	32,906	33,380
31-Jul	0	27,156	27,658	28,171	28,346	28,592	28,809	29,183	29,298	29,549	29,802	30,233
1-Aug	0	25,251	25,713	26,191	26,357	26,590	26,795	27,148	27,257	27,493	27,732	28,137
2-Aug	0	27,648	28,157	28,680	28,859	29,111	29,332	29,715	29,832	30,088	30,347	30,787
3-Aug	0	28,994	29,534	30,080	30,265	30,525	30,753	31,149	31,270	31,534	31,802	32,259
4-Aug	0	28,551	29,083	29,621	29,802	30,058	30,282	30,671	30,790	31,050	31,313	31,762
5-Aug	0	28,387	28,916	29,451	29,631	29,885	30,107	30,494	30,612	30,870	31,131	31,577
6-Aug	0	28,503	29,034	29,571	29,752	30,006	30,229	30,618	30,736	30,995	31,257	31,705
7-Aug	0	27,156	27,658	28,171	28,346	28,592	28,809	29,183	29,298	29,549	29,802	30,233
8-Aug	0	25,530	25,997	26,481	26,649	26,884	27,092	27,449	27,559	27,798	28,040	28,449
9-Aug	0	27,763	28,275	28,800	28,980	29,232	29,455	29,838	29,956	30,213	30,473	30,915
10-Aug	0	29,996	30,553	31,119	31,311	31,581	31,817	32,228	32,354	32,628	32,906	33,380
11-Aug	0	29,996	30,553	31,119	31,311	31,581	31,817	32,228	32,354	32,628	32,906	33,380
12-Aug	0	29,669	30,220	30,779	30,969	31,235	31,468	31,874	31,998	32,269	32,543	33,011
13-Aug	0	30,719	31,288	31,868	32,065	32,342	32,585	33,007	33,136	33,418	33,703	34,189
14-Aug	0	28,486	29,010	29,549	29,734	29,994	30,222	30,617	30,739	31,002	31,270	31,723
15-Aug	0	25,202	25,664	26,142	26,307	26,539	26,743	27,094	27,203	27,438	27,676	28,080
16-Aug	0	28,486	29,010	29,549	29,734	29,994	30,222	30,617	30,739	31,002	31,270	31,723
17-Aug	0	31,162	31,739	32,327	32,528	32,809	33,056	33,485	33,616	33,902	34,192	34,685
18-Aug	1	29,244	29,789	30,340	30,525	30,786	31,015	31,413	31,534	31,799	32,068	32,528
19-Aug	0	34,380	35,013	35,663	35,887	36,201	36,477	36,954	37,100	37,419	37,742	38,290
20-Aug	0	35,267	35,914	36,582	36,812	37,135	37,419	37,909	38,061	38,388	38,720	39,284
21-Aug	1	28,340	28,864	29,399	29,582	29,840	30,066	30,457	30,577	30,838	31,103	31,553
22-Aug	0	29,914	30,457	31,025	31,225	31,504	31,751	32,174	32,306	32,589	32,875	33,360
23-Aug	0	32,426	33,019	33,634	33,847	34,147	34,411	34,865	35,005	35,309	35,616	36,137
24-Aug	0	32,443	33,043	33,656	33,865	34,159	34,418	34,865	35,002	35,301	35,604	36,119
25-Aug	0	32,887	33,494	34,115	34,328	34,626	34,889	35,343	35,482	35,786	36,093	36,615
26-Aug	0	33,050	33,660	34,285	34,499	34,799	35,063	35,520	35,660	35,966	36,275	36,800
27-Aug	0	32,771	33,376	33,995	34,207	34,505	34,767	35,219	35,358	35,661	35,967	36,488
28-Aug	0	29,372	29,912	30,468	30,659	30,928	31,165	31,573	31,699	31,972	32,248	32,717
29-Aug	0	25,482	25,948	26,431	26,598	26,833	27,039	27,395	27,505	27,743	27,984	28,392
30-Aug	0	28,437	28,961	29,499	29,684	29,942	30,170	30,564	30,685	30,948	31,214	31,667
31-Aug	0	32,443	33,043	33,656	33,865	34,159	34,418	34,865	35,002	35,301	35,604	36,119
1-Sep	0	32,723	33,327	33,945	34,157	34,453	34,714	35,166	35,304	35,606	35,911	36,431
2-Sep	0	33,166	33,778	34,405	34,619	34,921	35,185	35,644	35,784	36,090	36,400	36,928
3-Sep	0	33,609	34,229	34,864	35,082	35,388	35,657	36,122	36,264	36,575	36,890	37,424
4-Sep	0	30,933	31,500	32,086	32,288	32,573	32,823	33,254	33,387	33,675	33,967	34,462
5-Sep	0	28,093	28,604	29,138	29,324	29,584	29,814	30,209	30,331	30,596	30,863	31,316
6-Sep	0	31,212	31,784	32,375	32,580	32,867	33,119	33,555	33,689	33,980	34,275	34,775
7-Sep	0	34,332	34,964	35,613	35,836	36,149	36,424	36,900	37,046	37,364	37,686	38,233
8-Sep	0	34,168	34,797	35,443	35,665	35,976	36,250	36,723	36,868	37,185	37,505	38,049
9-Sep	0	34,611	35,248	35,903	36,128	36,443	36,721	37,201	37,349	37,669	37,994	38,545
10-Sep	3	34,235	34,866	35,513	35,735	36,046	36,320	36,793	36,938	37,255	37,575	38,119
11-Sep	3	33,775	34,391	35,032	35,255	35,567	35,842	36,315	36,461	36,778	37,098	37,641
12-Sep	0	33,970	34,583	35,230	35,459	35,779	36,061	36,545	36,696	37,020	37,348	37,901
13-Sep	0	35,037	35,675	36,340	36,573	36,898	37,185	37,678	37,832	38,162	38,495	39,061
14-Sep	0	35,497	36,150	36,822	37,053	37,378	37,663	38,157	38,309	38,638	38,972	39,539
15-Sep	1	34,563	35,199	35,853	36,077	36,392	36,669	37,147	37,295	37,614	37,938	38,489
16-Sep	3	35,564	36,219	36,892	37,123	37,448	37,733	38,227	38,379	38,709	39,042	39,610
17-Sep	0	38,276	38,976	39,702	39,953	40,306	40,616	41,151	41,317	41,675	42,037	42,651
18-Sep	0	35,177	35,817	36,485	36,718	37,045	37,332	37,827	37,980	38,311	38,646	39,213
19-Sep	2	30,860	31,420	32,007	32,212	32,500	32,753	33,189	33,324	33,616	33,910	34,409
20-Sep	7	34,107	34,738	35,382	35,602	35,911	36,182	36,652	36,796	37,110	37,428	37,969
21-Sep	5	39,782	40,510	41,264	41,525	41,891	42,214	42,769	42,941	43,312	43,688	44,326
22-Sep	0	41,822	42,583	43,377	43,654	44,043	44,386	44,974	45,157	45,551	45,950	46,625
23-Sep	6	38,071	38,773	39,493	39,740	40,086	40,390	40,916	41,078	41,429	41,785	42,391
24-Sep	12	61,836	62,949	64,127	64,546	65,131	65,649	66,532	66,809	67,402	68,000	69,010
25-Sep	1	41,637	42,389	43,181	43,462	43,854	44,200	44,793	44,978	45,375	45,777	46,455
26-Sep	0	36,919	37,583	38,287	38,537	38,887	39,196	39,724	39,890	40,244	40,602	41,205
27-Sep	1	34,163	34,787	35,435	35,661	35,976	36,254	36,733	36,881	37,201	37,525	38,074
28-Sep	5	36,297	36,966	37,652	37,888	38,218	38,508	39,009	39,164	39,499	39,838	40,416
29-Sep	8	40,488	41,236	42,001	42,262	42,629	42,952	43,510	43,681	44,054	44,432	45,075
30-Sep	13	70,251	71,507	72,848	73,329	74,001	74,594	75,607	75,925	76,604	77,290	78,445
1-Oct	0	46,357	47,203	48,083	48,389	48,817	49,195	49,845	50,046	50,481	50,921	51,666
2-Oct	7	39,105	39,823	40,563	40,818	41,177	41,492	42,036	42,204	42,568	42,936	43,561
3-Oct	9	41,053	41,799	42,579	42,852	43,235	43,572	44,151	44,331	44,719	45,111	45,775
4-Oct	1	40,751	41,487	42,263	42,537	42,920	43,258	43,837	44,018	44,406	44,799	45,461
5-Oct	3	40,440	41,178	41,945	42,212	42,586	42,916	43,484	43,659	44,039	44,423	45,074
6-Oct	0	39,032	39,755	40,492	40,742	41,094	41,403	41,939	42,103	42,461	42,823	43,441
7-Oct	2	37,664	38,356	39,069	39,314	39,659	39,962	40,485	40,646	40,996	41,350	41,951
8-Oct	0	38,517	39,237	39,962	40,205	40,548	40,848	41,371	41,530	41,879	42,232	42,836
9-Oct	14	68,214	69,431	70,734	71,203	71,858	72,437	73,423	73,734	74,396	75,064	76,188
10-Oct	23	118,844	120,919	123,205	124,053	125,230	126,277	128,042	128,608	129,794	130,992	132,994
11-Oct	19	110,204	112,137	114,253	115,034	116,118	117,082	118,709	119,230	120,323	121,427	123,275
12-Oct	16	99,100	100,850	102,750	103,443	104,409	105,265	106,716	107,177	108,151	109,135	110,786
13-Oct	9	58,673	59,733	60,850	61,245	61,797	62,284	63,119	63,380	63,939	64,504	65,459
14-Oct	6	46,915	47,769	48,660	48,971	49,408	49,792	50,453	50,658	51,100	51,547	52,304
15-Oct	5	42,441	43,215	44,020	44,301	44,694	45,041	45,636	45,821	46,220	46,623	47,306
16-Oct	15	77,352	78,723	80,204	80,742	81,492	82,156	83,284	83,641	84,398	85,162	86,446
17-Oct	20	105,325	107,167	109,191	109,941	110,982	111,907	113,468	113,968	115,017	116,076	117,847
18-Oct	19	109,317	111,235	113,334	114,108	115,184	116,139	117,754	118,270	119,354	120,449	122,282

	AI	RI SFT2 plus FT-1 pipeline (excludes FT-1 Storage and Peaking)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	81,774	83,229	84,793	85,358	86,147	86,845	88,032	88,407	89,203	90,008	91,360
20-Oct	9	57,344	58,381	59,472	59,857	60,396	60,871	61,685	61,940	62,485	63,037	63,969
21-Oct	12	68,908	70,141	71,457	71,927	72,585	73,166	74,157	74,469	75,134	75,805	76,937
22-Oct	21	116,452	118,498	120,734	121,556	122,700	123,715	125,431	125,980	127,132	128,297	130,247
23-Oct	23	129,759	132,026	134,521	135,446	136,731	137,873	139,799	140,417	141,711	143,017	145,202
24-Oct	23	131,958	134,256	136,796	137,741	139,054	140,221	142,188	142,820	144,141	145,476	147,705
25-Oct	22	130,189	132,463	134,967	135,894	137,184	138,329	140,261	140,881	142,179	143,490	145,682
26-Oct	15	95,098	96,780	98,602	99,266	100,190	101,009	102,399	102,841	103,774	104,716	106,297
27-Oct	16	96,884	98,596	100,453	101,130	102,073	102,909	104,326	104,777	105,728	106,689	108,302
28-Oct	16	94,225	95,891	97,696	98,354	99,270	100,082	101,459	101,897	102,821	103,755	105,321
29-Oct	14	84,004	85,496	87,103	87,685	88,497	89,215	90,437	90,823	91,642	92,470	93,861
30-Oct	7	46,497	47,340	48,224	48,535	48,970	49,354	50,012	50,217	50,658	51,103	51,857
31-Oct	2	40,127	40,846	41,611	41,885	42,267	42,605	43,182	43,363	43,750	44,140	44,798
Nov	697	4,094,602	4,108,333	4,180,062	4,259,080	4,288,388	4,329,109	4,365,292	4,426,316	4,445,894	4,486,893	4,528,297
Dec	1,040	6,225,983	6,254,762	6,363,104	6,483,693	6,528,890	6,591,607	6,647,409	6,741,219	6,771,482	6,834,550	6,898,223
Jan	1,250	7,476,690	7,517,328	7,646,917	7,792,082	7,846,854	7,922,791	7,990,410	8,103,843	8,140,566	8,216,852	8,293,857
Feb	1,091	6,553,738	6,587,598	6,701,317	6,828,453	6,876,315	6,942,694	7,001,788	7,100,997	7,133,076	7,199,793	7,267,142
Mar	942	5,656,258	5,680,639	5,779,228	5,888,685	5,929,604	5,986,404	6,036,925	6,121,922	6,149,305	6,206,439	6,264,126
Apr	518	3,063,822	3,117,752	3,176,534	3,198,097	3,228,101	3,254,722	3,299,773	3,314,141	3,344,387	3,374,940	3,426,140
May	228	1,656,735	1,686,637	1,718,175	1,729,341	1,744,949	1,758,731	1,782,318	1,789,696	1,805,494	1,821,470	1,848,446
Jun	48	1,067,693	1,087,245	1,107,476	1,114,483	1,124,306	1,132,954	1,147,859	1,152,464	1,162,433	1,172,520	1,189,633
Jul	3	904,832	921,554	938,648	944,485	952,683	959,887	972,360	976,183	984,517	992,953	1,007,311
Aug	2	917,957	934,896	952,247	958,185	966,523	973,851	986,531	990,423	998,896	1,007,473	1,022,063
Sep	70	1,115,172	1,135,550	1,156,695	1,164,043	1,174,340	1,183,409	1,199,022	1,203,856	1,214,301	1,224,868	1,242,785
Oct	361	2,332,521	2,373,960	2,418,584	2,434,745	2,457,270	2,477,221	2,511,120	2,521,857	2,544,596	2,567,576	2,606,189
Total	6,250	41,066,003	41,406,253	42,138,987	42,795,373	43,118,222	43,513,380	43,940,807	44,442,916	44,694,948	45,106,328	45,594,212

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI FIRM_CE										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	13,207	12,808	13,447	13,946	13,920	13,821	13,716	13,630	13,525	13,443	13,366
2-Nov	9	12,458	12,082	12,686	13,156	13,131	13,038	12,939	12,858	12,759	12,681	12,609
3-Nov	14	13,907	13,487	14,161	14,686	14,658	14,554	14,444	14,353	14,242	14,156	14,075
4-Nov	13	13,599	13,188	13,847	14,360	14,333	14,231	14,124	14,035	13,927	13,842	13,763
5-Nov	20	15,450	14,983	15,731	16,315	16,284	16,168	16,046	15,945	15,822	15,726	15,636
6-Nov	19	14,682	14,238	14,949	15,504	15,474	15,364	15,248	15,152	15,035	14,944	14,859
7-Nov	16	13,420	13,014	13,664	14,171	14,144	14,043	13,937	13,850	13,743	13,659	13,581
8-Nov	14	13,508	13,100	13,754	14,264	14,237	14,136	14,029	13,941	13,834	13,750	13,671
9-Nov	20	15,542	15,072	15,825	16,412	16,381	16,264	16,141	16,040	15,916	15,819	15,729
10-Nov	15	14,429	13,994	14,692	15,237	15,208	15,100	14,986	14,892	14,777	14,687	14,603
11-Nov	15	14,460	14,023	14,724	15,270	15,241	15,132	15,018	14,924	14,808	14,718	14,634
12-Nov	14	14,060	13,635	14,316	14,847	14,819	14,714	14,602	14,511	14,399	14,311	14,230
13-Nov	20	14,806	14,359	15,076	15,635	15,605	15,494	15,377	15,281	15,163	15,071	14,985
14-Nov	19	14,007	13,584	14,263	14,792	14,763	14,659	14,548	14,456	14,345	14,258	14,176
15-Nov	24	16,100	15,613	16,393	17,001	16,969	16,848	16,721	16,616	16,488	16,387	16,294
16-Nov	27	17,668	17,134	17,990	18,657	18,621	18,489	18,349	18,234	18,093	17,983	17,881
17-Nov	19	15,937	15,456	16,228	16,829	16,797	16,678	16,552	16,448	16,321	16,222	16,129
18-Nov	28	18,006	17,462	18,335	19,014	18,978	18,843	18,701	18,584	18,440	18,328	18,223
19-Nov	30	18,531	17,971	18,868	19,568	19,531	19,392	19,245	19,125	18,977	18,862	18,754
20-Nov	31	18,409	17,853	18,745	19,440	19,403	19,265	19,119	18,999	18,853	18,738	18,631
21-Nov	31	17,796	17,259	18,121	18,793	18,757	18,624	18,483	18,367	18,225	18,114	18,011
22-Nov	37	20,013	19,409	20,378	21,134	21,093	20,944	20,785	20,655	20,495	20,371	20,254
23-Nov	41	21,889	21,228	22,288	23,115	23,071	22,907	22,733	22,591	22,417	22,280	22,153
24-Nov	43	22,689	22,004	23,102	23,959	23,914	23,744	23,564	23,416	23,236	23,094	22,962
25-Nov	45	23,366	22,660	23,792	24,674	24,628	24,453	24,267	24,115	23,929	23,784	23,648
26-Nov	27	19,044	18,469	19,391	20,110	20,072	19,930	19,779	19,655	19,503	19,385	19,274
27-Nov	17	15,381	14,916	15,661	16,242	16,211	16,096	15,974	15,874	15,752	15,656	15,566
28-Nov	20	14,560	14,120	14,826	15,375	15,346	15,237	15,122	15,027	14,911	14,820	14,736
29-Nov	24	16,038	15,554	16,331	16,936	16,904	16,784	16,657	16,553	16,425	16,325	16,232
30-Nov	29	18,192	17,643	18,524	19,211	19,174	19,038	18,894	18,775	18,630	18,517	18,411
1-Dec	20	16,245	15,755	16,541	17,155	17,122	17,000	16,872	16,766	16,637	16,536	16,441
2-Dec	28	18,098	17,551	18,428	19,111	19,075	18,939	18,796	18,678	18,534	18,422	18,316
3-Dec	29	18,314	17,761	18,648	19,340	19,303	19,166	19,021	18,901	18,756	18,642	18,535
4-Dec	34	19,119	18,542	19,468	20,190	20,152	20,008	19,857	19,732	19,580	19,461	19,350
5-Dec	25	16,376	15,881	16,674	17,293	17,260	17,137	17,008	16,901	16,771	16,669	16,573
6-Dec	39	20,415	19,799	20,787	21,558	21,517	21,364	21,202	21,070	20,907	20,780	20,661
7-Dec	28	18,557	17,996	18,895	19,596	19,559	19,420	19,273	19,152	19,004	18,889	18,781
8-Dec	19	16,427	15,930	16,726	17,346	17,313	17,190	17,060	16,953	16,822	16,720	16,625
9-Dec	29	18,284	17,732	18,617	19,307	19,271	19,134	18,989	18,870	18,724	18,611	18,504
10-Dec	23	16,833	16,325	17,140	17,775	17,742	17,616	17,482	17,373	17,239	17,134	17,036
11-Dec	20	15,510	15,041	15,792	16,378	16,347	16,231	16,108	16,007	15,884	15,787	15,697
12-Dec	27	16,258	15,767	16,554	17,168	17,136	17,014	16,885	16,779	16,650	16,548	16,454
13-Dec	27	17,085	16,569	17,397	18,042	18,007	17,879	17,744	17,633	17,497	17,391	17,291
14-Dec	41	21,461	20,813	21,852	22,662	22,619	22,459	22,289	22,149	21,978	21,844	21,720
15-Dec	45	22,877	22,186	23,294	24,157	24,112	23,940	23,759	23,610	23,428	23,286	23,153
16-Dec	39	21,946	21,283	22,346	23,175	23,131	22,966	22,792	22,649	22,475	22,338	22,211
17-Dec	32	20,156	19,548	20,524	21,285	21,245	21,094	20,934	20,803	20,642	20,517	20,400
18-Dec	41	21,276	20,633	21,664	22,467	22,425	22,265	22,097	21,958	21,789	21,656	21,533
19-Dec	32	18,410	17,854	18,746	19,441	19,404	19,266	19,120	19,000	18,854	18,739	18,632
20-Dec	49	23,312	22,608	23,737	24,618	24,571	24,396	24,212	24,060	23,874	23,729	23,594
21-Dec	51	24,756	24,008	25,207	26,142	26,092	25,907	25,711	25,549	25,353	25,198	25,054
22-Dec	32	20,646	20,022	21,022	21,802	21,760	21,606	21,442	21,308	21,143	21,015	20,895
23-Dec	21	17,410	16,884	17,727	18,385	18,350	18,219	18,081	17,968	17,829	17,721	17,620
24-Dec	27	17,974	17,431	18,301	18,980	18,944	18,809	18,667	18,550	18,407	18,295	18,190
25-Dec	41	20,572	19,951	20,947	21,724	21,683	21,529	21,366	21,232	21,068	20,940	20,821
26-Dec	42	20,726	20,100	21,104	21,887	21,845	21,690	21,526	21,391	21,226	21,097	20,976
27-Dec	51	24,112	23,384	24,552	25,462	25,414	25,233	25,042	24,885	24,693	24,543	24,403
28-Dec	51	25,123	24,364	25,581	26,530	26,479	26,291	26,092	25,928	25,728	25,572	25,426
29-Dec	32	20,707	20,082	21,085	21,866	21,825	21,670	21,506	21,371	21,206	21,077	20,957
30-Dec	35	20,867	20,236	21,247	22,035	21,993	21,837	21,671	21,535	21,369	21,240	21,118
31-Dec	30	19,143	18,564	19,491	20,214	20,176	20,033	19,881	19,756	19,604	19,485	19,373
1-Jan	61	26,031	25,244	26,505	27,488	27,436	27,241	27,035	26,865	26,658	26,496	26,345
2-Jan	38	20,442	19,825	20,815	21,587	21,546	21,393	21,231	21,098	20,935	20,808	20,689
3-Jan	23	17,688	17,154	18,011	18,679	18,643	18,511	18,371	18,255	18,115	18,004	17,902
4-Jan	28	18,465	17,907	18,802	19,499	19,462	19,324	19,177	19,057	18,910	18,795	18,688
5-Jan	19	15,937	15,456	16,228	16,829	16,797	16,678	16,552	16,448	16,321	16,222	16,129
6-Jan	28	18,037	17,492	18,366	19,047	19,011	18,875	18,733	18,615	18,472	18,359	18,254
7-Jan	38	20,506	19,887	20,880	21,654	21,613	21,459	21,297	21,163	21,000	20,872	20,753
8-Jan	41	21,828	21,169	22,226	23,050	23,006	22,843	22,670	22,528	22,354	22,218	22,091
9-Jan	41	20,816	20,187	21,195	21,981	21,940	21,784	21,619	21,483	21,318	21,188	21,067
10-Jan	30	18,897	18,326	19,241	19,955	19,917	19,775	19,625	19,502	19,352	19,234	19,124
11-Jan	43	22,475	21,796	22,884	23,733	23,688	23,520	23,342	23,195	23,016	22,876	22,746
12-Jan	50	24,264	23,531	24,707	25,623	25,574	25,392	25,200	25,042	24,849	24,698	24,557
13-Jan	41	22,654	21,970	23,067	23,922	23,877	23,707	23,528	23,380	23,200	23,059	22,927
14-Jan	46	23,827	23,108	24,262	25,161	25,114	24,935	24,746	24,591	24,402	24,253	24,115
15-Jan	43	22,259	21,587	22,665	23,506	23,461	23,294	23,118	22,973	22,796	22,657	22,528
16-Jan	30	18,406	17,850	18,741	19,436	19,399	19,262	19,116	18,996	18,849	18,735	18,628
17-Jan	40	21,090	20,453	21,475	22,271	22,229	22,071	21,904	21,766	21,599	21,467	21,345
18-Jan	55	25,407	24,640	25,870	26,829	26,779	26,588	26,387	26,221	26,019	25,861	25,713
19-Jan	68	29,382	28,494	29,917	31,027	30,968	30,748	30,515	30,323	30,090	29,907	29,736
20-Jan	54	26,782	25,973	27,270	28,281	28,227	28,027	27,814	27,640	27,427	27,260	27,104
21-Jan	44	24,282	23,548	24,724	25,641	25,593	25,411	25,218	25,060	24,867	24,716	24,575
22-Jan	34	20,374	19,758	20,745	21,514	21,474	21,321	21,159	21,027	20,865	20,738	20,619
23-Jan	32	18,563	18,002	18,902	19,602	19,565	19,426	19,279	19,158	19,011	18,895	18,787
24-Jan	44	21,864	21,203	22,262	23,088	23,044	22,880	22,707	22,565	22,391	22,255	22,127
25-Jan	24	17,936	17,395	18,263	18,941	18,905	18,770	18,628	18,511	18,369	18,257	18,153
26-Jan	41	21,889	21,228	22,288	23,115	23,071	22,907	22,733	22,591	22,417	22,280	22,153
27-Jan	46	23,032	22,336	23,452	24,321	24,275	24,103	23,920	23,770	23,587	23,444	23,310

Date	AI HDDd	RI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	20,248	19,637	20,617	21,382	21,341	21,190	21,029	20,897	20,736	20,610	20,492
29-Jan	46	22,725	22,038	23,139	23,997	23,951	23,781	23,601	23,453	23,272	23,131	22,999
30-Jan	47	22,267	21,594	22,673	23,513	23,469	23,302	23,126	22,981	22,803	22,665	22,535
31-Jan	43	22,443	21,765	22,852	23,699	23,654	23,486	23,308	23,162	22,984	22,844	22,714
1-Feb	17	16,636	16,134	16,940	17,568	17,534	17,410	17,278	17,170	17,037	16,934	16,837
2-Feb	28	18,435	17,878	18,771	19,467	19,430	19,292	19,146	19,026	18,879	18,764	18,657
3-Feb	45	22,173	21,503	22,577	23,414	23,370	23,204	23,028	22,884	22,707	22,569	22,441
4-Feb	45	23,030	22,334	23,449	24,319	24,273	24,100	23,918	23,768	23,585	23,441	23,307
5-Feb	56	25,561	24,789	26,027	26,992	26,941	26,749	26,547	26,380	26,177	26,018	25,869
6-Feb	56	25,193	24,432	25,652	26,603	26,553	26,364	26,164	26,000	25,800	25,643	25,496
7-Feb	57	26,481	25,681	26,964	27,963	27,910	27,712	27,502	27,330	27,119	26,954	26,800
8-Feb	42	23,513	22,803	23,941	24,829	24,782	24,606	24,420	24,266	24,079	23,933	23,796
9-Feb	44	23,578	22,866	24,008	24,898	24,851	24,674	24,488	24,334	24,146	24,000	23,863
10-Feb	39	21,946	21,283	22,346	23,175	23,131	22,966	22,792	22,649	22,475	22,338	22,211
11-Feb	42	22,595	21,912	23,007	23,860	23,815	23,645	23,466	23,319	23,139	22,999	22,867
12-Feb	37	20,594	19,972	20,970	21,747	21,706	21,552	21,389	21,255	21,091	20,962	20,843
13-Feb	43	21,310	20,666	21,698	22,503	22,460	22,300	22,132	21,993	21,823	21,691	21,567
14-Feb	45	22,539	21,858	22,950	23,801	23,756	23,587	23,408	23,262	23,082	22,942	22,811
15-Feb	32	20,279	19,666	20,648	21,414	21,374	21,222	21,061	20,929	20,768	20,641	20,523
16-Feb	33	20,189	19,579	20,557	21,319	21,279	21,128	20,968	20,836	20,676	20,550	20,433
17-Feb	35	20,316	19,702	20,686	21,453	21,413	21,260	21,099	20,967	20,806	20,679	20,561
18-Feb	31	19,420	18,833	19,774	20,507	20,468	20,323	20,169	20,043	19,888	19,767	19,654
19-Feb	37	20,135	19,527	20,502	21,263	21,222	21,072	20,912	20,781	20,621	20,495	20,378
20-Feb	22	15,788	15,311	16,076	16,672	16,640	16,522	16,397	16,294	16,169	16,070	15,979
21-Feb	39	20,415	19,799	20,787	21,558	21,517	21,364	21,202	21,070	20,907	20,780	20,661
22-Feb	43	22,169	21,499	22,573	23,410	23,366	23,199	23,024	22,879	22,703	22,565	22,436
23-Feb	22	17,626	17,094	17,947	18,613	18,578	18,446	18,306	18,191	18,051	17,941	17,839
24-Feb	35	20,316	19,702	20,686	21,453	21,413	21,260	21,099	20,967	20,806	20,679	20,561
25-Feb	43	22,046	21,381	22,448	23,281	23,237	23,071	22,897	22,753	22,578	22,440	22,312
26-Feb	43	21,984	21,320	22,385	23,215	23,171	23,006	22,832	22,689	22,514	22,377	22,249
27-Feb	41	21,030	20,395	21,413	22,207	22,165	22,008	21,841	21,704	21,537	21,406	21,284
28-Feb	39	21,180	20,540	21,566	22,366	22,323	22,165	21,997	21,859	21,690	21,559	21,435
1-Mar	47	23,738	23,021	24,170	25,067	25,019	24,841	24,653	24,499	24,310	24,162	24,024
2-Mar	32	20,218	19,607	20,586	21,350	21,309	21,158	20,997	20,866	20,705	20,579	20,461
3-Mar	43	22,719	22,033	23,134	23,991	23,946	23,776	23,596	23,448	23,267	23,126	22,993
4-Mar	42	22,350	21,675	22,758	23,601	23,557	23,389	23,212	23,067	22,889	22,750	22,620
5-Mar	27	18,248	17,697	18,580	19,269	19,233	19,096	18,951	18,833	18,687	18,574	18,468
6-Mar	36	19,275	18,693	19,627	20,355	20,316	20,172	20,019	19,893	19,740	19,620	19,508
7-Mar	32	18,809	18,241	19,152	19,862	19,825	19,684	19,535	19,412	19,262	19,145	19,036
8-Mar	41	21,889	21,228	22,288	23,115	23,071	22,907	22,733	22,591	22,417	22,280	22,153
9-Mar	45	23,030	22,334	23,449	24,319	24,273	24,100	23,918	23,768	23,585	23,441	23,307
10-Mar	46	23,674	22,959	24,106	25,000	24,952	24,775	24,587	24,433	24,245	24,097	23,960
11-Mar	21	17,655	17,121	17,976	18,643	18,608	18,475	18,336	18,221	18,080	17,970	17,868
12-Mar	16	14,981	14,529	15,254	15,820	15,790	15,678	15,559	15,461	15,342	15,249	15,162
13-Mar	22	14,840	14,392	15,110	15,671	15,641	15,530	15,412	15,316	15,197	15,105	15,019
14-Mar	20	15,081	14,626	15,356	15,926	15,896	15,783	15,663	15,565	15,445	15,351	15,263
15-Mar	25	17,143	16,625	17,456	18,103	18,069	17,940	17,804	17,693	17,556	17,450	17,350
16-Mar	27	17,729	17,193	18,052	18,721	18,686	18,553	18,413	18,297	18,156	18,046	17,943
17-Mar	35	19,918	19,317	20,281	21,033	20,993	20,844	20,686	20,557	20,398	20,274	20,158
18-Mar	27	18,249	17,698	18,582	19,271	19,234	19,097	18,953	18,834	18,689	18,575	18,469
19-Mar	28	17,791	17,254	18,115	18,787	18,751	18,618	18,477	18,361	18,220	18,109	18,005
20-Mar	28	16,872	16,362	17,179	17,816	17,783	17,656	17,523	17,413	17,279	17,173	17,075
21-Mar	28	17,607	17,076	17,928	18,593	18,558	18,426	18,286	18,172	18,032	17,922	17,820
22-Mar	21	16,584	16,083	16,886	17,512	17,479	17,355	17,223	17,116	16,984	16,880	16,784
23-Mar	24	17,110	16,594	17,422	18,068	18,034	17,906	17,770	17,659	17,523	17,416	17,317
24-Mar	29	18,223	17,672	18,555	19,243	19,206	19,070	18,925	18,807	18,662	18,548	18,442
25-Mar	21	16,492	15,994	16,793	17,415	17,382	17,259	17,128	17,021	16,890	16,787	16,691
26-Mar	26	16,930	16,419	17,239	17,878	17,844	17,717	17,583	17,473	17,338	17,233	17,134
27-Mar	41	19,837	19,238	20,199	20,948	20,908	20,759	20,602	20,473	20,315	20,192	20,076
28-Mar	42	21,401	20,754	21,791	22,599	22,556	22,396	22,226	22,087	21,916	21,783	21,659
29-Mar	29	19,385	18,800	19,738	20,470	20,432	20,286	20,133	20,007	19,852	19,732	19,619
30-Mar	20	16,796	16,289	17,102	17,736	17,703	17,577	17,444	17,334	17,201	17,096	16,998
31-Mar	21	16,370	15,875	16,668	17,286	17,253	17,131	17,001	16,894	16,764	16,662	16,567
1-Apr	23	16,058	16,859	17,485	17,451	17,327	17,196	17,088	16,957	16,854	16,757	16,682
2-Apr	24	16,416	17,235	17,875	17,841	17,714	17,580	17,470	17,335	17,229	17,131	17,054
3-Apr	25	16,090	16,894	17,520	17,487	17,363	17,231	17,123	16,991	16,888	16,791	16,716
4-Apr	21	14,508	15,233	15,798	15,768	15,656	15,537	15,440	15,321	15,227	15,140	15,072
5-Apr	39	19,413	20,382	21,138	21,098	20,948	20,789	20,659	20,500	20,375	20,259	20,167
6-Apr	31	18,596	19,525	20,249	20,210	20,067	19,915	19,790	19,637	19,518	19,407	19,319
7-Apr	19	16,019	16,819	17,443	17,410	17,286	17,155	17,048	16,916	16,814	16,718	16,642
8-Apr	29	17,821	18,711	19,404	19,368	19,230	19,084	18,965	18,818	18,704	18,597	18,513
9-Apr	12	13,691	14,374	14,907	14,879	14,773	14,661	14,570	14,457	14,369	14,287	14,223
10-Apr	22	15,194	15,953	16,544	16,513	16,395	16,271	16,169	16,045	15,947	15,856	15,784
11-Apr	21	14,063	14,765	15,313	15,284	15,175	15,060	14,966	14,851	14,760	14,676	14,610
12-Apr	19	14,535	15,261	15,827	15,797	15,684	15,566	15,468	15,349	15,255	15,168	15,100
13-Apr	7	12,256	12,868	13,345	13,320	13,225	13,125	13,043	12,942	12,864	12,790	12,732
14-Apr	15	13,756	14,443	14,979	14,950	14,844	14,732	14,639	14,527	14,438	14,356	14,291
15-Apr	17	14,116	14,821	15,371	15,342	15,233	15,117	15,023	14,907	14,816	14,732	14,665
16-Apr	21	15,371	16,139	16,737	16,705	16,587	16,461	16,358	16,232	16,133	16,041	15,968
17-Apr	21	14,865	15,608	16,187	16,156	16,041	15,920	15,820	15,698	15,602	15,513	15,443
18-Apr	13	12,385	13,003	13,486	13,460	13,364	13,263	13,180	13,078	12,999	12,925	12,866
19-Apr	15	13,310	13,975	14,493	14,465	14,363	14,254	14,165	14,055	13,970	13,890	13,827
20-Apr	5	11,449	12,021	12,467	12,443	12,355	12,261	12,184	12,090	12,017	11,948	11,894
21-Apr	14	13,339	14,005	14,524	14,497	14,394	14,285	14,195	14,086	14,000	13,920	13,857
22-Apr	7	11,633	12,214	12,667	12,643	12,553	12,458	12,380	12,284	12,210	12,140	12,085
23-Apr	15	13,608	14,287	14,817	14,789	14,684	14,573	14,482	14,370	14,283	14,201	14,137
24-Apr	15	12,954	13,601	14,105	14,079	13,978	13,873	13,786	13,679	13,596	13,519	13,457
25-Apr	14	12,268	12,881	13,359	13,333	13,239	13,138	13,056	12,955	12,877	12,803	12,745

Date	AI HDDd	RI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	11,964	12,562	13,028	13,003	12,911	12,813	12,733	12,634	12,558	12,486	12,429
27-Apr	7	11,781	12,370	12,828	12,804	12,713	12,617	12,538	12,441	12,365	12,295	12,239
28-Apr	8	11,813	12,403	12,863	12,839	12,747	12,651	12,571	12,475	12,399	12,328	12,272
29-Apr	13	12,951	13,598	14,102	14,075	13,975	13,869	13,782	13,676	13,593	13,515	13,454
30-Apr	16	13,847	14,539	15,078	15,049	14,942	14,829	14,736	14,623	14,534	14,451	14,386
1-May	0	11,725	12,311	12,767	12,743	12,652	12,556	12,478	12,382	12,306	12,236	12,181
2-May	0	11,162	11,720	12,154	12,131	12,045	11,954	11,879	11,787	11,716	11,649	11,596
3-May	0	11,668	12,250	12,705	12,681	12,590	12,495	12,417	12,321	12,246	12,176	12,121
4-May	0	12,381	12,999	13,481	13,456	13,360	13,259	13,176	13,074	12,995	12,921	12,862
5-May	6	11,423	11,994	12,438	12,415	12,327	12,233	12,157	12,063	11,989	11,921	11,867
6-May	17	13,938	14,635	15,177	15,148	15,041	14,927	14,833	14,719	14,629	14,546	14,480
7-May	23	15,583	16,361	16,968	16,936	16,815	16,688	16,583	16,455	16,355	16,262	16,188
8-May	14	13,249	13,910	14,426	14,399	14,296	14,188	14,099	13,990	13,905	13,826	13,763
9-May	13	12,237	12,848	13,324	13,299	13,204	13,104	13,022	12,922	12,843	12,770	12,712
10-May	2	10,920	11,466	11,891	11,868	11,784	11,695	11,621	11,532	11,462	11,396	11,345
11-May	0	11,514	12,089	12,538	12,514	12,425	12,331	12,253	12,159	12,085	12,016	11,962
12-May	0	11,336	11,902	12,344	12,320	12,233	12,140	12,064	11,971	11,898	11,830	11,777
13-May	3	11,157	11,714	12,148	12,125	12,039	11,948	11,873	11,781	11,710	11,643	11,590
14-May	8	11,605	12,185	12,637	12,613	12,523	12,428	12,350	12,255	12,181	12,111	12,056
15-May	12	11,909	12,504	12,968	12,943	12,851	12,754	12,674	12,576	12,500	12,428	12,372
16-May	17	12,690	13,324	13,818	13,792	13,694	13,590	13,505	13,401	13,319	13,243	13,183
17-May	12	12,443	13,065	13,549	13,524	13,427	13,326	13,242	13,140	13,060	12,986	12,927
18-May	12	13,127	13,782	14,294	14,266	14,165	14,058	13,970	13,862	13,778	13,699	13,637
19-May	1	11,576	12,154	12,605	12,581	12,492	12,397	12,319	12,224	12,150	12,081	12,026
20-May	8	11,694	12,278	12,734	12,710	12,619	12,524	12,445	12,349	12,274	12,204	12,149
21-May	9	11,815	12,405	12,865	12,841	12,750	12,653	12,574	12,477	12,401	12,330	12,274
22-May	9	11,369	11,937	12,379	12,356	12,268	12,175	12,099	12,006	11,933	11,864	11,811
23-May	8	10,476	10,999	11,407	11,385	11,304	11,218	11,148	11,062	10,995	10,932	10,883
24-May	10	11,608	12,188	12,640	12,616	12,526	12,432	12,354	12,258	12,184	12,114	12,060
25-May	7	11,603	12,183	12,635	12,611	12,521	12,426	12,348	12,253	12,179	12,109	12,054
26-May	7	11,574	12,152	12,602	12,578	12,489	12,394	12,317	12,222	12,147	12,078	12,023
27-May	1	11,279	11,843	12,282	12,259	12,171	12,079	12,004	11,911	11,839	11,771	11,718
28-May	5	10,856	11,398	11,821	11,798	11,715	11,626	11,553	11,464	11,394	11,329	11,278
29-May	3	10,236	10,747	11,145	11,124	11,045	10,962	10,893	10,809	10,743	10,682	10,634
30-May	9	10,418	10,939	11,344	11,323	11,242	11,157	11,087	11,002	10,935	10,872	10,823
31-May	12	11,939	12,535	13,000	12,975	12,883	12,786	12,705	12,607	12,531	12,459	12,403
1-Jun	6	11,453	12,025	12,471	12,447	12,359	12,265	12,188	12,094	12,021	11,952	11,898
2-Jun	7	11,603	12,183	12,635	12,611	12,521	12,426	12,348	12,253	12,179	12,109	12,054
3-Jun	2	11,188	11,747	12,183	12,160	12,073	11,982	11,907	11,815	11,743	11,676	11,623
4-Jun	0	11,131	11,687	12,120	12,097	12,011	11,920	11,846	11,754	11,683	11,616	11,564
5-Jun	0	10,270	10,782	11,182	11,161	11,082	10,998	10,929	10,845	10,779	10,717	10,669
6-Jun	0	9,495	9,969	10,339	10,319	10,246	10,168	10,104	10,027	9,966	9,909	9,864
7-Jun	0	10,270	10,782	11,182	11,161	11,082	10,998	10,929	10,845	10,779	10,717	10,669
8-Jun	0	11,137	11,693	12,127	12,104	12,018	11,927	11,852	11,761	11,689	11,623	11,570
9-Jun	0	11,019	11,569	11,998	11,975	11,890	11,800	11,726	11,635	11,565	11,499	11,447
10-Jun	0	10,991	11,540	11,968	11,945	11,860	11,770	11,696	11,606	11,536	11,470	11,418
11-Jun	0	10,961	11,509	11,935	11,913	11,828	11,738	11,665	11,575	11,505	11,439	11,387
12-Jun	0	10,125	10,631	11,025	11,004	10,926	10,843	10,775	10,692	10,627	10,566	10,519
13-Jun	0	9,501	9,975	10,345	10,326	10,252	10,175	10,111	10,033	9,972	9,915	9,870
14-Jun	0	10,305	10,820	11,221	11,200	11,120	11,036	10,967	10,882	10,816	10,754	10,706
15-Jun	9	11,459	12,031	12,478	12,454	12,365	12,272	12,195	12,101	12,027	11,959	11,905
16-Jun	7	11,277	11,840	12,279	12,256	12,169	12,077	12,001	11,908	11,836	11,768	11,715
17-Jun	1	11,339	11,905	12,347	12,323	12,236	12,143	12,067	11,974	11,901	11,833	11,779
18-Jun	5	10,856	11,398	11,821	11,798	11,715	11,626	11,553	11,464	11,394	11,329	11,278
19-Jun	6	10,324	10,840	11,242	11,220	11,141	11,056	10,987	10,902	10,836	10,774	10,726
20-Jun	5	9,578	10,056	10,429	10,409	10,335	10,257	10,193	10,114	10,053	9,995	9,950
21-Jun	0	10,875	11,418	11,842	11,819	11,735	11,646	11,573	11,484	11,414	11,349	11,298
22-Jun	0	11,232	11,793	12,231	12,207	12,121	12,029	11,953	11,861	11,789	11,722	11,669
23-Jun	0	10,936	11,482	11,907	11,885	11,800	11,711	11,638	11,548	11,478	11,412	11,361
24-Jun	0	10,936	11,482	11,907	11,885	11,800	11,711	11,638	11,548	11,478	11,412	11,361
25-Jun	0	10,936	11,482	11,907	11,885	11,800	11,711	11,638	11,548	11,478	11,412	11,361
26-Jun	0	10,375	10,893	11,297	11,275	11,195	11,110	11,041	10,956	10,889	10,827	10,778
27-Jun	0	9,632	10,113	10,488	10,468	10,394	10,315	10,250	10,171	10,109	10,052	10,006
28-Jun	0	10,256	10,768	11,168	11,146	11,067	10,983	10,915	10,830	10,765	10,703	10,655
29-Jun	0	10,878	11,422	11,845	11,823	11,739	11,650	11,577	11,487	11,418	11,352	11,301
30-Jun	0	10,908	11,453	11,877	11,855	11,771	11,681	11,608	11,519	11,449	11,383	11,332
1-Jul	0	10,938	11,484	11,910	11,887	11,803	11,713	11,640	11,550	11,480	11,414	11,363
2-Jul	0	10,938	11,484	11,910	11,887	11,803	11,713	11,640	11,550	11,480	11,414	11,363
3-Jul	0	10,315	10,831	11,232	11,211	11,131	11,047	10,978	10,893	10,827	10,765	10,716
4-Jul	0	9,664	10,146	10,522	10,502	10,428	10,349	10,284	10,205	10,143	10,085	10,039
5-Jul	0	10,226	10,737	11,135	11,114	11,035	10,952	10,883	10,799	10,733	10,672	10,624
6-Jul	1	10,419	10,939	11,345	11,324	11,243	11,158	11,088	11,002	10,936	10,873	10,824
7-Jul	2	10,625	11,155	11,569	11,547	11,465	11,378	11,307	11,220	11,151	11,088	11,038
8-Jul	0	11,567	12,144	12,595	12,571	12,481	12,387	12,309	12,214	12,140	12,071	12,016
9-Jul	0	11,331	11,897	12,338	12,315	12,228	12,135	12,059	11,966	11,893	11,825	11,772
10-Jul	0	10,292	10,806	11,206	11,185	11,106	11,022	10,953	10,868	10,802	10,740	10,692
11-Jul	0	9,456	9,928	10,296	10,277	10,204	10,126	10,063	9,985	9,925	9,868	9,823
12-Jul	0	10,137	10,644	11,038	11,017	10,939	10,856	10,788	10,705	10,640	10,579	10,531
13-Jul	0	10,971	11,519	11,946	11,924	11,839	11,749	11,676	11,586	11,515	11,449	11,398
14-Jul	0	11,033	11,584	12,013	11,990	11,905	11,815	11,741	11,650	11,580	11,514	11,461
15-Jul	0	10,973	11,521	11,949	11,926	11,841	11,752	11,678	11,588	11,517	11,452	11,400
16-Jul	0	11,005	11,555	11,983	11,960	11,875	11,785	11,712	11,621	11,551	11,485	11,433
17-Jul	0	10,353	10,870	11,273	11,252	11,172	11,087	11,018	10,933	10,866	10,804	10,756
18-Jul	0	9,672	10,155	10,531	10,511	10,437	10,357	10,293	10,213	10,151	10,093	10,048
19-Jul	0	10,235	10,746	11,144	11,123	11,044	10,960	10,892	10,808	10,742	10,681	10,632
20-Jul	0	10,857	11,399	11,822	11,799	11,715	11,627	11,554	11,465	11,395	11,330	11,279
21-Jul	0	10,977	11,526	11,953	11,930	11,846	11,756	11,682	11,592	11,522	11,456	11,404
22-Jul	0	10,916	11,461	11,886	11,864	11,779	11,690	11,617	11,527	11,457	11,392	11,340

Date	AI HDDd	RI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	10,855	11,397	11,819	11,797	11,713	11,624	11,552	11,462	11,393	11,328	11,277
24-Jul	0	10,230	10,741	11,140	11,119	11,040	10,956	10,887	10,803	10,738	10,676	10,628
25-Jul	0	9,577	10,055	10,428	10,408	10,334	10,256	10,191	10,113	10,051	9,994	9,949
26-Jul	0	10,199	10,708	11,105	11,084	11,005	10,922	10,854	10,770	10,704	10,643	10,595
27-Jul	0	10,973	11,521	11,949	11,926	11,841	11,752	11,678	11,588	11,517	11,452	11,400
28-Jul	0	10,973	11,521	11,949	11,926	11,841	11,752	11,678	11,588	11,517	11,452	11,400
29-Jul	0	10,944	11,490	11,916	11,894	11,809	11,720	11,646	11,556	11,486	11,421	11,369
30-Jul	0	10,944	11,490	11,916	11,894	11,809	11,720	11,646	11,556	11,486	11,421	11,369
31-Jul	0	10,199	10,708	11,105	11,084	11,005	10,922	10,854	10,770	10,704	10,643	10,595
1-Aug	0	9,668	10,150	10,527	10,507	10,432	10,353	10,288	10,209	10,147	10,089	10,043
2-Aug	0	10,383	10,901	11,306	11,284	11,204	11,119	11,049	10,964	10,898	10,835	10,786
3-Aug	0	10,977	11,526	11,953	11,930	11,846	11,756	11,682	11,592	11,522	11,456	11,404
4-Aug	0	10,948	11,494	11,921	11,898	11,814	11,724	11,651	11,561	11,490	11,425	11,373
5-Aug	0	10,886	11,430	11,854	11,831	11,747	11,658	11,585	11,496	11,426	11,361	11,309
6-Aug	0	10,793	11,332	11,753	11,730	11,647	11,559	11,486	11,398	11,328	11,264	11,213
7-Aug	0	10,199	10,708	11,105	11,084	11,005	10,922	10,854	10,770	10,704	10,643	10,595
8-Aug	0	9,636	10,117	10,492	10,472	10,398	10,319	10,255	10,175	10,114	10,056	10,010
9-Aug	0	10,290	10,804	11,204	11,183	11,104	11,019	10,950	10,866	10,800	10,738	10,690
10-Aug	0	10,944	11,490	11,916	11,894	11,809	11,720	11,646	11,556	11,486	11,421	11,369
11-Aug	0	10,944	11,490	11,916	11,894	11,809	11,720	11,646	11,556	11,486	11,421	11,369
12-Aug	0	10,821	11,361	11,783	11,760	11,677	11,588	11,516	11,427	11,357	11,293	11,242
13-Aug	0	10,942	11,488	11,914	11,892	11,807	11,718	11,644	11,554	11,484	11,419	11,367
14-Aug	0	10,288	10,802	11,202	11,181	11,101	11,017	10,948	10,864	10,798	10,736	10,688
15-Aug	0	9,513	9,988	10,359	10,339	10,266	10,188	10,124	10,046	9,985	9,928	9,883
16-Aug	0	10,288	10,802	11,202	11,181	11,101	11,017	10,948	10,864	10,798	10,736	10,688
17-Aug	0	10,971	11,519	11,946	11,924	11,839	11,749	11,676	11,586	11,515	11,449	11,398
18-Aug	1	10,389	10,908	11,313	11,291	11,211	11,126	11,056	10,971	10,904	10,842	10,793
19-Aug	0	11,086	11,640	12,071	12,048	11,963	11,872	11,798	11,707	11,636	11,569	11,517
20-Aug	0	11,145	11,702	12,136	12,113	12,027	11,936	11,861	11,769	11,698	11,631	11,578
21-Aug	1	9,824	10,315	10,698	10,677	10,601	10,521	10,455	10,375	10,312	10,253	10,206
22-Aug	0	9,778	10,266	10,647	10,627	10,551	10,472	10,406	10,326	10,263	10,204	10,158
23-Aug	0	10,400	10,920	11,325	11,303	11,223	11,138	11,068	10,983	10,916	10,854	10,805
24-Aug	0	10,906	11,451	11,875	11,853	11,768	11,679	11,606	11,517	11,447	11,381	11,330
25-Aug	0	10,936	11,482	11,907	11,885	11,800	11,711	11,638	11,548	11,478	11,412	11,361
26-Aug	0	10,997	11,546	11,974	11,952	11,867	11,777	11,703	11,613	11,542	11,476	11,424
27-Aug	0	11,029	11,579	12,009	11,986	11,901	11,811	11,737	11,646	11,575	11,509	11,457
28-Aug	0	10,347	10,864	11,267	11,245	11,165	11,081	11,011	10,926	10,860	10,798	10,749
29-Aug	0	9,481	9,955	10,324	10,305	10,231	10,154	10,090	10,012	9,952	9,895	9,850
30-Aug	0	10,133	10,639	11,034	11,013	10,935	10,852	10,784	10,701	10,636	10,575	10,527
31-Aug	0	10,906	11,451	11,875	11,853	11,768	11,679	11,606	11,517	11,447	11,381	11,330
1-Sep	0	10,874	11,417	11,841	11,818	11,734	11,645	11,572	11,483	11,413	11,348	11,297
2-Sep	0	10,904	11,448	11,873	11,850	11,766	11,677	11,604	11,514	11,444	11,379	11,328
3-Sep	0	10,934	11,480	11,905	11,883	11,798	11,709	11,635	11,546	11,476	11,410	11,359
4-Sep	0	10,250	10,762	11,161	11,140	11,061	10,977	10,908	10,824	10,758	10,697	10,648
5-Sep	0	9,505	9,980	10,350	10,330	10,257	10,179	10,115	10,037	9,976	9,919	9,874
6-Sep	0	10,218	10,729	11,126	11,105	11,026	10,943	10,874	10,790	10,725	10,664	10,615
7-Sep	0	10,932	11,477	11,903	11,880	11,796	11,707	11,633	11,544	11,473	11,408	11,356
8-Sep	0	10,870	11,413	11,836	11,814	11,730	11,641	11,568	11,479	11,409	11,344	11,293
9-Sep	0	10,900	11,444	11,869	11,846	11,762	11,673	11,600	11,510	11,440	11,375	11,323
10-Sep	3	10,623	11,153	11,567	11,545	11,463	11,376	11,305	11,218	11,149	11,086	11,036
11-Sep	3	10,087	10,591	10,984	10,963	10,885	10,803	10,735	10,652	10,588	10,527	10,480
12-Sep	0	9,798	10,287	10,668	10,648	10,573	10,492	10,427	10,346	10,283	10,225	10,178
13-Sep	0	10,424	10,945	11,350	11,329	11,248	11,163	11,093	11,008	10,941	10,878	10,829
14-Sep	0	10,959	11,506	11,933	11,911	11,826	11,736	11,663	11,573	11,502	11,437	11,385
15-Sep	1	10,745	11,282	11,700	11,678	11,595	11,507	11,435	11,347	11,278	11,214	11,163
16-Sep	3	10,712	11,247	11,664	11,642	11,559	11,471	11,399	11,311	11,243	11,179	11,128
17-Sep	0	10,983	11,531	11,959	11,936	11,851	11,762	11,688	11,598	11,527	11,461	11,410
18-Sep	0	10,299	10,814	11,215	11,193	11,114	11,030	10,960	10,876	10,810	10,748	10,699
19-Sep	2	9,495	9,969	10,339	10,319	10,246	10,168	10,104	10,027	9,966	9,909	9,864
20-Sep	7	10,475	10,998	11,406	11,384	11,303	11,217	11,147	11,061	10,994	10,931	10,882
21-Sep	5	10,886	11,429	11,853	11,831	11,747	11,658	11,585	11,495	11,425	11,360	11,309
22-Sep	0	11,220	11,780	12,217	12,194	12,107	12,016	11,940	11,848	11,776	11,709	11,656
23-Sep	6	11,008	11,558	11,986	11,963	11,878	11,788	11,715	11,624	11,554	11,488	11,436
24-Sep	12	12,474	13,097	13,583	13,557	13,461	13,359	13,275	13,173	13,093	13,018	12,959
25-Sep	1	10,715	11,250	11,667	11,645	11,562	11,474	11,402	11,315	11,246	11,182	11,131
26-Sep	0	9,760	10,247	10,627	10,607	10,532	10,452	10,386	10,306	10,244	10,185	10,139
27-Sep	1	10,299	10,814	11,215	11,193	11,114	11,030	10,960	10,876	10,810	10,748	10,699
28-Sep	5	10,737	11,274	11,692	11,669	11,586	11,499	11,427	11,339	11,270	11,205	11,155
29-Sep	8	11,487	12,060	12,508	12,484	12,395	12,301	12,224	12,130	12,056	11,987	11,933
30-Sep	13	12,892	13,535	14,037	14,011	13,911	13,806	13,719	13,614	13,531	13,453	13,393
1-Oct	0	11,692	12,276	12,731	12,707	12,617	12,521	12,443	12,347	12,272	12,202	12,147
2-Oct	7	10,979	11,527	11,955	11,932	11,847	11,758	11,684	11,594	11,523	11,458	11,406
3-Oct	9	10,596	11,126	11,538	11,516	11,434	11,348	11,277	11,190	11,122	11,058	11,008
4-Oct	1	10,655	11,187	11,602	11,580	11,498	11,411	11,339	11,252	11,183	11,120	11,069
5-Oct	3	11,038	11,589	12,019	11,996	11,911	11,821	11,747	11,656	11,585	11,519	11,467
6-Oct	0	11,427	11,998	12,443	12,419	12,331	12,238	12,161	12,067	11,994	11,925	11,872
7-Oct	2	11,129	11,685	12,118	12,095	12,009	11,918	11,844	11,752	11,681	11,614	11,562
8-Oct	0	11,845	12,436	12,898	12,873	12,782	12,685	12,605	12,508	12,432	12,361	12,305
9-Oct	14	12,388	13,007	13,489	13,464	13,368	13,267	13,183	13,082	13,002	12,928	12,870
10-Oct	23	14,216	14,926	15,479	15,450	15,340	15,224	15,128	15,012	14,920	14,835	14,768
11-Oct	19	14,357	15,074	15,633	15,603	15,492	15,375	15,279	15,161	15,069	14,982	14,915
12-Oct	16	14,470	15,193	15,756	15,727	15,615	15,497	15,399	15,281	15,188	15,101	15,033
13-Oct	9	12,587	13,215	13,705	13,679	13,582	13,479	13,395	13,291	13,211	13,135	13,076
14-Oct	6	11,572	12,149	12,600	12,576	12,487	12,392	12,314	12,219	12,145	12,076	12,021
15-Oct	5	11,064	11,616	12,047	12,024	11,939	11,848	11,774	11,683	11,612	11,546	11,494
16-Oct	15	12,628	13,258	13,750	13,724	13,626	13,523	13,438	13,335	13,254	13,178	13,118
17-Oct	20	13,408	14,078	14,600	14,572	14,469	14,359	14,269	14,159	14,073	13,993	13,929
18-Oct	19	14,297	15,011	15,568	15,539	15,428	15,311	15,215	15,098	15,006	14,921	14,853

	AI	RI FIRM_CE										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	13,663	14,345	14,877	14,849	14,744	14,632	14,540	14,428	14,340	14,258	14,194
20-Oct	9	12,498	13,122	13,608	13,582	13,486	13,384	13,300	13,197	13,117	13,042	12,983
21-Oct	12	12,919	13,564	14,067	14,041	13,941	13,835	13,749	13,643	13,560	13,482	13,421
22-Oct	21	15,045	15,796	16,382	16,351	16,234	16,111	16,010	15,887	15,790	15,700	15,629
23-Oct	23	15,196	15,955	16,546	16,515	16,398	16,274	16,172	16,047	15,949	15,858	15,787
24-Oct	23	14,839	15,580	16,157	16,127	16,012	15,891	15,791	15,670	15,574	15,485	15,415
25-Oct	22	15,342	16,108	16,706	16,674	16,556	16,430	16,327	16,201	16,103	16,011	15,938
26-Oct	15	14,320	15,035	15,593	15,563	15,452	15,335	15,239	15,122	15,030	14,944	14,876
27-Oct	16	14,322	15,037	15,595	15,565	15,455	15,338	15,242	15,124	15,032	14,946	14,879
28-Oct	16	14,144	14,850	15,401	15,372	15,263	15,147	15,052	14,936	14,845	14,760	14,694
29-Oct	14	13,695	14,379	14,912	14,884	14,778	14,666	14,574	14,462	14,374	14,292	14,227
30-Oct	7	11,276	11,839	12,278	12,255	12,167	12,075	12,000	11,907	11,835	11,767	11,714
31-Oct	2	10,059	10,561	10,953	10,932	10,854	10,772	10,704	10,622	10,557	10,497	10,450
Nov	697	491,155	476,320	500,107	518,652	517,669	513,990	510,098	506,900	502,992	499,934	497,078
Dec	1,040	608,996	590,601	620,096	643,090	641,871	637,309	632,483	628,517	623,672	619,881	616,340
Jan	1,250	670,815	650,554	683,042	708,371	707,028	702,003	696,687	692,319	686,982	682,806	678,905
Feb	1,091	596,477	578,461	607,349	629,871	628,677	624,208	619,482	615,598	610,852	607,139	603,671
Mar	942	580,944	563,397	591,533	613,468	612,305	607,953	603,349	599,567	594,945	591,328	587,950
Apr	518	426,071	447,349	463,937	463,058	459,767	456,285	453,425	449,929	447,194	444,639	442,631
May	228	366,512	384,815	399,085	398,328	395,497	392,502	390,042	387,035	384,682	382,485	380,757
Jun	48	321,245	337,288	349,795	349,132	346,650	344,025	341,869	339,233	337,171	335,245	333,730
Jul	3	327,793	344,163	356,925	356,248	353,716	351,038	348,837	346,148	344,044	342,078	340,533
Aug	2	325,848	342,121	354,808	354,135	351,618	348,955	346,768	344,094	342,003	340,049	338,513
Sep	70	321,463	337,517	350,033	349,369	346,886	344,259	342,101	339,464	337,400	335,473	333,957
Oct	361	397,665	417,524	433,007	432,186	429,114	425,865	423,195	419,932	417,380	414,995	413,120
Total	6,250	5,434,986	5,470,111	5,709,716	5,815,908	5,790,797	5,748,392	5,708,333	5,668,736	5,629,316	5,596,052	5,567,184

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI NFS+NFT										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	6,067	7,040	7,286	7,375	7,344	7,304	7,259	7,229	7,183	7,152	7,123
2-Nov	9	5,839	6,775	7,012	7,098	7,068	7,029	6,986	6,957	6,913	6,883	6,855
3-Nov	14	5,839	6,775	7,012	7,098	7,068	7,029	6,987	6,957	6,913	6,883	6,856
4-Nov	13	5,855	6,794	7,032	7,118	7,088	7,049	7,006	6,977	6,932	6,902	6,875
5-Nov	20	6,012	6,976	7,221	7,309	7,278	7,238	7,194	7,164	7,118	7,087	7,059
6-Nov	19	5,531	6,418	6,642	6,724	6,695	6,659	6,618	6,590	6,549	6,520	6,494
7-Nov	16	4,974	5,771	5,973	6,046	6,021	5,988	5,951	5,926	5,889	5,863	5,840
8-Nov	14	5,287	6,135	6,350	6,427	6,400	6,365	6,326	6,300	6,260	6,233	6,208
9-Nov	20	5,931	6,882	7,123	7,210	7,180	7,140	7,097	7,067	7,022	6,992	6,964
10-Nov	15	5,633	6,536	6,765	6,848	6,819	6,782	6,740	6,712	6,670	6,641	6,614
11-Nov	15	5,606	6,505	6,733	6,815	6,786	6,749	6,708	6,680	6,638	6,609	6,582
12-Nov	14	5,703	6,618	6,850	6,934	6,904	6,866	6,825	6,796	6,753	6,723	6,697
13-Nov	20	5,677	6,587	6,818	6,902	6,872	6,835	6,793	6,765	6,722	6,692	6,666
14-Nov	19	5,223	6,060	6,272	6,349	6,322	6,288	6,249	6,223	6,184	6,157	6,132
15-Nov	24	5,558	6,449	6,675	6,757	6,728	6,691	6,651	6,623	6,581	6,552	6,526
16-Nov	27	5,844	6,782	7,019	7,105	7,075	7,036	6,993	6,964	6,920	6,890	6,862
17-Nov	19	5,324	6,178	6,395	6,473	6,446	6,410	6,371	6,345	6,304	6,277	6,252
18-Nov	28	5,801	6,731	6,967	7,052	7,023	6,984	6,942	6,913	6,869	6,839	6,811
19-Nov	30	5,850	6,788	7,026	7,112	7,082	7,043	7,000	6,971	6,926	6,896	6,869
20-Nov	31	5,309	6,160	6,376	6,454	6,427	6,392	6,353	6,326	6,286	6,259	6,234
21-Nov	31	4,947	5,740	5,941	6,014	5,988	5,956	5,919	5,895	5,857	5,832	5,808
22-Nov	37	5,045	5,854	6,059	6,133	6,107	6,074	6,037	6,012	5,973	5,947	5,924
23-Nov	41	3,179	3,689	3,818	3,865	3,849	3,828	3,804	3,789	3,764	3,748	3,733
24-Nov	43	1,917	2,224	2,302	2,330	2,320	2,308	2,293	2,284	2,269	2,259	2,250
25-Nov	45	762	884	915	927	923	918	912	908	902	898	895
26-Nov	27	4,626	5,368	5,556	5,624	5,600	5,570	5,536	5,512	5,477	5,454	5,432
27-Nov	17	4,399	5,104	5,283	5,348	5,325	5,296	5,264	5,242	5,209	5,186	5,165
28-Nov	20	4,990	5,790	5,993	6,066	6,041	6,008	5,971	5,946	5,908	5,882	5,859
29-Nov	24	5,612	6,512	6,740	6,823	6,794	6,757	6,715	6,687	6,645	6,616	6,590
30-Nov	29	5,893	6,838	7,078	7,164	7,134	7,095	7,052	7,022	6,978	6,947	6,920
1-Dec	20	5,308	6,159	6,375	6,453	6,426	6,391	6,352	6,325	6,285	6,258	6,233
2-Dec	28	5,720	6,637	6,870	6,954	6,924	6,886	6,844	6,816	6,773	6,743	6,716
3-Dec	29	5,785	6,713	6,948	7,033	7,003	6,965	6,922	6,893	6,849	6,820	6,792
4-Dec	34	5,450	6,324	6,545	6,625	6,597	6,561	6,521	6,494	6,453	6,425	6,399
5-Dec	25	4,665	5,413	5,603	5,671	5,647	5,617	5,582	5,559	5,524	5,500	5,478
6-Dec	39	4,134	4,797	4,965	5,026	5,005	4,977	4,947	4,926	4,895	4,874	4,854
7-Dec	28	5,314	6,166	6,382	6,460	6,433	6,398	6,358	6,332	6,292	6,264	6,239
8-Dec	19	4,891	5,676	5,874	5,946	5,921	5,889	5,853	5,828	5,791	5,766	5,743
9-Dec	29	5,812	6,744	6,980	7,066	7,036	6,997	6,955	6,925	6,882	6,852	6,824
10-Dec	23	5,557	6,448	6,674	6,756	6,727	6,691	6,650	6,622	6,580	6,551	6,525
11-Dec	20	5,054	5,865	6,070	6,145	6,119	6,085	6,048	6,023	5,984	5,958	5,935
12-Dec	27	5,282	6,130	6,344	6,422	6,395	6,360	6,321	6,295	6,255	6,227	6,202
13-Dec	27	5,455	6,330	6,552	6,632	6,604	6,568	6,528	6,500	6,459	6,431	6,405
14-Dec	41	3,558	4,129	4,274	4,326	4,308	4,284	4,258	4,240	4,213	4,195	4,178
15-Dec	45	1,195	1,387	1,436	1,453	1,447	1,439	1,430	1,424	1,415	1,409	1,404
16-Dec	39	3,684	4,275	4,425	4,479	4,460	4,435	4,408	4,390	4,362	4,343	4,326
17-Dec	32	4,924	5,714	5,914	5,986	5,961	5,928	5,892	5,867	5,830	5,805	5,782
18-Dec	41	2,817	3,269	3,383	3,425	3,410	3,392	3,371	3,357	3,336	3,321	3,308
19-Dec	32	4,660	5,407	5,597	5,665	5,641	5,610	5,576	5,553	5,517	5,493	5,472
20-Dec	49	0	0	0	0	0	0	0	0	0	0	0
21-Dec	51	0	0	0	0	0	0	0	0	0	0	0
22-Dec	32	4,491	5,211	5,394	5,460	5,436	5,407	5,374	5,351	5,317	5,294	5,273
23-Dec	21	4,534	5,261	5,445	5,512	5,489	5,459	5,425	5,403	5,368	5,345	5,324
24-Dec	27	5,574	6,467	6,694	6,776	6,747	6,710	6,669	6,642	6,599	6,571	6,544
25-Dec	41	3,440	3,991	4,131	4,182	4,164	4,141	4,116	4,099	4,073	4,055	4,039
26-Dec	42	2,121	2,462	2,548	2,579	2,568	2,554	2,539	2,528	2,512	2,501	2,491
27-Dec	51	0	0	0	0	0	0	0	0	0	0	0
28-Dec	51	0	0	0	0	0	0	0	0	0	0	0
29-Dec	32	4,437	5,148	5,329	5,394	5,371	5,342	5,309	5,287	5,253	5,230	5,209
30-Dec	35	5,065	5,877	6,083	6,157	6,131	6,098	6,061	6,035	5,997	5,971	5,947
31-Dec	30	5,308	6,160	6,375	6,454	6,426	6,391	6,352	6,325	6,285	6,258	6,233
1-Jan	61	0	0	0	0	0	0	0	0	0	0	0
2-Jan	38	3,483	4,041	4,183	4,234	4,216	4,193	4,168	4,150	4,124	4,106	4,089
3-Jan	23	3,896	4,520	4,679	4,736	4,716	4,690	4,662	4,642	4,613	4,592	4,574
4-Jan	28	5,395	6,260	6,479	6,559	6,531	6,495	6,456	6,429	6,388	6,360	6,335
5-Jan	19	5,324	6,178	6,395	6,473	6,446	6,410	6,371	6,345	6,304	6,277	6,252
6-Jan	28	5,774	6,700	6,935	7,020	6,990	6,952	6,909	6,880	6,837	6,807	6,780
7-Jan	38	5,236	6,076	6,288	6,365	6,338	6,304	6,265	6,239	6,200	6,173	6,148
8-Jan	41	3,234	3,752	3,883	3,931	3,914	3,893	3,869	3,853	3,829	3,812	3,797
9-Jan	41	2,320	2,692	2,786	2,820	2,808	2,793	2,776	2,764	2,747	2,735	2,724
10-Jan	30	4,621	5,362	5,550	5,618	5,594	5,564	5,530	5,507	5,472	5,448	5,426
11-Jan	43	2,106	2,444	2,529	2,560	2,550	2,536	2,520	2,510	2,494	2,483	2,473
12-Jan	50	0	0	0	0	0	0	0	0	0	0	0
13-Jan	41	2,503	2,904	3,006	3,042	3,030	3,013	2,995	2,982	2,963	2,950	2,938
14-Jan	46	77	89	92	93	93	92	92	91	91	90	90
15-Jan	43	1,392	1,615	1,672	1,692	1,685	1,676	1,666	1,659	1,648	1,641	1,634
16-Jan	30	4,151	4,817	4,985	5,046	5,025	4,997	4,967	4,946	4,915	4,893	4,874
17-Jan	40	3,259	3,782	3,914	3,962	3,945	3,924	3,900	3,883	3,859	3,842	3,827
18-Jan	55	0	0	0	0	0	0	0	0	0	0	0
19-Jan	68	0	0	0	0	0	0	0	0	0	0	0
20-Jan	54	0	0	0	0	0	0	0	0	0	0	0
21-Jan	44	229	266	276	279	278	276	275	273	272	270	269
22-Jan	34	4,340	5,036	5,212	5,276	5,254	5,225	5,193	5,171	5,139	5,116	5,096
23-Jan	32	4,525	5,250	5,434	5,501	5,477	5,447	5,414	5,391	5,357	5,334	5,313
24-Jan	44	1,465	1,699	1,759	1,780	1,773	1,763	1,752	1,745	1,734	1,726	1,720
25-Jan	24	4,837	5,613	5,810	5,881	5,856	5,824	5,788	5,764	5,727	5,702	5,680
26-Jan	41	3,179	3,689	3,818	3,865	3,849	3,828	3,804	3,789	3,764	3,748	3,733
27-Jan	46	781	906	937	949	945	940	934	930	924	920	916

	AI	RI NFS+NFT										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	4,843	5,619	5,816	5,887	5,863	5,830	5,795	5,771	5,734	5,709	5,686
29-Jan	46	148	171	177	179	179	178	177	176	175	174	173
30-Jan	47	0	0	0	0	0	0	0	0	0	0	0
31-Jan	43	1,230	1,427	1,477	1,495	1,488	1,480	1,471	1,465	1,456	1,449	1,444
1-Feb	17	4,193	4,865	5,035	5,097	5,076	5,048	5,017	4,996	4,964	4,943	4,923
2-Feb	28	5,422	6,292	6,512	6,592	6,564	6,528	6,488	6,461	6,420	6,392	6,366
3-Feb	45	1,818	2,110	2,183	2,210	2,201	2,189	2,175	2,166	2,153	2,143	2,135
4-Feb	45	1,060	1,230	1,273	1,289	1,283	1,276	1,268	1,263	1,255	1,250	1,245
5-Feb	56	0	0	0	0	0	0	0	0	0	0	0
6-Feb	56	0	0	0	0	0	0	0	0	0	0	0
7-Feb	57	0	0	0	0	0	0	0	0	0	0	0
8-Feb	42	1,465	1,700	1,760	1,781	1,774	1,764	1,753	1,746	1,735	1,727	1,720
9-Feb	44	852	989	1,023	1,036	1,031	1,026	1,020	1,015	1,009	1,004	1,000
10-Feb	39	3,684	4,275	4,425	4,479	4,460	4,435	4,408	4,390	4,362	4,343	4,326
11-Feb	42	2,277	2,642	2,735	2,769	2,757	2,742	2,725	2,714	2,696	2,685	2,674
12-Feb	37	4,531	5,257	5,441	5,508	5,484	5,455	5,421	5,399	5,364	5,341	5,320
13-Feb	43	1,328	1,541	1,594	1,614	1,607	1,598	1,589	1,582	1,572	1,565	1,559
14-Feb	45	589	684	708	717	714	710	705	702	698	695	692
15-Feb	32	4,816	5,588	5,784	5,855	5,830	5,798	5,763	5,738	5,702	5,677	5,654
16-Feb	33	5,152	5,978	6,187	6,263	6,236	6,202	6,164	6,138	6,099	6,073	6,049
17-Feb	35	5,552	6,443	6,668	6,750	6,721	6,685	6,644	6,616	6,574	6,545	6,519
18-Feb	31	5,319	6,172	6,388	6,467	6,439	6,404	6,365	6,338	6,298	6,271	6,246
19-Feb	37	4,937	5,728	5,929	6,002	5,976	5,943	5,907	5,882	5,845	5,820	5,796
20-Feb	22	4,416	5,124	5,304	5,369	5,346	5,317	5,284	5,262	5,229	5,206	5,185
21-Feb	39	4,134	4,797	4,965	5,026	5,005	4,977	4,947	4,926	4,895	4,874	4,854
22-Feb	43	2,377	2,758	2,855	2,890	2,877	2,862	2,844	2,832	2,814	2,802	2,791
23-Feb	22	4,599	5,336	5,523	5,591	5,567	5,537	5,503	5,480	5,445	5,422	5,400
24-Feb	35	5,552	6,443	6,668	6,750	6,721	6,685	6,644	6,616	6,574	6,545	6,519
25-Feb	43	2,485	2,884	2,985	3,021	3,008	2,992	2,974	2,961	2,942	2,930	2,918
26-Feb	43	1,636	1,898	1,964	1,988	1,980	1,969	1,957	1,949	1,937	1,928	1,921
27-Feb	41	2,130	2,472	2,558	2,590	2,579	2,565	2,549	2,538	2,522	2,511	2,501
28-Feb	39	3,457	4,012	4,152	4,203	4,185	4,162	4,137	4,120	4,094	4,076	4,059
1-Mar	47	0	0	0	0	0	0	0	0	0	0	0
2-Mar	32	4,870	5,651	5,849	5,920	5,895	5,863	5,827	5,803	5,766	5,741	5,718
3-Mar	43	1,890	2,193	2,269	2,297	2,287	2,275	2,261	2,252	2,237	2,228	2,219
4-Mar	42	2,494	2,894	2,995	3,032	3,019	3,002	2,984	2,972	2,953	2,940	2,928
5-Mar	27	4,426	5,136	5,316	5,381	5,358	5,329	5,297	5,274	5,241	5,218	5,197
6-Mar	36	4,920	5,709	5,909	5,981	5,956	5,923	5,887	5,863	5,825	5,800	5,777
7-Mar	32	5,212	6,047	6,259	6,336	6,309	6,274	6,236	6,210	6,171	6,144	6,119
8-Mar	41	3,179	3,689	3,818	3,865	3,849	3,828	3,804	3,789	3,764	3,748	3,733
9-Mar	45	1,060	1,230	1,273	1,289	1,283	1,276	1,268	1,263	1,255	1,250	1,245
10-Mar	46	212	246	255	258	257	255	254	253	251	250	249
11-Mar	21	4,317	5,010	5,185	5,249	5,226	5,198	5,166	5,145	5,112	5,090	5,069
12-Mar	16	4,497	5,218	5,400	5,466	5,443	5,414	5,381	5,358	5,324	5,301	5,280
13-Mar	22	5,255	6,098	6,312	6,389	6,362	6,327	6,288	6,262	6,222	6,195	6,171
14-Mar	20	5,433	6,305	6,525	6,605	6,577	6,541	6,502	6,474	6,433	6,405	6,380
15-Mar	25	5,796	6,725	6,961	7,046	7,016	6,978	6,935	6,906	6,862	6,832	6,805
16-Mar	27	5,790	6,719	6,954	7,039	7,009	6,971	6,929	6,900	6,856	6,826	6,799
17-Mar	35	5,904	6,851	7,091	7,178	7,147	7,108	7,065	7,035	6,991	6,960	6,932
18-Mar	27	5,330	6,185	6,401	6,480	6,452	6,417	6,378	6,351	6,311	6,283	6,258
19-Mar	28	5,087	5,903	6,109	6,184	6,158	6,124	6,087	6,062	6,023	5,997	5,973
20-Mar	28	4,996	5,797	6,000	6,073	6,047	6,014	5,978	5,953	5,915	5,889	5,866
21-Mar	28	5,249	6,091	6,305	6,382	6,355	6,320	6,281	6,255	6,215	6,188	6,164
22-Mar	21	5,265	6,109	6,323	6,401	6,373	6,339	6,300	6,274	6,234	6,207	6,182
23-Mar	24	5,568	6,461	6,687	6,769	6,741	6,704	6,663	6,635	6,593	6,564	6,538
24-Mar	29	5,866	6,807	7,045	7,131	7,101	7,062	7,019	6,990	6,946	6,915	6,888
25-Mar	21	5,346	6,203	6,421	6,499	6,472	6,436	6,397	6,370	6,330	6,302	6,277
26-Mar	26	5,336	6,192	6,409	6,487	6,460	6,424	6,385	6,358	6,318	6,290	6,265
27-Mar	41	3,186	3,697	3,826	3,873	3,857	3,836	3,812	3,796	3,772	3,756	3,741
28-Mar	42	2,429	2,819	2,918	2,954	2,941	2,925	2,907	2,895	2,877	2,864	2,853
29-Mar	29	4,837	5,613	5,810	5,881	5,856	5,824	5,788	5,764	5,728	5,703	5,680
30-Mar	20	4,821	5,594	5,790	5,861	5,836	5,804	5,769	5,745	5,708	5,683	5,661
31-Mar	21	5,454	6,329	6,551	6,631	6,603	6,567	6,527	6,499	6,458	6,430	6,404
1-Apr	23	6,731	6,967	7,052	7,022	6,984	6,941	6,912	6,869	6,839	6,811	6,798
2-Apr	24	6,650	6,883	6,967	6,937	6,899	6,857	6,829	6,785	6,756	6,729	6,716
3-Apr	25	6,242	6,461	6,540	6,512	6,476	6,437	6,410	6,369	6,341	6,316	6,304
4-Apr	21	5,677	5,876	5,948	5,923	5,890	5,854	5,830	5,793	5,768	5,745	5,734
5-Apr	39	5,205	5,388	5,454	5,431	5,401	5,368	5,346	5,312	5,288	5,267	5,257
6-Apr	31	6,424	6,649	6,730	6,701	6,665	6,624	6,596	6,555	6,526	6,500	6,488
7-Apr	19	5,581	5,777	5,848	5,823	5,791	5,756	5,732	5,695	5,670	5,648	5,637
8-Apr	29	6,650	6,883	6,967	6,937	6,900	6,857	6,829	6,785	6,756	6,729	6,716
9-Apr	12	5,964	6,173	6,249	6,222	6,188	6,151	6,125	6,086	6,060	6,035	6,024
10-Apr	22	6,298	6,519	6,599	6,571	6,535	6,495	6,468	6,427	6,399	6,373	6,361
11-Apr	21	6,148	6,364	6,442	6,414	6,379	6,340	6,314	6,274	6,246	6,221	6,209
12-Apr	19	6,104	6,317	6,395	6,368	6,333	6,294	6,268	6,228	6,201	6,176	6,164
13-Apr	7	5,996	6,206	6,282	6,255	6,221	6,183	6,157	6,118	6,091	6,067	6,055
14-Apr	15	6,788	7,025	7,111	7,081	7,043	7,000	6,970	6,926	6,896	6,868	6,855
15-Apr	17	7,001	7,246	7,335	7,304	7,264	7,220	7,190	7,144	7,113	7,085	7,071
16-Apr	21	6,863	7,104	7,191	7,160	7,121	7,077	7,048	7,003	6,973	6,945	6,931
17-Apr	21	6,349	6,571	6,651	6,623	6,587	6,547	6,519	6,478	6,450	6,424	6,412
18-Apr	13	5,545	5,739	5,809	5,785	5,753	5,718	5,694	5,658	5,633	5,611	5,600
19-Apr	15	6,210	6,428	6,506	6,479	6,443	6,404	6,377	6,337	6,309	6,284	6,272
20-Apr	5	6,285	6,505	6,584	6,557	6,521	6,481	6,454	6,413	6,385	6,359	6,347
21-Apr	14	6,932	7,175	7,263	7,232	7,192	7,149	7,119	7,073	7,043	7,015	7,001
22-Apr	7	6,655	6,889	6,973	6,943	6,905	6,863	6,835	6,791	6,762	6,735	6,722
23-Apr	15	6,945	7,188	7,276	7,245	7,205	7,162	7,132	7,086	7,055	7,027	7,014
24-Apr	15	6,587	6,818	6,901	6,872	6,835	6,793	6,764	6,722	6,692	6,666	6,653
25-Apr	14	5,966	6,175	6,250	6,224	6,190	6,152	6,126	6,088	6,061	6,037	6,025

	AI					RI NFS+NFT						
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	6,147	6,363	6,440	6,413	6,378	6,339	6,313	6,273	6,245	6,220	6,208
27-Apr	7	6,498	6,726	6,808	6,779	6,742	6,701	6,673	6,631	6,602	6,576	6,563
28-Apr	8	6,762	6,999	7,085	7,055	7,016	6,973	6,944	6,900	6,870	6,843	6,830
29-Apr	13	7,045	7,292	7,381	7,350	7,310	7,265	7,235	7,189	7,157	7,129	7,115
30-Apr	16	6,989	7,233	7,322	7,291	7,251	7,207	7,177	7,131	7,100	7,072	7,058
1-May	0	6,103	6,317	6,394	6,367	6,333	6,294	6,268	6,228	6,201	6,176	6,164
2-May	0	5,947	6,155	6,231	6,204	6,170	6,133	6,107	6,068	6,042	6,018	6,006
3-May	0	6,461	6,688	6,770	6,741	6,704	6,663	6,635	6,593	6,564	6,538	6,526
4-May	0	6,756	6,993	7,078	7,048	7,010	6,967	6,938	6,894	6,864	6,836	6,823
5-May	6	6,580	6,810	6,894	6,865	6,827	6,785	6,757	6,714	6,685	6,658	6,645
6-May	17	7,190	7,442	7,533	7,501	7,460	7,414	7,383	7,336	7,304	7,275	7,261
7-May	23	7,234	7,487	7,579	7,547	7,506	7,460	7,429	7,381	7,349	7,320	7,306
8-May	14	5,978	6,187	6,263	6,236	6,202	6,164	6,139	6,100	6,073	6,049	6,037
9-May	13	5,702	5,902	5,974	5,949	5,916	5,880	5,855	5,818	5,793	5,770	5,759
10-May	2	5,858	6,063	6,137	6,111	6,078	6,041	6,016	5,978	5,951	5,928	5,916
11-May	0	6,781	7,019	7,105	7,074	7,036	6,993	6,964	6,919	6,889	6,862	6,849
12-May	0	6,970	7,214	7,302	7,271	7,231	7,187	7,157	7,112	7,081	7,052	7,039
13-May	3	6,636	6,869	6,953	6,924	6,886	6,844	6,815	6,772	6,742	6,715	6,702
14-May	8	6,982	7,227	7,315	7,284	7,244	7,200	7,170	7,125	7,094	7,065	7,052
15-May	12	6,801	7,039	7,125	7,095	7,056	7,013	6,984	6,939	6,909	6,882	6,868
16-May	17	6,412	6,637	6,718	6,689	6,653	6,612	6,585	6,543	6,514	6,488	6,476
17-May	12	6,235	6,454	6,533	6,505	6,469	6,430	6,403	6,362	6,335	6,309	6,297
18-May	12	6,561	6,791	6,874	6,845	6,808	6,766	6,738	6,695	6,666	6,639	6,627
19-May	1	6,234	6,453	6,532	6,504	6,468	6,429	6,402	6,361	6,334	6,308	6,296
20-May	8	6,888	7,129	7,216	7,186	7,147	7,103	7,073	7,028	6,998	6,970	6,956
21-May	9	7,058	7,305	7,394	7,363	7,323	7,278	7,248	7,202	7,170	7,142	7,128
22-May	9	6,480	6,707	6,789	6,761	6,724	6,683	6,655	6,612	6,584	6,557	6,545
23-May	8	6,079	6,292	6,369	6,342	6,307	6,269	6,242	6,203	6,176	6,151	6,139
24-May	10	6,524	6,753	6,835	6,806	6,769	6,728	6,700	6,657	6,628	6,602	6,589
25-May	7	6,687	6,921	7,006	6,976	6,938	6,896	6,867	6,823	6,793	6,766	6,753
26-May	7	6,718	6,954	7,039	7,009	6,971	6,928	6,899	6,855	6,825	6,798	6,785
27-May	1	6,548	6,778	6,861	6,832	6,794	6,753	6,725	6,682	6,653	6,626	6,614
28-May	5	6,913	7,155	7,243	7,212	7,173	7,129	7,099	7,054	7,023	6,995	6,982
29-May	3	6,562	6,792	6,875	6,846	6,808	6,767	6,738	6,696	6,666	6,640	6,627
30-May	9	6,437	6,662	6,744	6,715	6,679	6,638	6,610	6,568	6,540	6,514	6,501
31-May	12	6,769	7,006	7,092	7,062	7,024	6,981	6,952	6,907	6,877	6,850	6,837
1-Jun	6	6,549	6,778	6,861	6,832	6,795	6,753	6,725	6,682	6,653	6,626	6,614
2-Jun	7	6,687	6,921	7,006	6,976	6,938	6,896	6,867	6,823	6,793	6,766	6,753
3-Jun	2	6,624	6,856	6,940	6,910	6,873	6,831	6,802	6,759	6,730	6,703	6,690
4-Jun	0	6,705	6,940	7,025	6,996	6,957	6,915	6,886	6,842	6,812	6,785	6,772
5-Jun	0	6,568	6,798	6,881	6,852	6,815	6,773	6,745	6,702	6,673	6,646	6,633
6-Jun	0	6,317	6,539	6,619	6,591	6,555	6,515	6,487	6,446	6,418	6,393	6,380
7-Jun	0	6,568	6,798	6,881	6,852	6,815	6,773	6,745	6,702	6,673	6,646	6,633
8-Jun	0	6,762	6,999	7,085	7,054	7,016	6,973	6,944	6,900	6,870	6,842	6,829
9-Jun	0	6,888	7,129	7,216	7,186	7,146	7,103	7,073	7,028	6,997	6,970	6,956
10-Jun	0	6,938	7,181	7,269	7,238	7,198	7,155	7,125	7,079	7,049	7,020	7,007
11-Jun	0	6,969	7,213	7,302	7,271	7,231	7,187	7,157	7,111	7,080	7,052	7,039
12-Jun	0	6,763	7,000	7,085	7,055	7,017	6,974	6,945	6,901	6,871	6,843	6,830
13-Jun	0	6,374	6,597	6,678	6,650	6,613	6,573	6,545	6,504	6,475	6,450	6,437
14-Jun	0	6,593	6,824	6,908	6,878	6,841	6,799	6,770	6,727	6,698	6,671	6,659
15-Jun	9	7,435	7,695	7,789	7,756	7,714	7,667	7,635	7,586	7,553	7,523	7,509
16-Jun	7	7,032	7,279	7,368	7,337	7,297	7,252	7,222	7,176	7,145	7,116	7,102
17-Jun	1	6,486	6,713	6,795	6,766	6,729	6,688	6,660	6,618	6,589	6,563	6,550
18-Jun	5	6,913	7,155	7,243	7,212	7,173	7,129	7,099	7,054	7,023	6,995	6,982
19-Jun	6	6,694	6,928	7,013	6,983	6,945	6,903	6,874	6,830	6,801	6,773	6,760
20-Jun	5	6,167	6,383	6,461	6,433	6,398	6,359	6,333	6,292	6,265	6,240	6,228
21-Jun	0	6,053	6,265	6,341	6,314	6,280	6,242	6,216	6,176	6,149	6,125	6,113
22-Jun	0	6,724	6,960	7,045	7,015	6,977	6,934	6,905	6,861	6,831	6,804	6,791
23-Jun	0	7,038	7,285	7,374	7,343	7,303	7,258	7,228	7,182	7,151	7,122	7,108
24-Jun	0	7,038	7,285	7,374	7,343	7,303	7,258	7,228	7,182	7,151	7,122	7,108
25-Jun	0	7,038	7,285	7,374	7,343	7,303	7,258	7,228	7,182	7,151	7,122	7,108
26-Jun	0	6,624	6,856	6,940	6,911	6,873	6,831	6,803	6,759	6,730	6,703	6,690
27-Jun	0	6,361	6,584	6,665	6,636	6,600	6,560	6,532	6,491	6,463	6,437	6,424
28-Jun	0	6,750	6,986	7,072	7,042	7,003	6,961	6,932	6,888	6,858	6,830	6,817
29-Jun	0	7,120	7,369	7,460	7,428	7,387	7,342	7,312	7,265	7,234	7,205	7,191
30-Jun	0	7,089	7,337	7,427	7,395	7,355	7,310	7,279	7,233	7,202	7,173	7,159
1-Jul	0	7,057	7,304	7,394	7,362	7,322	7,278	7,247	7,201	7,170	7,141	7,127
2-Jul	0	7,057	7,304	7,394	7,362	7,322	7,278	7,247	7,201	7,170	7,141	7,127
3-Jul	0	6,687	6,921	7,006	6,976	6,938	6,896	6,867	6,824	6,794	6,767	6,754
4-Jul	0	6,348	6,571	6,651	6,623	6,587	6,547	6,519	6,478	6,450	6,424	6,412
5-Jul	0	6,781	7,019	7,105	7,075	7,036	6,993	6,964	6,920	6,890	6,862	6,849
6-Jul	1	7,459	7,721	7,815	7,782	7,740	7,692	7,660	7,612	7,578	7,548	7,534
7-Jul	2	7,221	7,474	7,565	7,533	7,492	7,446	7,415	7,368	7,336	7,307	7,293
8-Jul	0	6,454	6,680	6,762	6,733	6,696	6,655	6,628	6,586	6,557	6,531	6,518
9-Jul	0	6,724	6,960	7,045	7,015	6,977	6,934	6,905	6,861	6,831	6,804	6,791
10-Jul	0	6,775	7,012	7,098	7,068	7,029	6,987	6,957	6,913	6,883	6,856	6,842
11-Jul	0	6,568	6,798	6,882	6,853	6,815	6,774	6,745	6,702	6,673	6,647	6,634
12-Jul	0	6,876	7,116	7,204	7,173	7,134	7,090	7,061	7,016	6,985	6,957	6,944
13-Jul	0	7,063	7,311	7,400	7,369	7,329	7,284	7,254	7,207	7,176	7,147	7,134
14-Jul	0	7,019	7,265	7,354	7,323	7,283	7,239	7,208	7,163	7,131	7,103	7,089
15-Jul	0	7,082	7,330	7,420	7,389	7,348	7,303	7,273	7,227	7,195	7,166	7,153
16-Jul	0	7,070	7,317	7,407	7,375	7,335	7,290	7,260	7,214	7,182	7,154	7,140
17-Jul	0	6,731	6,967	7,052	7,022	6,984	6,941	6,912	6,868	6,838	6,811	6,798
18-Jul	0	6,424	6,649	6,730	6,702	6,665	6,624	6,597	6,555	6,526	6,500	6,488
19-Jul	0	6,857	7,097	7,184	7,153	7,114	7,071	7,041	6,996	6,966	6,938	6,925
20-Jul	0	7,227	7,480	7,571	7,539	7,498	7,452	7,421	7,374	7,342	7,313	7,299
21-Jul	0	7,120	7,369	7,459	7,428	7,387	7,342	7,311	7,265	7,233	7,205	7,191
22-Jul	0	7,164	7,415	7,506	7,474	7,433	7,388	7,357	7,310	7,278	7,249	7,235

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI NFS+NFT										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	7,208	7,460	7,552	7,520	7,479	7,433	7,402	7,355	7,323	7,294	7,280
24-Jul	0	6,819	7,058	7,144	7,114	7,075	7,032	7,003	6,958	6,928	6,900	6,887
25-Jul	0	6,462	6,688	6,770	6,741	6,704	6,663	6,635	6,593	6,565	6,538	6,526
26-Jul	0	6,832	7,071	7,157	7,127	7,088	7,045	7,015	6,971	6,941	6,913	6,900
27-Jul	0	7,082	7,330	7,420	7,389	7,348	7,303	7,273	7,227	7,195	7,166	7,153
28-Jul	0	7,082	7,330	7,420	7,389	7,348	7,303	7,273	7,227	7,195	7,166	7,153
29-Jul	0	7,114	7,363	7,453	7,421	7,381	7,336	7,305	7,259	7,227	7,198	7,184
30-Jul	0	7,114	7,363	7,453	7,421	7,381	7,336	7,305	7,259	7,227	7,198	7,184
31-Jul	0	6,832	7,071	7,157	7,127	7,088	7,045	7,015	6,971	6,941	6,913	6,900
1-Aug	0	6,386	6,610	6,691	6,662	6,626	6,586	6,558	6,516	6,488	6,462	6,450
2-Aug	0	6,700	6,934	7,019	6,989	6,951	6,909	6,880	6,836	6,806	6,779	6,766
3-Aug	0	7,120	7,369	7,459	7,428	7,387	7,342	7,311	7,265	7,233	7,205	7,191
4-Aug	0	7,151	7,402	7,492	7,461	7,420	7,375	7,344	7,297	7,265	7,236	7,222
5-Aug	0	7,195	7,447	7,538	7,507	7,466	7,420	7,389	7,342	7,310	7,281	7,267
6-Aug	0	7,252	7,506	7,598	7,566	7,524	7,478	7,447	7,400	7,368	7,338	7,324
7-Aug	0	6,832	7,071	7,157	7,127	7,088	7,045	7,015	6,971	6,941	6,913	6,900
8-Aug	0	6,399	6,623	6,704	6,676	6,639	6,599	6,571	6,529	6,501	6,475	6,462
9-Aug	0	6,756	6,993	7,078	7,048	7,010	6,967	6,938	6,894	6,864	6,837	6,823
10-Aug	0	7,114	7,363	7,453	7,421	7,381	7,336	7,305	7,259	7,227	7,198	7,184
11-Aug	0	7,114	7,363	7,453	7,421	7,381	7,336	7,305	7,259	7,227	7,198	7,184
12-Aug	0	7,202	7,454	7,545	7,513	7,472	7,427	7,395	7,349	7,317	7,287	7,273
13-Aug	0	7,095	7,343	7,433	7,402	7,361	7,316	7,286	7,240	7,208	7,179	7,165
14-Aug	0	6,737	6,973	7,059	7,029	6,990	6,948	6,919	6,875	6,845	6,818	6,804
15-Aug	0	6,487	6,714	6,796	6,767	6,730	6,689	6,661	6,619	6,590	6,564	6,551
16-Aug	0	6,737	6,973	7,059	7,029	6,990	6,948	6,919	6,875	6,845	6,818	6,804
17-Aug	0	7,063	7,311	7,400	7,369	7,329	7,284	7,254	7,207	7,176	7,147	7,134
18-Aug	1	7,491	7,753	7,848	7,815	7,772	7,725	7,692	7,644	7,610	7,580	7,565
19-Aug	0	6,900	7,142	7,229	7,199	7,159	7,116	7,086	7,041	7,010	6,982	6,969
20-Aug	0	6,837	7,077	7,163	7,133	7,094	7,051	7,021	6,977	6,946	6,919	6,905
21-Aug	1	7,039	7,286	7,375	7,344	7,304	7,259	7,229	7,183	7,151	7,123	7,109
22-Aug	0	6,185	6,402	6,480	6,453	6,418	6,378	6,352	6,311	6,284	6,259	6,247
23-Aug	0	6,555	6,785	6,868	6,839	6,801	6,760	6,732	6,689	6,660	6,633	6,620
24-Aug	0	7,070	7,317	7,407	7,376	7,335	7,291	7,260	7,214	7,183	7,154	7,140
25-Aug	0	7,038	7,285	7,374	7,343	7,303	7,258	7,228	7,182	7,151	7,122	7,108
26-Aug	0	6,994	7,239	7,328	7,297	7,257	7,213	7,183	7,137	7,106	7,078	7,064
27-Aug	0	6,982	7,226	7,315	7,284	7,244	7,200	7,170	7,124	7,093	7,065	7,051
28-Aug	0	6,675	6,908	6,993	6,963	6,925	6,883	6,854	6,811	6,781	6,754	6,741
29-Aug	0	6,499	6,727	6,809	6,780	6,743	6,702	6,674	6,632	6,603	6,577	6,564
30-Aug	0	6,838	7,077	7,164	7,134	7,095	7,052	7,022	6,977	6,947	6,919	6,906
31-Aug	0	7,070	7,317	7,407	7,376	7,335	7,291	7,260	7,214	7,183	7,154	7,140
1-Sep	0	7,082	7,330	7,420	7,389	7,348	7,304	7,273	7,227	7,195	7,167	7,153
2-Sep	0	7,051	7,298	7,387	7,356	7,316	7,271	7,241	7,195	7,163	7,135	7,121
3-Sep	0	7,020	7,265	7,354	7,323	7,283	7,239	7,208	7,163	7,131	7,103	7,089
4-Sep	0	6,693	6,928	7,013	6,983	6,945	6,903	6,874	6,830	6,800	6,773	6,760
5-Sep	0	6,411	6,636	6,717	6,689	6,652	6,612	6,584	6,542	6,514	6,488	6,475
6-Sep	0	6,706	6,941	7,026	6,996	6,958	6,916	6,887	6,843	6,813	6,786	6,773
7-Sep	0	7,001	7,246	7,335	7,304	7,264	7,219	7,189	7,143	7,112	7,084	7,070
8-Sep	0	7,045	7,291	7,381	7,349	7,309	7,265	7,234	7,188	7,157	7,129	7,115
9-Sep	0	7,013	7,259	7,348	7,317	7,277	7,232	7,202	7,156	7,125	7,097	7,083
10-Sep	3	7,202	7,454	7,545	7,513	7,472	7,427	7,396	7,349	7,317	7,288	7,274
11-Sep	3	6,719	6,954	7,039	7,009	6,971	6,929	6,900	6,856	6,826	6,799	6,786
12-Sep	0	6,060	6,272	6,349	6,322	6,287	6,249	6,223	6,183	6,156	6,132	6,120
13-Sep	0	6,467	6,694	6,776	6,747	6,710	6,669	6,641	6,599	6,571	6,544	6,532
14-Sep	0	6,950	7,194	7,282	7,251	7,212	7,168	7,138	7,092	7,061	7,033	7,020
15-Sep	1	7,114	7,363	7,453	7,422	7,381	7,336	7,305	7,259	7,227	7,199	7,185
16-Sep	3	7,108	7,357	7,447	7,415	7,375	7,330	7,299	7,253	7,221	7,192	7,178
17-Sep	0	6,863	7,103	7,190	7,159	7,120	7,077	7,047	7,003	6,972	6,944	6,931
18-Sep	0	6,537	6,766	6,848	6,819	6,782	6,741	6,712	6,670	6,641	6,614	6,602
19-Sep	2	6,317	6,539	6,619	6,591	6,555	6,515	6,487	6,446	6,418	6,393	6,380
20-Sep	7	6,832	7,071	7,158	7,128	7,089	7,045	7,016	6,971	6,941	6,913	6,900
21-Sep	5	6,882	7,123	7,210	7,179	7,140	7,096	7,067	7,022	6,991	6,963	6,950
22-Sep	0	6,611	6,843	6,927	6,897	6,860	6,818	6,789	6,746	6,717	6,690	6,677
23-Sep	6	7,020	7,266	7,355	7,323	7,283	7,239	7,209	7,163	7,132	7,103	7,090
24-Sep	12	7,252	7,506	7,598	7,566	7,525	7,479	7,448	7,400	7,368	7,339	7,325
25-Sep	1	6,097	6,310	6,388	6,360	6,326	6,287	6,261	6,221	6,194	6,169	6,157
26-Sep	0	6,016	6,227	6,303	6,276	6,242	6,204	6,178	6,139	6,112	6,087	6,076
27-Sep	1	6,537	6,766	6,848	6,819	6,782	6,741	6,712	6,670	6,641	6,614	6,602
28-Sep	5	7,039	7,285	7,374	7,343	7,303	7,258	7,228	7,182	7,151	7,122	7,109
29-Sep	8	7,108	7,357	7,447	7,415	7,375	7,330	7,299	7,253	7,221	7,192	7,179
30-Sep	13	7,108	7,357	7,447	7,415	7,375	7,330	7,299	7,253	7,221	7,193	7,179
1-Oct	0	6,593	6,824	6,907	6,878	6,840	6,798	6,770	6,727	6,698	6,671	6,658
2-Oct	7	6,298	6,519	6,598	6,570	6,535	6,495	6,467	6,426	6,398	6,373	6,361
3-Oct	9	6,248	6,467	6,546	6,519	6,483	6,444	6,417	6,376	6,348	6,323	6,311
4-Oct	1	6,160	6,375	6,453	6,426	6,391	6,352	6,325	6,285	6,258	6,233	6,221
5-Oct	3	6,762	6,999	7,085	7,055	7,016	6,973	6,944	6,900	6,870	6,843	6,829
6-Oct	0	7,171	7,422	7,513	7,481	7,440	7,395	7,364	7,317	7,285	7,256	7,242
7-Oct	2	6,687	6,921	7,006	6,976	6,938	6,896	6,867	6,823	6,793	6,766	6,753
8-Oct	0	7,026	7,272	7,361	7,330	7,290	7,246	7,215	7,169	7,138	7,110	7,096
9-Oct	14	6,889	7,130	7,217	7,187	7,147	7,104	7,074	7,029	6,999	6,971	6,957
10-Oct	23	6,582	6,812	6,896	6,867	6,829	6,787	6,759	6,716	6,687	6,660	6,647
11-Oct	19	6,292	6,512	6,592	6,564	6,528	6,489	6,461	6,420	6,392	6,367	6,355
12-Oct	16	6,329	6,551	6,631	6,603	6,567	6,527	6,499	6,458	6,430	6,404	6,392
13-Oct	9	6,241	6,459	6,538	6,511	6,475	6,436	6,409	6,368	6,340	6,315	6,303
14-Oct	6	6,423	6,648	6,729	6,701	6,664	6,624	6,596	6,554	6,525	6,499	6,487
15-Oct	5	6,693	6,927	7,012	6,983	6,944	6,902	6,873	6,830	6,800	6,773	6,760
16-Oct	15	6,933	7,176	7,263	7,233	7,193	7,149	7,119	7,074	7,043	7,015	7,002
17-Oct	20	6,544	6,773	6,856	6,827	6,790	6,748	6,720	6,678	6,648	6,622	6,609
18-Oct	19	6,355	6,577	6,658	6,630	6,594	6,553	6,526	6,484	6,456	6,430	6,418

Date	AI HDDd	RI NFS+NFT 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	6,291	6,512	6,591	6,563	6,527	6,488	6,461	6,419	6,392	6,366	6,354
20-Oct	9	6,335	6,557	6,637	6,609	6,573	6,533	6,506	6,464	6,436	6,410	6,398
21-Oct	12	6,781	7,019	7,105	7,075	7,036	6,993	6,964	6,920	6,889	6,862	6,849
22-Oct	21	7,209	7,461	7,553	7,521	7,479	7,434	7,403	7,356	7,324	7,294	7,280
23-Oct	23	6,594	6,825	6,908	6,879	6,841	6,800	6,771	6,728	6,699	6,672	6,659
24-Oct	23	5,922	6,130	6,205	6,178	6,145	6,107	6,082	6,043	6,017	5,993	5,981
25-Oct	22	6,141	6,356	6,434	6,407	6,372	6,333	6,307	6,267	6,239	6,214	6,202
26-Oct	15	6,191	6,408	6,486	6,459	6,423	6,384	6,357	6,317	6,289	6,264	6,252
27-Oct	16	6,486	6,713	6,795	6,767	6,730	6,689	6,661	6,618	6,589	6,563	6,551
28-Oct	16	6,674	6,908	6,993	6,963	6,925	6,883	6,854	6,811	6,781	6,754	6,741
29-Oct	14	6,555	6,785	6,868	6,839	6,801	6,760	6,732	6,689	6,660	6,633	6,620
30-Oct	7	5,984	6,193	6,269	6,243	6,209	6,171	6,145	6,106	6,079	6,055	6,043
31-Oct	2	5,720	5,921	5,993	5,968	5,935	5,899	5,874	5,837	5,812	5,789	5,777
Nov	697	154,233	178,964	185,233	187,502	186,707	185,687	184,554	183,782	182,615	181,819	181,094
Dec	1,040	124,238	144,160	149,209	151,037	150,396	149,575	148,662	148,040	147,100	146,459	145,875
Jan	1,250	78,346	90,909	94,093	95,245	94,841	94,323	93,748	93,356	92,763	92,359	91,990
Feb	1,091	83,781	97,216	100,621	101,853	101,421	100,867	100,252	99,832	99,199	98,766	98,373
Mar	942	134,027	155,518	160,966	162,937	162,246	161,360	160,376	159,705	158,691	157,999	157,369
Apr	518	191,237	197,936	200,360	199,510	198,420	197,210	196,385	195,138	194,288	193,513	193,140
May	228	203,084	210,198	212,772	211,870	210,713	209,427	208,551	207,227	206,324	205,501	205,105
Jun	48	201,865	208,937	211,495	210,598	209,448	208,170	207,299	205,983	205,086	204,268	203,874
Jul	3	214,308	221,815	224,531	223,579	222,358	221,001	220,077	218,679	217,727	216,858	216,440
Aug	2	213,512	220,991	223,697	222,749	221,533	220,181	219,260	217,867	216,918	216,053	215,637
Sep	70	203,859	211,000	213,584	212,678	211,517	210,226	209,346	208,017	207,111	206,285	205,888
Oct	361	201,107	208,152	210,701	209,808	208,662	207,389	206,521	205,210	204,316	203,501	203,109
Total	6,250	2,003,598	2,145,795	2,187,263	2,189,365	2,178,263	2,165,418	2,155,031	2,142,836	2,132,137	2,123,383	2,117,895

Design-RI-NovOct_EcoSoRI-DR-S05

	AI	RI TSO										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	100,967	101,645	103,978	106,132	106,646	107,302	107,858	108,937	109,166	109,855	110,560
2-Nov	9	69,607	69,996	71,767	73,294	73,579	73,922	74,200	74,810	74,891	75,265	75,653
3-Nov	14	100,618	101,163	103,513	105,671	106,173	106,810	107,347	108,402	108,618	109,289	109,977
4-Nov	13	94,149	94,665	96,894	98,920	99,377	99,952	100,436	101,397	101,585	102,194	102,819
5-Nov	20	134,988	135,739	138,732	141,588	142,328	143,289	144,113	145,658	146,024	147,022	148,040
6-Nov	19	128,366	129,087	131,925	134,643	135,352	136,273	137,063	138,541	138,894	139,849	140,823
7-Nov	16	110,584	111,203	113,678	116,032	116,633	117,408	118,072	119,323	119,614	120,421	121,244
8-Nov	14	101,352	101,892	104,224	106,395	106,917	107,584	108,151	109,244	109,480	110,179	110,894
9-Nov	20	136,320	137,063	140,080	142,964	143,714	144,688	145,524	147,089	147,462	148,473	149,505
10-Nov	15	110,195	110,752	113,278	115,634	116,204	116,933	117,553	118,747	119,007	119,771	120,553
11-Nov	15	110,639	111,194	113,728	116,092	116,666	117,400	118,024	119,224	119,486	120,255	121,041
12-Nov	14	102,838	103,371	105,760	107,965	108,483	109,143	109,700	110,788	111,015	111,708	112,418
13-Nov	20	132,170	132,936	135,847	138,641	139,376	140,331	141,152	142,682	143,051	144,041	145,051
14-Nov	19	125,104	125,842	128,590	131,238	131,938	132,848	133,631	135,088	135,441	136,384	137,346
15-Nov	24	158,933	159,813	163,222	166,561	167,484	168,694	169,740	171,655	172,142	173,389	174,659
16-Nov	27	181,156	182,111	185,964	189,760	190,825	192,224	193,436	195,644	196,215	197,655	199,121
17-Nov	19	140,066	140,719	143,799	146,766	147,547	148,562	149,435	151,060	151,454	152,506	153,579
18-Nov	28	188,069	189,051	193,032	196,970	198,083	199,548	200,819	203,126	203,727	205,234	206,767
19-Nov	30	199,674	200,723	204,922	209,095	210,289	211,863	213,231	215,704	216,356	217,973	219,618
20-Nov	31	206,433	207,509	211,802	216,110	217,367	219,029	220,475	223,073	223,771	225,474	227,205
21-Nov	31	204,059	205,148	209,366	213,623	214,877	216,537	217,984	220,575	221,277	222,977	224,704
22-Nov	37	241,308	242,523	247,459	252,478	253,983	255,979	257,723	260,827	261,681	263,722	265,795
23-Nov	41	267,865	268,841	274,255	279,831	281,534	283,796	285,775	289,276	290,258	292,566	294,907
24-Nov	43	282,398	283,248	288,907	294,787	296,606	299,024	301,144	304,876	305,936	308,400	310,899
25-Nov	45	295,156	295,889	301,762	307,908	309,830	312,387	314,631	318,567	319,697	322,299	324,937
26-Nov	27	201,140	201,978	206,190	210,406	211,620	213,220	214,611	217,118	217,785	219,427	221,096
27-Nov	17	134,525	135,073	138,014	140,870	141,631	142,621	143,473	145,051	145,439	146,462	147,505
28-Nov	20	135,126	135,872	138,805	141,659	142,431	143,438	144,307	145,910	146,309	147,350	148,410
29-Nov	24	158,044	158,930	162,323	165,644	166,560	167,761	168,799	170,701	171,183	172,421	173,682
30-Nov	29	192,761	193,783	197,853	201,885	203,031	204,539	205,848	208,222	208,843	210,394	211,972
1-Dec	20	146,534	147,218	150,418	153,516	154,343	155,420	156,347	158,065	158,487	159,601	160,736
2-Dec	28	189,401	190,375	194,381	198,346	199,469	200,948	202,230	204,558	205,165	206,686	208,232
3-Dec	29	194,537	195,549	199,651	203,720	204,879	206,405	207,730	210,131	210,761	212,329	213,925
4-Dec	34	222,730	223,914	228,512	233,151	234,521	236,335	237,917	240,747	241,515	243,373	245,260
5-Dec	25	171,465	172,338	175,945	179,541	180,570	181,925	183,101	185,228	185,789	187,179	188,594
6-Dec	39	250,069	251,190	256,268	261,470	263,047	265,142	266,975	270,223	271,128	273,267	275,438
7-Dec	28	196,062	196,998	201,123	205,228	206,401	207,946	209,288	211,716	212,355	213,943	215,557
8-Dec	19	147,171	147,783	150,991	154,106	154,941	156,027	156,964	158,695	159,123	160,247	161,392
9-Dec	29	194,093	195,108	199,202	203,262	204,417	205,939	207,260	209,654	210,281	211,845	213,437
10-Dec	23	161,055	161,857	165,331	168,722	169,648	170,860	171,906	173,829	174,314	175,564	176,838
11-Dec	20	142,384	143,090	146,185	149,193	150,005	151,062	151,974	153,657	154,076	155,169	156,282
12-Dec	27	173,744	174,739	178,396	182,032	183,072	184,442	185,632	187,784	188,351	189,758	191,190
13-Dec	27	179,226	180,191	183,978	187,731	188,797	190,199	191,416	193,623	194,200	195,642	197,109
14-Dec	41	261,647	262,661	267,963	273,408	275,064	277,263	279,188	282,595	283,548	285,792	288,071
15-Dec	45	288,050	288,825	294,570	300,567	302,436	304,921	307,103	310,932	312,028	314,558	317,124
16-Dec	39	265,765	266,796	272,188	277,722	279,401	281,631	283,582	287,038	288,002	290,278	292,588
17-Dec	32	227,266	228,289	232,992	237,737	239,131	240,975	242,582	245,461	246,240	248,129	250,048
18-Dec	41	265,491	266,480	271,820	277,343	279,044	281,304	283,285	286,778	287,764	290,069	292,406
19-Dec	32	214,969	216,061	220,480	224,961	226,295	228,060	229,602	232,352	233,104	234,910	236,745
20-Dec	49	307,956	308,728	314,796	321,198	323,231	325,940	328,322	332,480	333,688	336,441	339,231
21-Dec	51	326,235	327,014	333,447	340,229	342,378	345,243	347,762	352,161	353,438	356,350	359,301
22-Dec	32	234,371	235,353	240,184	245,077	246,525	248,440	250,111	253,096	253,910	255,870	257,861
23-Dec	21	165,437	166,077	169,622	173,113	174,079	175,341	176,434	178,431	178,941	180,243	181,567
24-Dec	27	185,597	186,526	190,458	194,348	195,446	196,890	198,142	200,416	201,008	202,493	204,004
25-Dec	41	255,277	256,326	261,482	266,791	268,415	270,573	272,462	275,802	276,740	278,941	281,175
26-Dec	42	265,499	266,465	271,766	277,287	279,006	281,295	283,303	286,830	287,837	290,167	292,530
27-Dec	51	323,752	324,600	330,965	337,689	339,832	342,689	345,202	349,585	350,861	353,764	356,706
28-Dec	51	331,889	332,689	339,231	346,129	348,317	351,233	353,798	358,274	359,575	362,539	365,543
29-Dec	32	235,259	236,236	241,083	245,995	247,449	249,373	251,052	254,050	254,868	256,837	258,838
30-Dec	35	243,563	244,694	249,703	254,777	256,285	258,281	260,024	263,134	263,984	266,028	268,103
31-Dec	30	208,555	209,553	213,911	218,271	219,531	221,195	222,641	225,248	225,942	227,649	229,384
1-Jan	61	370,696	371,803	379,033	386,709	389,183	392,490	395,403	400,465	401,952	405,309	408,710
2-Jan	38	255,527	256,636	261,789	267,103	268,733	270,900	272,798	276,150	277,092	279,302	281,544
3-Jan	23	179,997	180,686	184,470	188,256	189,340	190,764	192,002	194,236	194,828	196,290	197,777
4-Jan	28	194,730	195,673	199,774	203,852	205,015	206,547	207,877	210,284	210,917	212,491	214,092
5-Jan	19	140,066	140,719	143,799	146,766	147,547	148,562	149,435	151,060	151,454	152,506	153,579
6-Jan	28	188,513	189,492	193,482	197,429	198,545	200,015	201,289	203,603	204,207	205,718	207,256
7-Jan	38	243,399	244,582	249,580	254,645	256,153	258,153	259,899	263,013	263,865	265,912	267,990
8-Jan	41	266,976	267,958	273,356	278,914	280,610	282,862	284,834	288,322	289,300	291,598	293,930
9-Jan	41	265,337	266,326	271,631	277,150	278,864	281,146	283,147	286,665	287,667	289,991	292,347
10-Jan	30	211,511	212,489	216,869	221,288	222,587	224,302	225,797	228,476	229,201	230,958	232,743
11-Jan	43	279,290	280,158	285,761	291,576	293,371	295,758	297,851	301,536	302,581	305,013	307,480
12-Jan	50	316,923	317,660	323,917	330,508	332,593	335,371	337,814	342,080	343,317	346,141	349,004
13-Jan	41	278,967	279,878	285,492	291,301	293,087	295,460	297,539	301,206	302,242	304,661	307,115
14-Jan	46	303,311	303,975	309,987	316,304	318,290	320,934	323,257	327,322	328,495	331,184	333,909
15-Jan	43	282,689	283,535	289,169	295,052	296,889	299,332	301,477	305,241	306,318	308,806	311,328
16-Jan	30	210,913	211,894	216,231	220,636	221,945	223,677	225,189	227,886	228,624	230,396	232,196
17-Jan	40	261,332	262,367	267,640	273,077	274,743	276,956	278,894	282,318	283,281	285,538	287,829
18-Jan	55	343,222	344,098	350,843	357,968	360,238	363,267	365,931	370,577	371,931	375,008	378,127
19-Jan	68	427,053	428,562	436,895	445,749	448,631	452,480	455,871	461,736	463,471	467,356	471,291
20-Jan	54	362,651	363,590	370,714	378,241	380,642	383,844	386,662	391,573	393,005	396,259	399,556
21-Jan	44	306,984	307,669	313,763	320,158	322,165	324,835	327,180	331,287	332,469	335,186	337,939
22-Jan	34	240,938	242,015	246,941	251,962	253,468	255,464	257,209	260,312	261,168	263,209	265,281
23-Jan	32	217,189	218,268	222,727	227,255	228,605	230,393	231,954	234,738	235,500	237,329	239,187
24-Jan	44	278,410	279,260	284,808	290,602	292,410	294,816	296,927	300,634	301,695	304,144	306,627
25-Jan	24	179,070	179,833	183,636	187,401	188,459	189,848	191,052	193,241	193,810	195,238	196,692
26-Jan	41	267,865	268,841	274,255	279,831	281,534	283,796	285,775	289,276	290,258	292,566	294,907
27-Jan	46	291,764	292,496	298,300	304,375	306,275	308,803	311,023	314,914	316,032	318,605	321,213

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI TSO 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
28-Jan	32	228,598	229,613	234,340	239,113	240,518	242,375	243,994	246,892	247,678	249,580	251,513
29-Jan	46	293,832	294,550	300,360	306,475	308,406	310,977	313,238	317,188	318,331	320,946	323,596
30-Jan	47	295,801	296,590	302,410	308,560	310,517	313,125	315,420	319,422	320,587	323,237	325,923
31-Jan	43	285,354	286,184	291,865	297,805	299,662	302,132	304,300	308,104	309,194	311,709	314,258
1-Feb	17	146,224	146,706	149,889	152,992	153,826	154,910	155,845	157,570	157,999	159,119	160,261
2-Feb	28	194,286	195,232	199,325	203,393	204,553	206,080	207,406	209,807	210,438	212,007	213,604
3-Feb	45	277,836	278,671	284,232	290,015	291,807	294,190	296,280	299,957	301,003	303,430	305,893
4-Feb	45	290,271	291,032	296,817	302,861	304,747	307,254	309,455	313,318	314,424	316,977	319,565
5-Feb	56	354,762	355,768	362,711	370,066	372,425	375,576	378,349	383,176	384,589	387,788	391,030
6-Feb	56	356,520	357,610	364,566	371,953	374,333	377,514	380,316	385,185	386,615	389,844	393,115
7-Feb	57	370,670	371,743	378,989	386,671	389,139	392,436	395,339	400,389	401,869	405,217	408,608
8-Feb	42	292,895	293,704	299,560	305,661	307,555	310,073	312,282	316,164	317,271	319,835	322,436
9-Feb	44	296,770	297,515	303,425	309,606	311,536	314,104	316,358	320,311	321,445	324,058	326,708
10-Feb	39	265,765	266,796	272,188	277,722	279,401	281,631	283,582	287,038	288,002	290,278	292,588
11-Feb	42	279,572	280,459	286,076	291,897	293,691	296,076	298,165	301,848	302,891	305,321	307,786
12-Feb	37	249,746	250,911	255,999	261,195	262,763	264,844	266,663	269,894	270,789	272,915	275,073
13-Feb	43	275,430	276,318	281,789	287,518	289,315	291,708	293,810	297,493	298,552	300,987	303,456
14-Feb	45	289,673	290,437	296,180	302,209	304,105	306,629	308,847	312,728	313,848	316,415	319,018
15-Feb	32	229,042	230,055	234,790	239,572	240,980	242,841	244,464	247,370	248,157	250,064	252,001
16-Feb	33	229,737	230,814	235,566	240,358	241,768	243,633	245,259	248,171	248,959	250,870	252,811
17-Feb	35	235,569	236,747	241,612	246,519	247,966	249,883	251,554	254,545	255,356	257,319	259,313
18-Feb	31	214,580	215,610	220,081	224,563	225,865	227,586	229,083	231,775	232,496	234,260	236,054
19-Feb	37	243,085	244,289	249,257	254,313	255,831	257,845	259,605	262,736	263,599	265,657	267,748
20-Feb	22	156,944	157,699	161,033	164,336	165,266	166,485	167,542	169,463	169,962	171,216	172,492
21-Feb	39	250,069	251,190	256,268	261,470	263,047	265,142	266,975	270,223	271,128	273,267	275,438
22-Feb	43	274,849	275,743	281,266	286,988	288,750	291,092	293,145	296,764	297,788	300,175	302,597
23-Feb	22	170,574	171,251	174,893	178,488	179,488	180,799	181,934	184,004	184,537	185,886	187,260
24-Feb	35	235,569	236,747	241,612	246,519	247,966	249,883	251,554	254,545	255,356	257,319	259,313
25-Feb	43	273,072	273,977	279,468	285,153	286,902	289,226	291,263	294,855	295,870	298,240	300,644
26-Feb	43	278,692	279,562	285,123	290,923	292,730	295,133	297,242	300,946	302,004	304,451	306,933
27-Feb	41	268,446	269,416	274,778	280,361	282,099	284,412	286,441	290,006	291,023	293,377	295,765
28-Feb	39	261,171	262,227	267,505	272,940	274,601	276,807	278,738	282,153	283,111	285,362	287,646
1-Mar	47	303,594	304,255	310,267	316,589	318,580	321,230	323,558	327,631	328,808	331,503	334,235
2-Mar	32	228,154	229,172	233,891	238,654	240,055	241,908	243,523	246,415	247,199	249,097	251,025
3-Mar	43	282,842	283,689	289,357	295,246	297,068	299,491	301,615	305,353	306,416	308,884	311,387
4-Mar	42	276,020	276,928	282,480	288,227	289,994	292,343	294,401	298,030	299,056	301,450	303,880
5-Mar	27	196,102	196,967	201,058	205,165	206,357	207,929	209,297	211,757	212,415	214,027	215,665
6-Mar	36	235,514	236,757	241,562	246,459	247,933	249,891	251,602	254,644	255,484	257,485	259,516
7-Mar	32	214,234	215,332	219,769	224,238	225,550	227,286	228,798	231,510	232,242	234,020	235,827
8-Mar	41	267,865	268,841	274,255	279,831	281,534	283,796	285,775	289,276	290,258	292,566	294,907
9-Mar	45	290,271	291,032	296,817	302,861	304,747	307,254	309,455	313,318	314,424	316,977	319,565
10-Mar	46	301,090	301,767	307,739	314,010	315,980	318,601	320,904	324,936	326,098	328,765	331,468
11-Mar	21	168,990	169,609	173,218	176,784	177,776	179,074	180,198	182,248	182,776	184,113	185,474
12-Mar	16	126,724	127,251	130,047	132,743	133,449	134,363	135,149	136,614	136,968	137,916	138,883
13-Mar	22	143,178	144,013	147,099	150,113	150,940	152,021	152,955	154,670	155,102	156,218	157,354
14-Mar	20	136,167	136,909	139,892	142,770	143,535	144,530	145,386	146,977	147,365	148,395	149,446
15-Mar	25	169,551	170,439	174,074	177,635	178,619	179,909	181,024	183,067	183,587	184,916	186,271
16-Mar	27	182,044	182,994	186,863	190,678	191,749	193,157	194,377	196,599	197,174	198,623	200,098
17-Mar	35	229,796	231,008	235,769	240,554	241,959	243,818	245,437	248,341	249,125	251,030	252,965
18-Mar	27	189,594	190,499	194,504	198,477	199,605	201,089	202,377	204,711	205,322	206,848	208,399
19-Mar	28	191,468	192,429	196,440	200,446	201,600	203,122	204,445	206,831	207,465	209,027	210,615
20-Mar	28	184,654	185,652	189,509	193,370	194,489	195,965	197,249	199,561	200,177	201,692	203,231
21-Mar	28	188,804	189,780	193,743	197,693	198,828	200,323	201,622	203,968	204,589	206,124	207,685
22-Mar	21	153,447	154,157	157,487	160,726	161,601	162,744	163,729	165,547	165,999	167,180	168,383
23-Mar	24	167,079	167,913	171,500	175,014	175,982	177,251	178,347	180,357	180,867	182,176	183,508
24-Mar	29	193,205	194,225	198,303	202,344	203,493	205,006	206,319	208,699	209,322	210,878	212,460
25-Mar	21	152,115	152,833	156,138	159,349	160,215	161,344	162,318	164,115	164,561	165,728	166,918
26-Mar	26	174,978	175,900	179,606	183,274	184,311	185,675	186,857	189,005	189,564	190,966	192,393
27-Mar	41	251,127	252,198	257,248	262,468	264,076	266,215	268,089	271,395	272,328	274,509	276,721
28-Mar	42	268,761	269,710	275,100	280,692	282,421	284,719	286,734	290,283	291,289	293,632	296,007
29-Mar	29	210,080	211,001	215,383	219,778	221,053	222,736	224,199	226,833	227,537	229,263	231,016
30-Mar	20	154,528	155,164	158,509	161,775	162,661	163,818	164,817	166,654	167,115	168,309	169,526
31-Mar	21	150,338	151,067	154,340	157,514	158,367	159,478	160,435	162,206	162,644	163,793	164,964
1-Apr	23	157,883	161,286	164,593	165,489	166,661	167,671	169,535	170,000	171,210	172,443	174,625
2-Apr	24	165,265	168,804	172,261	173,209	174,451	175,524	177,494	177,991	179,273	180,578	182,880
3-Apr	25	168,960	172,538	176,065	177,053	178,351	179,475	181,523	182,051	183,387	184,746	187,133
4-Apr	21	143,695	146,773	149,786	150,613	151,695	152,631	154,346	154,780	155,896	157,033	159,037
5-Apr	39	245,451	250,425	255,506	257,040	259,077	260,858	264,020	264,896	266,977	269,090	272,741
6-Apr	31	212,078	216,485	220,892	222,168	223,853	225,318	227,958	228,662	230,390	232,147	235,211
7-Apr	19	149,107	152,339	155,483	156,327	157,427	158,375	160,127	160,561	161,698	162,857	164,909
8-Apr	29	196,432	200,550	204,638	205,803	207,339	208,672	211,085	211,719	213,297	214,902	217,709
9-Apr	12	100,086	102,411	104,557	105,058	105,692	106,228	107,277	107,494	108,162	108,846	110,098
10-Apr	22	149,465	152,681	155,813	156,665	157,778	158,739	160,509	160,952	162,102	163,273	165,343
11-Apr	21	137,073	140,030	142,904	143,682	144,697	145,573	147,188	147,590	148,639	149,708	151,599
12-Apr	19	133,501	136,420	139,231	139,974	140,938	141,768	143,312	143,687	144,687	145,706	147,520
13-Apr	7	71,858	73,651	75,223	75,530	75,903	76,208	76,858	76,955	77,358	77,774	78,574
14-Apr	15	107,220	109,683	111,963	112,507	113,201	113,789	114,929	115,172	115,901	116,646	118,005
15-Apr	17	116,685	119,325	121,794	122,402	123,183	123,848	125,121	125,404	126,220	127,055	128,565
16-Apr	21	143,562	146,699	149,715	150,510	151,546	152,436	154,094	154,495	155,568	156,663	158,610
17-Apr	21	142,525	145,612	148,603	149,407	150,454	151,357	153,027	153,439	154,523	155,627	157,584
18-Apr	13	95,681	97,866	99,909	100,404	101,035	101,571	102,604	102,829	103,490	104,166	105,392
19-Apr	15	107,066	109,494	111,769	112,327	113,042	113,651	114,817	115,075	115,823	116,587	117,970
20-Apr	5	65,937	67,602	69,044	69,315	69,643	69,908	70,487	70,565	70,921	71,290	72,005
21-Apr	14	98,956	101,266	103,377	103,862	104,477	104,995	106,016	106,222	106,870	107,535	108,758
22-Apr	7	62,586	64,212	65,589	65,826	66,105	66,326	66,837	66,889	67,198	67,520	68,161
23-Apr	15	105,013	107,435	109,669	110,196	110,868	111,436	112,543	112,776	113,481	114,205	115,526
24-Apr	15	101,768	104,101	106,264	106,782	107,443	108,004	109,090	109,323	110,017	110,727	112,020
25-Apr	14	95,999	98,192	100,237	100,730	101,360	101,896	102,928	103,151	103,811	104,487	105,714

Date	AI HDDd	RI TSO 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
26-Apr	10	76,782	78,647	80,310	80,657	81,088	81,444	82,179	82,306	82,766	83,240	84,133
27-Apr	7	64,794	66,460	67,883	68,136	68,438	68,679	69,223	69,286	69,617	69,961	70,640
28-Apr	8	63,939	65,597	67,002	67,245	67,532	67,759	68,283	68,337	68,654	68,983	69,641
29-Apr	13	91,133	93,298	95,250	95,680	96,220	96,671	97,579	97,751	98,324	98,912	100,008
30-Apr	16	110,628	113,155	115,502	116,068	116,792	117,407	118,593	118,850	119,609	120,386	121,798
1-May	0	65,474	67,141	68,579	68,844	69,161	69,417	69,982	70,054	70,401	70,759	71,461
2-May	0	56,709	58,203	59,462	59,671	59,912	60,102	60,551	60,590	60,860	61,141	61,709
3-May	0	53,517	54,991	56,192	56,360	56,545	56,681	57,051	57,057	57,271	57,497	57,980
4-May	0	57,221	58,794	60,077	60,257	60,456	60,604	61,002	61,009	61,240	61,483	62,002
5-May	6	54,244	55,721	56,932	57,109	57,306	57,455	57,843	57,856	58,083	58,321	58,823
6-May	17	109,807	112,329	114,660	115,215	115,924	116,525	117,691	117,939	118,683	119,445	120,835
7-May	23	150,819	154,094	157,252	158,095	159,195	160,143	161,900	162,330	163,469	164,630	166,691
8-May	14	104,100	106,471	108,689	109,228	109,917	110,503	111,630	111,877	112,598	113,336	114,674
9-May	13	93,474	95,619	97,615	98,093	98,702	99,219	100,218	100,432	101,070	101,724	102,913
10-May	2	62,241	63,809	65,174	65,434	65,748	66,002	66,554	66,630	66,970	67,321	68,002
11-May	0	61,993	63,606	64,968	65,201	65,475	65,692	66,195	66,244	66,548	66,864	67,496
12-May	0	56,384	57,900	59,148	59,338	59,554	59,718	60,134	60,156	60,401	60,658	61,193
13-May	3	54,085	55,545	56,750	56,931	57,136	57,292	57,689	57,708	57,941	58,186	58,697
14-May	8	57,888	59,442	60,723	60,920	61,144	61,315	61,745	61,769	62,023	62,289	62,841
15-May	12	80,066	81,996	83,718	84,083	84,538	84,916	85,690	85,827	86,312	86,812	87,751
16-May	17	108,431	110,858	113,148	113,724	114,468	115,102	116,306	116,581	117,356	118,147	119,571
17-May	12	88,012	90,087	91,976	92,401	92,936	93,386	94,280	94,455	95,021	95,602	96,676
18-May	12	91,698	93,871	95,840	96,278	96,828	97,288	98,210	98,387	98,969	99,568	100,678
19-May	1	64,783	66,430	67,853	68,116	68,432	68,687	69,250	69,322	69,667	70,023	70,720
20-May	8	62,173	63,799	65,167	65,396	65,665	65,877	66,374	66,419	66,719	67,030	67,657
21-May	9	66,022	67,721	69,165	69,420	69,723	69,965	70,515	70,577	70,911	71,258	71,946
22-May	9	65,868	67,533	68,971	69,240	69,565	69,827	70,403	70,479	70,833	71,199	71,911
23-May	8	57,008	58,479	59,732	59,954	60,216	60,425	60,900	60,952	61,241	61,540	62,134
24-May	10	71,484	73,253	74,804	75,112	75,489	75,798	76,453	76,554	76,960	77,380	78,183
25-May	7	62,145	63,763	65,130	65,363	65,638	65,856	66,360	66,410	66,714	67,031	67,665
26-May	7	61,704	63,313	64,671	64,901	65,172	65,385	65,883	65,931	66,231	66,543	67,170
27-May	1	60,368	61,935	63,265	63,495	63,767	63,982	64,478	64,529	64,828	65,140	65,761
28-May	5	57,107	58,613	59,868	60,073	60,311	60,497	60,943	60,978	61,245	61,523	62,089
29-May	3	52,788	54,184	55,349	55,538	55,756	55,926	56,336	56,366	56,611	56,866	57,385
30-May	9	58,209	59,704	60,978	61,204	61,474	61,690	62,178	62,233	62,530	62,838	63,447
31-May	12	80,507	82,446	84,176	84,545	85,005	85,387	86,168	86,306	86,796	87,301	88,247
1-Jun	6	63,144	64,769	66,154	66,400	66,692	66,926	67,454	67,514	67,835	68,169	68,829
2-Jun	7	62,145	63,763	65,130	65,363	65,638	65,856	66,360	66,410	66,714	67,031	67,665
3-Jun	2	59,746	61,300	62,616	62,841	63,107	63,317	63,803	63,851	64,145	64,451	65,062
4-Jun	0	58,329	59,858	61,144	61,359	61,610	61,808	62,272	62,314	62,593	62,884	63,470
5-Jun	0	51,571	52,947	54,089	54,269	54,474	54,632	55,023	55,047	55,278	55,520	56,018
6-Jun	0	47,007	48,269	49,311	49,471	49,653	49,793	50,142	50,161	50,367	50,582	51,030
7-Jun	0	50,725	52,087	53,213	53,386	53,582	53,732	54,109	54,129	54,351	54,584	55,067
8-Jun	0	54,787	56,257	57,475	57,663	57,877	58,041	58,450	58,473	58,715	58,968	59,492
9-Jun	0	53,867	55,319	56,516	56,698	56,902	57,058	57,455	57,473	57,706	57,951	58,460
10-Jun	0	53,147	54,586	55,768	55,944	56,142	56,292	56,677	56,692	56,918	57,155	57,652
11-Jun	0	52,705	54,137	55,310	55,482	55,675	55,821	56,200	56,213	56,434	56,667	57,156
12-Jun	0	48,215	49,532	50,606	50,760	50,931	51,059	51,398	51,406	51,603	51,810	52,251
13-Jun	0	45,413	46,647	47,659	47,808	47,973	48,097	48,423	48,433	48,622	48,821	49,241
14-Jun	0	50,163	51,516	52,631	52,800	52,991	53,136	53,504	53,521	53,738	53,965	54,438
15-Jun	9	60,725	62,328	63,659	63,874	64,124	64,319	64,789	64,825	65,105	65,398	65,996
16-Jun	7	57,289	58,819	60,083	60,280	60,506	60,680	61,111	61,137	61,392	61,660	62,211
17-Jun	1	61,251	62,834	64,182	64,419	64,700	64,923	65,432	65,487	65,796	66,117	66,753
18-Jun	5	57,107	58,613	59,868	60,073	60,311	60,497	60,943	60,978	61,245	61,523	62,089
19-Jun	6	52,836	54,243	55,408	55,591	55,802	55,965	56,366	56,392	56,630	56,879	57,390
20-Jun	5	51,060	52,393	53,516	53,706	53,929	54,104	54,515	54,553	54,799	55,057	55,573
21-Jun	0	56,446	57,915	59,167	59,383	59,636	59,837	60,299	60,346	60,626	60,916	61,496
22-Jun	0	55,275	56,755	57,985	58,177	58,395	58,563	58,980	59,005	59,252	59,510	60,043
23-Jun	0	50,860	52,260	53,397	53,555	53,729	53,858	54,208	54,212	54,414	54,627	55,084
24-Jun	0	50,860	52,260	53,397	53,555	53,729	53,858	54,208	54,212	54,414	54,627	55,084
25-Jun	0	50,860	52,260	53,397	53,555	53,729	53,858	54,208	54,212	54,414	54,627	55,084
26-Jun	0	47,537	48,847	49,913	50,063	50,225	50,345	50,673	50,676	50,865	51,064	51,491
27-Jun	0	42,968	44,164	45,132	45,262	45,401	45,502	45,788	45,785	45,949	46,121	46,498
28-Jun	0	45,771	47,049	48,078	48,214	48,359	48,463	48,764	48,759	48,929	49,110	49,507
29-Jun	0	49,276	50,648	51,752	51,899	52,057	52,171	52,497	52,493	52,678	52,875	53,305
30-Jun	0	49,717	51,097	52,211	52,361	52,523	52,641	52,974	52,972	53,162	53,363	53,801
1-Jul	0	50,159	51,547	52,670	52,823	52,990	53,112	53,451	53,451	53,646	53,852	54,297
2-Jul	0	50,159	51,547	52,670	52,823	52,990	53,112	53,451	53,451	53,646	53,852	54,297
3-Jul	0	46,654	47,948	48,996	49,138	49,292	49,404	49,718	49,717	49,897	50,087	50,499
4-Jul	0	42,708	43,900	44,863	44,991	45,128	45,226	45,508	45,504	45,664	45,834	46,206
5-Jul	0	45,330	46,600	47,619	47,752	47,892	47,993	48,287	48,279	48,446	48,622	49,012
6-Jul	1	47,566	48,900	49,960	50,094	50,236	50,336	50,639	50,628	50,798	50,979	51,382
7-Jul	2	51,358	52,760	53,898	54,061	54,242	54,376	54,736	54,744	54,953	55,173	55,641
8-Jul	0	57,325	58,845	60,123	60,330	60,569	60,754	61,201	61,235	61,502	61,780	62,346
9-Jul	0	53,091	54,536	55,725	55,901	56,096	56,244	56,626	56,640	56,863	57,098	57,591
10-Jul	0	44,107	45,358	46,356	46,479	46,606	46,695	46,970	46,956	47,109	47,272	47,640
11-Jul	0	39,618	40,754	41,652	41,757	41,862	41,932	42,168	42,149	42,278	42,416	42,735
12-Jul	0	44,005	45,251	46,243	46,366	46,493	46,581	46,855	46,841	46,994	47,157	47,524
13-Jul	0	49,197	50,569	51,674	51,820	51,977	52,090	52,414	52,409	52,594	52,789	53,217
14-Jul	0	49,378	50,754	51,865	52,012	52,170	52,285	52,611	52,607	52,793	52,990	53,421
15-Jul	0	48,495	49,856	50,947	51,088	51,237	51,343	51,657	51,648	51,825	52,013	52,429
16-Jul	0	48,235	49,591	50,679	50,818	50,964	51,068	51,377	51,367	51,541	51,726	52,137
17-Jul	0	44,289	45,543	46,546	46,671	46,800	46,890	47,167	47,154	47,308	47,473	47,844
18-Jul	0	39,901	41,046	41,955	42,062	42,169	42,241	42,480	42,461	42,592	42,732	43,054
19-Jul	0	42,523	43,746	44,711	44,822	44,933	45,008	45,258	45,236	45,373	45,520	45,860
20-Jul	0	46,027	47,344	48,385	48,507	48,631	48,715	48,991	48,970	49,122	49,285	49,658
21-Jul	0	47,092	48,429	49,493	49,623	49,758	49,851	50,143	50,127	50,289	50,462	50,853
22-Jul	0	46,910	48,243	49,302	49,431	49,564	49,656	49,945	49,929	50,090	50,261	50,650

Design-RI-NovOct_EcoSoRI-DR-S05

Date	AI HDDd	RI TSO 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
23-Jul	0	46,729	48,058	49,112	49,240	49,371	49,461	49,748	49,731	49,890	50,060	50,446
24-Jul	0	43,926	45,173	46,165	46,287	46,413	46,500	46,773	46,758	46,909	47,071	47,436
25-Jul	0	40,682	41,838	42,760	42,873	42,988	43,068	43,320	43,305	43,445	43,594	43,930
26-Jul	0	44,186	45,437	46,433	46,557	46,686	46,776	47,052	47,039	47,194	47,358	47,728
27-Jul	0	48,495	49,856	50,947	51,088	51,237	51,343	51,657	51,648	51,825	52,013	52,429
28-Jul	0	48,495	49,856	50,947	51,088	51,237	51,343	51,657	51,648	51,825	52,013	52,429
29-Jul	0	48,054	49,406	50,488	50,626	50,771	50,873	51,180	51,169	51,342	51,525	51,933
30-Jul	0	48,054	49,406	50,488	50,626	50,771	50,873	51,180	51,169	51,342	51,525	51,933
31-Jul	0	44,186	45,437	46,433	46,557	46,686	46,776	47,052	47,039	47,194	47,358	47,728
1-Aug	0	41,305	42,473	43,409	43,527	43,648	43,734	43,994	43,982	44,128	44,283	44,630
2-Aug	0	44,730	45,993	47,005	47,133	47,266	47,360	47,644	47,633	47,792	47,962	48,340
3-Aug	0	47,092	48,429	49,493	49,623	49,758	49,851	50,143	50,127	50,289	50,462	50,853
4-Aug	0	46,650	47,979	49,034	49,161	49,291	49,380	49,665	49,647	49,805	49,974	50,358
5-Aug	0	46,469	47,794	48,843	48,969	49,098	49,186	49,468	49,450	49,606	49,773	50,154
6-Aug	0	46,548	47,872	48,921	49,048	49,177	49,266	49,551	49,533	49,691	49,859	50,242
7-Aug	0	44,186	45,437	46,433	46,557	46,686	46,776	47,052	47,039	47,194	47,358	47,728
8-Aug	0	41,565	42,737	43,677	43,797	43,921	44,009	44,274	44,264	44,412	44,570	44,922
9-Aug	0	44,809	46,072	47,083	47,211	47,346	47,441	47,727	47,716	47,877	48,048	48,428
10-Aug	0	48,054	49,406	50,488	50,626	50,771	50,873	51,180	51,169	51,342	51,525	51,933
11-Aug	0	48,054	49,406	50,488	50,626	50,771	50,873	51,180	51,169	51,342	51,525	51,933
12-Aug	0	47,691	49,035	50,107	50,242	50,384	50,483	50,785	50,773	50,943	51,123	51,525
13-Aug	0	48,755	50,120	51,215	51,358	51,510	51,619	51,937	51,930	52,110	52,301	52,721
14-Aug	0	45,511	46,785	47,810	47,944	48,086	48,187	48,484	48,477	48,645	48,823	49,215
15-Aug	0	41,202	42,366	43,296	43,413	43,535	43,620	43,880	43,868	44,013	44,168	44,514
16-Aug	0	45,511	46,785	47,810	47,944	48,086	48,187	48,484	48,477	48,645	48,823	49,215
17-Aug	0	49,197	50,569	51,674	51,820	51,977	52,090	52,414	52,409	52,594	52,789	53,217
18-Aug	1	47,124	48,451	49,501	49,632	49,769	49,866	50,162	50,149	50,314	50,491	50,886
19-Aug	0	52,366	53,794	54,963	55,134	55,323	55,464	55,837	55,848	56,065	56,293	56,776
20-Aug	0	53,249	54,693	55,881	56,058	56,256	56,406	56,792	56,807	57,033	57,270	57,767
21-Aug	1	45,204	46,465	47,472	47,603	47,745	47,846	48,140	48,134	48,301	48,478	48,868
22-Aug	0	45,877	47,125	48,153	48,305	48,473	48,601	48,932	48,943	49,136	49,338	49,765
23-Aug	0	49,382	50,723	51,826	51,989	52,171	52,308	52,664	52,677	52,885	53,103	53,562
24-Aug	0	50,419	51,811	52,938	53,093	53,263	53,387	53,731	53,733	53,930	54,139	54,589
25-Aug	0	50,860	52,260	53,397	53,555	53,729	53,858	54,208	54,212	54,414	54,627	55,084
26-Aug	0	51,042	52,446	53,587	53,747	53,923	54,053	54,406	54,410	54,614	54,828	55,288
27-Aug	0	50,781	52,181	53,319	53,477	53,650	53,777	54,126	54,129	54,329	54,541	54,996
28-Aug	0	46,394	47,684	48,727	48,868	49,019	49,129	49,438	49,436	49,613	49,800	50,207
29-Aug	0	41,463	42,630	43,565	43,683	43,808	43,896	44,160	44,149	44,298	44,455	44,806
30-Aug	0	45,409	46,678	47,697	47,830	47,972	48,074	48,370	48,363	48,530	48,708	49,100
31-Aug	0	50,419	51,811	52,938	53,093	53,263	53,387	53,731	53,733	53,930	54,139	54,589
1-Sep	0	50,679	52,075	53,206	53,364	53,536	53,663	54,011	54,014	54,215	54,426	54,881
2-Sep	0	51,121	52,524	53,665	53,826	54,003	54,134	54,488	54,493	54,698	54,914	55,376
3-Sep	0	51,562	52,974	54,124	54,288	54,469	54,604	54,965	54,973	55,182	55,403	55,872
4-Sep	0	47,876	49,190	50,259	50,411	50,578	50,702	51,035	51,041	51,234	51,437	51,871
5-Sep	0	44,009	45,220	46,205	46,343	46,493	46,605	46,908	46,911	47,086	47,270	47,666
6-Sep	0	48,136	49,454	50,528	50,681	50,851	50,978	51,315	51,322	51,518	51,724	52,163
7-Sep	0	52,264	53,687	54,851	55,020	55,209	55,351	55,723	55,734	55,950	56,178	56,660
8-Sep	0	52,083	53,502	54,660	54,828	55,015	55,156	55,525	55,536	55,751	55,977	56,456
9-Sep	0	52,524	53,951	55,119	55,290	55,482	55,626	56,003	56,015	56,235	56,465	56,952
10-Sep	3	52,059	53,473	54,626	54,793	54,981	55,123	55,494	55,505	55,721	55,948	56,429
11-Sep	3	50,581	51,937	53,055	53,227	53,423	53,573	53,950	53,970	54,191	54,424	54,906
12-Sep	0	49,827	51,142	52,247	52,429	52,639	52,803	53,195	53,226	53,460	53,704	54,199
13-Sep	0	51,929	53,314	54,466	54,649	54,857	55,018	55,413	55,438	55,673	55,918	56,421
14-Sep	0	53,407	54,850	56,037	56,215	56,415	56,567	56,957	56,974	57,202	57,442	57,944
15-Sep	1	52,422	53,844	55,006	55,177	55,368	55,512	55,888	55,901	56,120	56,350	56,836
16-Sep	3	53,384	54,822	56,002	56,180	56,381	56,534	56,925	56,943	57,172	57,413	57,916
17-Sep	0	56,121	57,610	58,850	59,049	59,278	59,455	59,887	59,917	60,174	60,442	60,991
18-Sep	0	52,012	53,397	54,548	54,731	54,940	55,103	55,500	55,526	55,762	56,009	56,514
19-Sep	2	46,672	47,928	48,964	49,122	49,300	49,436	49,781	49,797	49,999	50,212	50,654
20-Sep	7	51,414	52,807	53,946	54,114	54,303	54,445	54,815	54,829	55,045	55,273	55,751
21-Sep	5	57,549	59,062	60,327	60,535	60,778	60,968	61,420	61,458	61,729	62,012	62,585
22-Sep	0	59,653	61,206	62,521	62,746	63,010	63,219	63,704	63,752	64,044	64,349	64,958
23-Sep	6	56,099	57,597	58,834	59,026	59,248	59,417	59,839	59,865	60,115	60,376	60,916
24-Sep	12	81,563	83,553	85,308	85,669	86,117	86,486	87,255	87,382	87,862	88,357	89,294
25-Sep	1	58,449	59,949	61,236	61,467	61,742	61,962	62,456	62,514	62,815	63,128	63,743
26-Sep	0	52,695	54,057	55,217	55,421	55,661	55,852	56,289	56,335	56,599	56,874	57,420
27-Sep	1	50,999	52,366	53,498	53,673	53,872	54,024	54,406	54,427	54,652	54,887	55,375
28-Sep	5	54,073	55,525	56,718	56,900	57,107	57,265	57,664	57,684	57,919	58,166	58,679
29-Sep	8	59,082	60,653	61,955	62,161	62,399	62,583	63,033	63,064	63,332	63,612	64,187
30-Sep	13	90,250	92,399	94,333	94,755	95,287	95,730	96,625	96,792	97,356	97,936	99,016
1-Oct	0	64,642	66,303	67,721	67,974	68,274	68,515	69,058	69,120	69,451	69,794	70,471
2-Oct	7	56,382	57,869	59,116	59,321	59,559	59,744	60,188	60,224	60,489	60,766	61,327
3-Oct	9	57,898	59,392	60,663	60,887	61,152	61,363	61,844	61,897	62,189	62,492	63,094
4-Oct	1	57,566	59,050	60,318	60,543	60,809	61,021	61,502	61,555	61,848	62,151	62,751
5-Oct	3	58,240	59,766	61,049	61,263	61,514	61,710	62,174	62,216	62,494	62,785	63,370
6-Oct	0	57,630	59,175	60,447	60,642	60,865	61,036	61,464	61,487	61,740	62,005	62,554
7-Oct	2	55,480	56,962	58,193	58,386	58,606	58,776	59,195	59,221	59,470	59,730	60,266
8-Oct	0	57,388	58,945	60,221	60,408	60,620	60,779	61,192	61,207	61,449	61,703	62,237
9-Oct	14	87,491	89,567	91,440	91,853	92,373	92,807	93,681	93,845	94,396	94,963	96,015
10-Oct	23	139,642	142,657	145,580	146,369	147,399	148,288	149,929	150,336	151,401	152,487	154,409
11-Oct	19	130,852	133,723	136,478	137,201	138,139	138,945	140,449	140,811	141,784	142,776	144,545
12-Oct	16	119,899	122,594	125,137	125,773	126,590	127,288	128,615	128,916	129,769	130,640	132,210
13-Oct	9	77,501	79,408	81,094	81,435	81,854	82,199	82,922	83,039	83,490	83,954	84,837
14-Oct	6	64,910	66,567	67,989	68,248	68,558	68,808	69,363	69,431	69,771	70,122	70,812
15-Oct	5	60,198	61,759	63,080	63,308	63,577	63,791	64,283	64,334	64,632	64,941	65,560
16-Oct	15	96,912	99,156	101,217	101,698	102,311	102,828	103,841	104,050	104,695	105,356	106,566
17-Oct	20	125,277	128,018	130,648	131,340	132,240	133,014	134,457	134,805	135,738	136,690	138,386
18-Oct	19	129,970	132,824	135,561	136,277	137,206	138,004	139,495	139,852	140,816	141,800	143,553

Date	AI HDDd	RI TSO 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
19-Oct	13	101,729	104,086	106,261	106,771	107,418	107,964	109,032	109,255	109,935	110,632	111,908
20-Oct	9	76,176	78,059	79,717	80,048	80,454	80,788	81,491	81,601	82,038	82,489	83,350
21-Oct	12	88,608	90,725	92,629	93,043	93,562	93,994	94,870	95,031	95,583	96,149	97,207
22-Oct	21	138,706	141,755	144,668	145,427	146,414	147,260	148,845	149,222	150,246	151,291	153,156
23-Oct	23	151,548	154,805	157,975	158,840	159,970	160,946	162,742	163,192	164,359	165,548	167,648
24-Oct	23	152,719	155,965	159,158	160,046	161,211	162,219	164,061	164,532	165,732	166,954	169,101
25-Oct	22	151,672	154,928	158,107	158,975	160,111	161,092	162,895	163,348	164,521	165,715	167,822
26-Oct	15	115,608	118,222	120,680	121,287	122,066	122,729	123,996	124,280	125,093	125,924	127,426
27-Oct	16	117,692	120,347	122,843	123,462	124,257	124,935	126,229	126,519	127,350	128,199	129,731
28-Oct	16	115,043	117,650	120,090	120,689	121,458	122,112	123,365	123,643	124,447	125,269	126,756
29-Oct	14	104,254	106,659	108,883	109,408	110,076	110,641	111,742	111,974	112,676	113,395	114,708
30-Oct	7	63,757	65,373	66,771	67,032	67,346	67,600	68,156	68,230	68,572	68,925	69,614
31-Oct	2	55,906	57,328	58,557	58,785	59,057	59,276	59,761	59,822	60,119	60,426	61,025
Nov	697	4,744,608	4,767,759	4,869,670	4,969,563	4,997,085	5,033,105	5,064,255	5,121,313	5,135,808	5,172,954	5,210,779
Dec	1,040	6,975,050	7,003,721	7,147,039	7,292,662	7,335,977	7,393,298	7,443,334	7,532,574	7,557,022	7,615,661	7,675,216
Jan	1,250	8,268,907	8,297,402	8,463,839	8,636,060	8,689,025	8,759,384	8,821,037	8,929,758	8,960,470	9,032,184	9,104,939
Feb	1,091	7,261,822	7,288,228	7,434,999	7,586,261	7,632,458	7,693,792	7,747,495	7,842,433	7,869,080	7,931,657	7,995,156
Mar	942	6,382,312	6,409,493	6,541,969	6,675,479	6,714,529	6,766,082	6,810,995	6,891,552	6,913,278	6,966,106	7,019,790
Apr	518	3,681,130	3,763,037	3,840,831	3,860,665	3,886,288	3,908,217	3,949,582	3,959,208	3,985,868	4,013,093	4,061,911
May	228	2,226,331	2,281,650	2,330,032	2,339,539	2,351,159	2,360,661	2,380,911	2,383,958	2,396,501	2,409,456	2,434,308
Jun	48	1,590,803	1,633,470	1,668,766	1,674,213	1,680,405	1,685,150	1,697,027	1,697,681	1,704,690	1,712,032	1,727,238
Jul	3	1,446,933	1,487,531	1,520,104	1,524,312	1,528,757	1,531,926	1,541,273	1,541,010	1,546,287	1,551,890	1,564,284
Aug	2	1,457,317	1,498,009	1,530,752	1,535,069	1,539,673	1,542,988	1,552,558	1,552,384	1,557,817	1,563,576	1,576,213
Sep	70	1,640,494	1,684,067	1,720,312	1,726,091	1,732,742	1,737,894	1,750,470	1,751,337	1,758,812	1,766,626	1,782,630
Oct	361	2,931,294	2,999,636	3,062,291	3,076,739	3,095,046	3,110,474	3,140,836	3,146,999	3,166,292	3,186,072	3,222,418
Total	6,250	48,607,000	49,114,002	50,130,604	50,896,653	51,183,146	51,522,970	51,899,772	52,350,206	52,551,924	52,921,306	53,374,880

Design_AI_S05

	AI	AI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	5,015	5,075	5,159	5,258	5,298	5,352	5,401	5,481	5,508	5,562	5,616
2-Nov	9	3,454	3,495	3,553	3,621	3,648	3,685	3,719	3,774	3,793	3,830	3,867
3-Nov	14	5,021	5,081	5,165	5,264	5,303	5,358	5,406	5,487	5,513	5,568	5,622
4-Nov	13	4,691	4,747	4,826	4,919	4,955	5,006	5,052	5,127	5,152	5,202	5,253
5-Nov	20	6,730	6,810	6,923	7,056	7,109	7,181	7,247	7,354	7,390	7,463	7,536
6-Nov	19	6,615	6,694	6,804	6,935	6,987	7,059	7,123	7,229	7,264	7,335	7,407
7-Nov	16	5,948	6,019	6,118	6,236	6,283	6,347	6,405	6,500	6,532	6,596	6,661
8-Nov	14	5,161	5,222	5,309	5,411	5,451	5,507	5,557	5,640	5,667	5,723	5,779
9-Nov	20	6,810	6,892	7,005	7,140	7,194	7,267	7,333	7,442	7,479	7,552	7,626
10-Nov	15	5,538	5,604	5,697	5,806	5,850	5,910	5,963	6,052	6,081	6,141	6,202
11-Nov	15	5,565	5,631	5,724	5,834	5,878	5,938	5,992	6,081	6,111	6,171	6,232
12-Nov	14	5,155	5,216	5,303	5,405	5,445	5,501	5,551	5,633	5,661	5,716	5,773
13-Nov	20	6,783	6,864	6,978	7,112	7,165	7,239	7,304	7,413	7,449	7,522	7,596
14-Nov	19	6,641	6,721	6,832	6,963	7,015	7,087	7,152	7,258	7,293	7,365	7,437
15-Nov	24	8,027	8,123	8,257	8,416	8,479	8,566	8,643	8,772	8,815	8,901	8,989
16-Nov	27	9,090	9,199	9,351	9,530	9,602	9,700	9,788	9,934	9,982	10,080	10,179
17-Nov	19	7,097	7,182	7,301	7,441	7,497	7,574	7,642	7,756	7,794	7,870	7,948
18-Nov	28	9,446	9,559	9,717	9,904	9,978	10,080	10,172	10,323	10,373	10,475	10,578
19-Nov	30	10,025	10,145	10,312	10,511	10,589	10,698	10,795	10,955	11,009	11,117	11,226
20-Nov	31	10,595	10,722	10,900	11,109	11,192	11,307	11,410	11,579	11,636	11,750	11,865
21-Nov	31	10,676	10,804	10,982	11,193	11,277	11,393	11,496	11,667	11,724	11,839	11,956
22-Nov	37	12,230	12,376	12,581	12,823	12,919	13,051	13,170	13,365	13,430	13,563	13,696
23-Nov	41	13,623	13,786	14,013	14,283	14,390	14,537	14,669	14,887	14,960	15,107	15,255
24-Nov	43	14,442	14,615	14,857	15,142	15,256	15,412	15,552	15,783	15,860	16,016	16,173
25-Nov	45	15,155	15,336	15,590	15,890	16,009	16,172	16,319	16,562	16,643	16,806	16,972
26-Nov	27	10,296	10,419	10,592	10,795	10,876	10,987	11,087	11,252	11,307	11,418	11,530
27-Nov	17	7,108	7,193	7,312	7,453	7,509	7,586	7,654	7,768	7,806	7,883	7,960
28-Nov	20	7,185	7,271	7,392	7,534	7,590	7,668	7,737	7,852	7,891	7,968	8,047
29-Nov	24	7,973	8,068	8,202	8,360	8,422	8,508	8,586	8,713	8,756	8,842	8,929
30-Nov	29	9,668	9,784	9,946	10,137	10,213	10,317	10,411	10,566	10,617	10,722	10,827
1-Dec	20	7,427	7,515	7,640	7,787	7,845	7,925	7,997	8,116	8,156	8,236	8,317
2-Dec	28	9,527	9,641	9,800	9,988	10,063	10,166	10,258	10,411	10,462	10,565	10,668
3-Dec	29	9,776	9,893	10,056	10,249	10,326	10,432	10,527	10,683	10,735	10,841	10,947
4-Dec	34	11,396	11,533	11,723	11,949	12,038	12,161	12,272	12,454	12,515	12,638	12,762
5-Dec	25	9,074	9,183	9,335	9,514	9,585	9,683	9,771	9,917	9,965	10,063	10,162
6-Dec	39	12,701	12,853	13,066	13,317	13,417	13,554	13,677	13,881	13,948	14,085	14,224
7-Dec	28	9,929	10,047	10,214	10,410	10,488	10,595	10,691	10,850	10,903	11,011	11,119
8-Dec	19	7,526	7,616	7,742	7,891	7,950	8,031	8,104	8,225	8,265	8,346	8,428
9-Dec	29	9,749	9,865	10,029	10,221	10,298	10,403	10,498	10,654	10,706	10,811	10,917
10-Dec	23	8,120	8,217	8,353	8,514	8,578	8,665	8,744	8,874	8,917	9,005	9,094
11-Dec	20	7,400	7,488	7,612	7,758	7,817	7,897	7,968	8,087	8,126	8,206	8,287
12-Dec	27	9,090	9,199	9,351	9,530	9,602	9,700	9,788	9,934	9,982	10,080	10,179
13-Dec	27	9,069	9,177	9,329	9,508	9,580	9,678	9,766	9,911	9,959	10,057	10,156
14-Dec	41	13,247	13,406	13,627	13,889	13,993	14,137	14,265	14,477	14,548	14,691	14,835
15-Dec	45	14,726	14,902	15,149	15,440	15,555	15,715	15,857	16,093	16,172	16,331	16,491
16-Dec	39	13,553	13,715	13,942	14,210	14,317	14,463	14,595	14,812	14,884	15,030	15,178
17-Dec	32	11,568	11,707	11,900	12,129	12,220	12,345	12,457	12,642	12,704	12,829	12,955
18-Dec	41	13,703	13,867	14,096	14,367	14,475	14,623	14,756	14,975	15,048	15,196	15,345
19-Dec	32	11,274	11,408	11,597	11,820	11,908	12,030	12,140	12,320	12,380	12,502	12,625
20-Dec	49	15,836	16,025	16,290	16,603	16,727	16,899	17,052	17,306	17,390	17,561	17,734
21-Dec	51	16,730	16,930	17,210	17,541	17,672	17,853	18,015	18,283	18,372	18,553	18,735
22-Dec	32	11,997	12,141	12,342	12,579	12,673	12,803	12,919	13,111	13,175	13,305	13,435
23-Dec	21	8,507	8,609	8,751	8,919	8,986	9,078	9,160	9,297	9,342	9,434	9,526
24-Dec	27	9,358	9,470	9,626	9,811	9,885	9,986	10,077	10,227	10,276	10,378	10,480
25-Dec	41	13,086	13,243	13,462	13,721	13,823	13,965	14,092	14,301	14,371	14,512	14,655
26-Dec	42	13,898	14,065	14,297	14,572	14,681	14,831	14,966	15,189	15,263	15,413	15,564
27-Dec	51	16,655	16,855	17,133	17,463	17,593	17,774	17,935	18,202	18,290	18,470	18,652
28-Dec	51	17,052	17,256	17,541	17,878	18,012	18,196	18,362	18,635	18,725	18,910	19,096
29-Dec	32	12,051	12,195	12,397	12,635	12,730	12,860	12,977	13,170	13,234	13,364	13,495
30-Dec	35	12,369	12,517	12,724	12,969	13,066	13,200	13,320	13,518	13,583	13,717	13,852
31-Dec	30	10,561	10,687	10,864	11,073	11,156	11,270	11,372	11,541	11,598	11,712	11,827
1-Jan	61	19,060	19,288	19,607	19,984	20,133	20,340	20,524	20,830	20,931	21,137	21,345
2-Jan	38	13,411	13,572	13,796	14,061	14,167	14,312	14,442	14,657	14,728	14,873	15,019
3-Jan	23	9,359	9,471	9,628	9,813	9,886	9,988	10,078	10,228	10,278	10,379	10,481
4-Jan	28	9,848	9,966	10,131	10,326	10,403	10,509	10,605	10,763	10,815	10,921	11,029
5-Jan	19	7,097	7,182	7,301	7,441	7,497	7,574	7,642	7,756	7,794	7,870	7,948
6-Jan	28	9,473	9,586	9,745	9,932	10,006	10,109	10,201	10,352	10,403	10,505	10,608
7-Jan	38	12,232	12,378	12,583	12,825	12,921	13,053	13,172	13,367	13,433	13,565	13,698
8-Jan	41	13,569	13,731	13,958	14,227	14,333	14,480	14,611	14,829	14,901	15,047	15,195
9-Jan	41	13,917	14,084	14,317	14,592	14,701	14,852	14,987	15,210	15,284	15,434	15,586
10-Jan	30	10,835	10,964	11,146	11,360	11,445	11,562	11,667	11,841	11,898	12,016	12,134
11-Jan	43	14,255	14,425	14,664	14,946	15,058	15,212	15,350	15,578	15,654	15,808	15,963
12-Jan	50	16,240	16,434	16,706	17,027	17,154	17,330	17,487	17,747	17,834	18,009	18,186
13-Jan	41	14,293	14,464	14,703	14,986	15,098	15,252	15,391	15,620	15,696	15,850	16,006
14-Jan	46	15,619	15,805	16,067	16,376	16,498	16,667	16,818	17,069	17,152	17,321	17,491
15-Jan	43	14,684	14,859	15,105	15,395	15,511	15,669	15,812	16,047	16,125	16,284	16,444
16-Jan	30	11,151	11,284	11,471	11,691	11,779	11,899	12,007	12,186	12,245	12,366	12,487
17-Jan	40	13,352	13,512	13,736	14,000	14,104	14,249	14,378	14,592	14,663	14,808	14,953
18-Jan	55	17,539	17,748	18,042	18,389	18,526	18,716	18,886	19,167	19,260	19,450	19,641
19-Jan	68	21,795	22,069	22,434	22,867	23,039	23,277	23,489	23,840	23,956	24,192	24,430
20-Jan	54	18,684	18,907	19,220	19,589	19,736	19,938	20,119	20,418	20,518	20,720	20,923
21-Jan	44	15,898	16,088	16,354	16,668	16,793	16,965	17,119	17,374	17,458	17,630	17,803
22-Jan	34	12,496	12,645	12,854	13,101	13,199	13,334	13,455	13,656	13,722	13,857	13,993
23-Jan	32	11,408	11,544	11,735	11,960	12,050	12,173	12,284	12,467	12,527	12,651	12,775
24-Jan	44	14,268	14,439	14,678	14,960	15,072	15,226	15,365	15,593	15,669	15,823	15,979
25-Jan	24	9,147	9,256	9,409	9,590	9,662	9,761	9,850	9,996	10,045	10,144	10,243
26-Jan	41	13,623	13,786	14,013	14,283	14,390	14,537	14,669	14,887	14,960	15,107	15,255
27-Jan	46	14,922	15,100	15,350	15,645	15,762	15,923	16,068	16,307	16,386	16,548	16,710
28-Jan	32	11,649	11,788	11,983	12,213	12,305	12,431	12,544	12,730	12,792	12,918	13,045
29-Jan	46	15,270	15,453	15,708	16,010	16,130	16,295	16,443	16,688	16,769	16,934	17,100
30-Jan	47	15,546	15,732	15,992	16,299	16,421	16,590	16,740	16,989	17,072	17,240	17,409

Design_AI_S05

	AI	AI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	14,716	14,892	15,139	15,430	15,545	15,704	15,847	16,083	16,161	16,320	16,480
1-Feb	17	7,591	7,682	7,809	7,959	8,018	8,100	8,174	8,296	8,336	8,418	8,501
2-Feb	28	9,821	9,939	10,103	10,297	10,375	10,481	10,576	10,733	10,786	10,892	10,999
3-Feb	45	14,109	14,278	14,514	14,793	14,904	15,057	15,193	15,419	15,495	15,647	15,801
4-Feb	45	14,860	15,038	15,287	15,580	15,697	15,858	16,002	16,240	16,319	16,479	16,641
5-Feb	56	18,351	18,570	18,877	19,240	19,384	19,583	19,761	20,054	20,152	20,350	20,550
6-Feb	56	18,646	18,869	19,181	19,549	19,696	19,897	20,078	20,377	20,476	20,677	20,880
7-Feb	57	19,088	19,317	19,636	20,013	20,163	20,370	20,555	20,860	20,962	21,168	21,376
8-Feb	42	15,105	15,286	15,538	15,837	15,955	16,119	16,265	16,507	16,588	16,751	16,915
9-Feb	44	15,281	15,464	15,720	16,022	16,142	16,307	16,455	16,700	16,781	16,946	17,113
10-Feb	39	13,553	13,715	13,942	14,210	14,317	14,463	14,595	14,812	14,884	15,030	15,178
11-Feb	42	14,301	14,472	14,711	14,994	15,106	15,261	15,399	15,628	15,704	15,859	16,015
12-Feb	37	12,867	13,021	13,237	13,491	13,592	13,731	13,856	14,062	14,131	14,270	14,410
13-Feb	43	14,469	14,642	14,884	15,171	15,284	15,441	15,581	15,813	15,890	16,046	16,204
14-Feb	45	14,920	15,098	15,348	15,643	15,760	15,921	16,066	16,305	16,384	16,545	16,708
15-Feb	32	11,676	11,815	12,011	12,242	12,333	12,459	12,573	12,760	12,822	12,948	13,075
16-Feb	33	11,657	11,796	11,991	12,222	12,313	12,439	12,552	12,739	12,801	12,927	13,054
17-Feb	35	11,887	12,029	12,228	12,463	12,556	12,685	12,800	12,990	13,054	13,182	13,312
18-Feb	31	10,864	10,994	11,175	11,390	11,475	11,593	11,698	11,872	11,930	12,047	12,166
19-Feb	37	12,465	12,614	12,823	13,070	13,167	13,302	13,423	13,623	13,689	13,824	13,959
20-Feb	22	8,381	8,481	8,621	8,787	8,853	8,943	9,024	9,159	9,203	9,294	9,385
21-Feb	39	12,701	12,853	13,066	13,317	13,417	13,554	13,677	13,881	13,948	14,085	14,224
22-Feb	43	13,987	14,154	14,388	14,665	14,774	14,926	15,061	15,285	15,360	15,511	15,663
23-Feb	22	8,756	8,861	9,007	9,180	9,249	9,344	9,429	9,569	9,615	9,710	9,805
24-Feb	35	11,887	12,029	12,228	12,463	12,556	12,685	12,800	12,990	13,054	13,182	13,312
25-Feb	43	13,879	14,045	14,278	14,552	14,661	14,811	14,946	15,168	15,242	15,392	15,543
26-Feb	43	14,442	14,615	14,857	15,142	15,256	15,412	15,552	15,783	15,860	16,016	16,173
27-Feb	41	14,105	14,274	14,510	14,789	14,899	15,052	15,189	15,415	15,490	15,642	15,796
28-Feb	39	13,371	13,531	13,755	14,020	14,125	14,269	14,399	14,613	14,684	14,829	14,974
1-Mar	47	15,600	15,786	16,047	16,356	16,478	16,647	16,798	17,048	17,131	17,299	17,469
2-Mar	32	11,622	11,761	11,955	12,185	12,277	12,402	12,515	12,701	12,763	12,888	13,015
3-Mar	43	14,469	14,642	14,884	15,171	15,284	15,441	15,581	15,813	15,890	16,046	16,204
4-Mar	42	14,086	14,255	14,490	14,769	14,879	15,032	15,168	15,394	15,469	15,621	15,774
5-Mar	27	10,216	10,338	10,509	10,711	10,791	10,902	11,001	11,164	11,219	11,329	11,440
6-Mar	36	12,270	12,417	12,622	12,865	12,961	13,094	13,212	13,409	13,474	13,607	13,741
7-Mar	32	10,877	11,007	11,189	11,405	11,490	11,608	11,713	11,887	11,945	12,063	12,181
8-Mar	41	13,623	13,786	14,013	14,283	14,390	14,537	14,669	14,887	14,960	15,107	15,255
9-Mar	45	14,860	15,038	15,287	15,580	15,697	15,858	16,002	16,240	16,319	16,479	16,641
10-Mar	46	15,485	15,670	15,929	16,235	16,357	16,524	16,674	16,922	17,005	17,172	17,341
11-Mar	21	8,721	8,826	8,971	9,144	9,212	9,307	9,391	9,531	9,577	9,672	9,767
12-Mar	16	6,698	6,779	6,891	7,023	7,076	7,148	7,213	7,320	7,356	7,428	7,501
13-Mar	22	7,549	7,640	7,766	7,915	7,975	8,056	8,129	8,250	8,291	8,372	8,454
14-Mar	20	6,896	6,979	7,094	7,231	7,285	7,359	7,426	7,537	7,573	7,648	7,723
15-Mar	25	8,511	8,613	8,755	8,924	8,991	9,083	9,165	9,301	9,347	9,439	9,531
16-Mar	27	9,143	9,253	9,406	9,587	9,658	9,757	9,846	9,992	10,041	10,140	10,239
17-Mar	35	11,538	11,676	11,869	12,097	12,188	12,313	12,425	12,609	12,671	12,796	12,921
18-Mar	27	9,599	9,714	9,875	10,064	10,140	10,244	10,337	10,490	10,541	10,645	10,750
19-Mar	28	9,875	9,993	10,158	10,354	10,431	10,538	10,634	10,792	10,844	10,951	11,059
20-Mar	28	9,687	9,803	9,965	10,157	10,233	10,338	10,432	10,587	10,638	10,743	10,849
21-Mar	28	9,586	9,701	9,861	10,051	10,126	10,230	10,322	10,476	10,527	10,631	10,735
22-Mar	21	7,783	7,876	8,006	8,160	8,221	8,305	8,381	8,506	8,547	8,631	8,716
23-Mar	24	8,423	8,524	8,665	8,831	8,897	8,988	9,070	9,205	9,250	9,341	9,433
24-Mar	29	9,695	9,811	9,973	10,165	10,241	10,346	10,440	10,595	10,647	10,752	10,857
25-Mar	21	7,703	7,795	7,924	8,076	8,136	8,220	8,294	8,418	8,459	8,542	8,626
26-Mar	26	9,002	9,109	9,260	9,438	9,509	9,606	9,693	9,837	9,885	9,982	10,081
27-Mar	41	13,060	13,216	13,434	13,693	13,795	13,936	14,063	14,272	14,341	14,483	14,625
28-Mar	42	13,743	13,908	14,138	14,410	14,517	14,666	14,799	15,019	15,093	15,241	15,391
29-Mar	29	10,714	10,842	11,021	11,233	11,317	11,433	11,537	11,709	11,766	11,881	11,998
30-Mar	20	7,909	8,004	8,136	8,293	8,355	8,440	8,517	8,643	8,686	8,771	8,857
31-Mar	21	7,595	7,686	7,813	7,963	8,023	8,105	8,179	8,300	8,341	8,423	8,506
1-Apr	23	7,879	8,009	8,163	8,224	8,309	8,384	8,509	8,550	8,634	8,719	8,859
2-Apr	24	8,262	8,399	8,560	8,624	8,713	8,792	8,922	8,966	9,054	9,143	9,290
3-Apr	25	8,645	8,788	8,957	9,024	9,117	9,199	9,336	9,382	9,474	9,567	9,720
4-Apr	21	7,595	7,721	7,869	7,928	8,009	8,082	8,202	8,242	8,323	8,405	8,540
5-Apr	39	12,353	12,557	12,798	12,894	13,026	13,145	13,340	13,405	13,537	13,670	13,889
6-Apr	31	10,649	10,825	11,033	11,116	11,230	11,332	11,500	11,556	11,670	11,785	11,973
7-Apr	19	7,606	7,732	7,881	7,940	8,021	8,094	8,214	8,254	8,336	8,417	8,552
8-Apr	29	9,829	9,992	10,184	10,260	10,365	10,459	10,615	10,666	10,771	10,877	11,052
9-Apr	12	5,085	5,170	5,269	5,308	5,363	5,411	5,492	5,519	5,573	5,628	5,718
10-Apr	22	7,657	7,783	7,933	7,992	8,074	8,147	8,269	8,309	8,391	8,473	8,609
11-Apr	21	7,193	7,312	7,453	7,508	7,585	7,654	7,768	7,806	7,883	7,960	8,088
12-Apr	19	6,754	6,866	6,998	7,051	7,123	7,187	7,294	7,330	7,402	7,475	7,594
13-Apr	7	3,492	3,549	3,617	3,645	3,682	3,715	3,771	3,789	3,826	3,864	3,926
14-Apr	15	5,323	5,411	5,515	5,557	5,614	5,665	5,749	5,777	5,834	5,891	5,985
15-Apr	17	5,768	5,863	5,976	6,021	6,082	6,138	6,229	6,259	6,321	6,383	6,485
16-Apr	21	7,140	7,258	7,397	7,452	7,529	7,597	7,710	7,748	7,824	7,901	8,027
17-Apr	21	7,300	7,421	7,564	7,620	7,698	7,768	7,884	7,922	8,000	8,079	8,208
18-Apr	13	5,200	5,286	5,388	5,428	5,484	5,534	5,616	5,643	5,699	5,755	5,847
19-Apr	15	5,410	5,499	5,605	5,647	5,705	5,756	5,842	5,870	5,928	5,986	6,082
20-Apr	5	2,618	2,661	2,712	2,733	2,761	2,786	2,827	2,841	2,869	2,897	2,944
21-Apr	14	4,887	4,967	5,063	5,101	5,153	5,200	5,277	5,303	5,355	5,408	5,494
22-Apr	7	2,929	2,977	3,034	3,057	3,088	3,116	3,163	3,178	3,209	3,241	3,293
23-Apr	15	5,189	5,275	5,376	5,417	5,472	5,522	5,604	5,631	5,687	5,743	5,835
24-Apr	15	5,216	5,302	5,404	5,445	5,500	5,550	5,633	5,660	5,716	5,772	5,865
25-Apr	14	5,155	5,240	5,341	5,381	5,436	5,485	5,567	5,594	5,649	5,704	5,796
26-Apr	10	3,896	3,961	4,037	4,067	4,109	4,146	4,208	4,228	4,270	4,312	4,381
27-Apr	7	3,063	3,113	3,173	3,197	3,230	3,259	3,307	3,323	3,356	3,389	3,443
28-Apr	8	3,151	3,203	3,264	3,289	3,323	3,353	3,403	3,419	3,453	3,487	3,543
29-Apr	13	4,477	4,551	4,638	4,673	4,721	4,764	4,834	4,858	4,906	4,954	5,033
30-Apr	16	5,465	5,556	5,662	5,705	5,763	5,815	5,902	5,931	5,989	6,048	6,145
1-May	0	2,679	2,723	2,775	2,796	2,825	2,850	2,893	2,907	2,935	2,964	3,012

Design_AI_S05

Date	AI HDDd	AI SFT2										
		2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	2,330	2,369	2,414	2,432	2,457	2,480	2,516	2,529	2,554	2,579	2,620
3-May	0	1,773	1,802	1,837	1,851	1,870	1,887	1,915	1,924	1,943	1,962	1,994
4-May	0	1,901	1,933	1,970	1,985	2,005	2,023	2,053	2,063	2,083	2,104	2,138
5-May	6	2,143	2,179	2,221	2,237	2,260	2,281	2,315	2,326	2,349	2,372	2,410
6-May	17	5,339	5,427	5,532	5,573	5,630	5,681	5,766	5,794	5,851	5,908	6,003
7-May	23	7,450	7,573	7,719	7,777	7,856	7,928	8,045	8,085	8,164	8,244	8,377
8-May	14	5,423	5,512	5,618	5,660	5,718	5,770	5,856	5,885	5,943	6,001	6,097
9-May	13	5,066	5,150	5,249	5,288	5,343	5,391	5,471	5,498	5,552	5,607	5,697
10-May	2	2,466	2,506	2,555	2,574	2,600	2,624	2,663	2,676	2,702	2,729	2,772
11-May	0	2,303	2,341	2,386	2,404	2,429	2,451	2,487	2,500	2,524	2,549	2,590
12-May	0	1,955	1,987	2,025	2,041	2,061	2,080	2,111	2,121	2,142	2,163	2,198
13-May	3	1,854	1,885	1,921	1,936	1,955	1,973	2,003	2,012	2,032	2,052	2,085
14-May	8	2,775	2,821	2,876	2,897	2,927	2,953	2,997	3,012	3,042	3,071	3,121
15-May	12	4,094	4,161	4,241	4,273	4,317	4,356	4,421	4,442	4,486	4,530	4,603
16-May	17	5,714	5,809	5,920	5,965	6,026	6,081	6,171	6,201	6,262	6,324	6,425
17-May	12	4,448	4,521	4,608	4,643	4,690	4,733	4,803	4,827	4,874	4,922	5,001
18-May	12	4,576	4,652	4,741	4,777	4,826	4,869	4,942	4,966	5,015	5,064	5,145
19-May	1	2,529	2,571	2,620	2,640	2,667	2,691	2,731	2,744	2,771	2,799	2,844
20-May	8	3,044	3,094	3,153	3,177	3,209	3,239	3,287	3,303	3,335	3,368	3,422
21-May	9	3,212	3,265	3,328	3,353	3,387	3,418	3,469	3,486	3,520	3,555	3,612
22-May	9	3,427	3,483	3,550	3,577	3,614	3,646	3,701	3,719	3,755	3,792	3,853
23-May	8	3,178	3,230	3,292	3,317	3,351	3,381	3,432	3,448	3,482	3,516	3,573
24-May	10	3,574	3,634	3,703	3,731	3,769	3,804	3,860	3,879	3,917	3,956	4,019
25-May	7	2,902	2,950	3,006	3,029	3,060	3,088	3,134	3,149	3,180	3,211	3,263
26-May	7	2,875	2,922	2,979	3,001	3,032	3,059	3,105	3,120	3,150	3,181	3,232
27-May	1	2,261	2,298	2,342	2,360	2,384	2,406	2,442	2,454	2,478	2,502	2,542
28-May	5	2,082	2,116	2,157	2,173	2,195	2,215	2,248	2,259	2,281	2,304	2,341
29-May	3	2,015	2,048	2,088	2,104	2,125	2,144	2,176	2,187	2,208	2,230	2,266
30-May	9	3,185	3,238	3,300	3,325	3,359	3,390	3,440	3,457	3,491	3,525	3,582
31-May	12	3,992	4,058	4,136	4,167	4,210	4,248	4,311	4,332	4,375	4,418	4,489
1-Jun	6	2,706	2,751	2,804	2,825	2,854	2,880	2,923	2,937	2,966	2,995	3,043
2-Jun	7	2,902	2,950	3,006	3,029	3,060	3,088	3,134	3,149	3,180	3,211	3,263
3-Jun	2	2,218	2,255	2,299	2,316	2,339	2,361	2,396	2,407	2,431	2,455	2,494
4-Jun	0	2,143	2,178	2,220	2,236	2,259	2,280	2,314	2,325	2,348	2,371	2,409
5-Jun	0	1,955	1,987	2,025	2,041	2,061	2,080	2,111	2,121	2,142	2,163	2,198
6-Jun	0	1,901	1,933	1,970	1,985	2,005	2,023	2,053	2,063	2,083	2,104	2,138
7-Jun	0	1,773	1,802	1,837	1,851	1,870	1,887	1,915	1,924	1,943	1,962	1,994
8-Jun	0	1,933	1,964	2,002	2,017	2,038	2,056	2,087	2,097	2,118	2,139	2,173
9-Jun	0	1,879	1,910	1,947	1,961	1,981	1,999	2,029	2,039	2,059	2,079	2,113
10-Jun	0	1,841	1,871	1,907	1,922	1,941	1,959	1,988	1,998	2,017	2,037	2,070
11-Jun	0	1,814	1,844	1,880	1,894	1,913	1,930	1,959	1,969	1,988	2,008	2,040
12-Jun	0	1,756	1,785	1,819	1,833	1,852	1,869	1,896	1,906	1,924	1,943	1,974
13-Jun	0	1,810	1,840	1,875	1,889	1,908	1,926	1,954	1,964	1,983	2,003	2,035
14-Jun	0	1,751	1,780	1,814	1,827	1,846	1,863	1,891	1,900	1,919	1,937	1,968
15-Jun	9	2,891	2,938	2,995	3,017	3,048	3,076	3,122	3,137	3,168	3,199	3,250
16-Jun	7	2,607	2,650	2,701	2,721	2,749	2,774	2,815	2,829	2,857	2,885	2,931
17-Jun	1	2,315	2,353	2,398	2,416	2,441	2,463	2,500	2,512	2,536	2,561	2,602
18-Jun	5	2,082	2,116	2,157	2,173	2,195	2,215	2,248	2,259	2,281	2,304	2,341
19-Jun	6	2,304	2,342	2,387	2,405	2,430	2,452	2,488	2,500	2,525	2,550	2,591
20-Jun	5	2,162	2,198	2,240	2,257	2,280	2,301	2,335	2,346	2,370	2,393	2,431
21-Jun	0	2,146	2,182	2,224	2,240	2,263	2,284	2,318	2,329	2,352	2,375	2,413
22-Jun	0	1,979	2,012	2,051	2,066	2,087	2,106	2,138	2,148	2,169	2,190	2,226
23-Jun	0	1,711	1,740	1,773	1,786	1,805	1,821	1,848	1,857	1,875	1,894	1,924
24-Jun	0	1,711	1,740	1,773	1,786	1,805	1,821	1,848	1,857	1,875	1,894	1,924
25-Jun	0	1,711	1,740	1,773	1,786	1,805	1,821	1,848	1,857	1,875	1,894	1,924
26-Jun	0	1,743	1,771	1,805	1,819	1,838	1,854	1,882	1,891	1,910	1,928	1,959
27-Jun	0	1,689	1,717	1,750	1,763	1,781	1,797	1,824	1,833	1,851	1,869	1,899
28-Jun	0	1,507	1,532	1,562	1,573	1,589	1,604	1,628	1,636	1,652	1,668	1,695
29-Jun	0	1,620	1,647	1,678	1,691	1,708	1,724	1,749	1,758	1,775	1,792	1,821
30-Jun	0	1,647	1,674	1,706	1,719	1,736	1,752	1,778	1,787	1,804	1,822	1,851
1-Jul	0	1,673	1,701	1,734	1,747	1,765	1,781	1,807	1,816	1,834	1,852	1,881
2-Jul	0	1,673	1,701	1,734	1,747	1,765	1,781	1,807	1,816	1,834	1,852	1,881
3-Jul	0	1,689	1,717	1,750	1,763	1,781	1,797	1,824	1,833	1,851	1,869	1,899
4-Jul	0	1,678	1,706	1,738	1,751	1,769	1,785	1,812	1,821	1,839	1,857	1,886
5-Jul	0	1,480	1,505	1,534	1,545	1,561	1,575	1,599	1,606	1,622	1,638	1,665
6-Jul	1	1,483	1,508	1,537	1,549	1,564	1,579	1,602	1,610	1,626	1,642	1,668
7-Jul	2	1,709	1,737	1,771	1,784	1,802	1,819	1,846	1,855	1,873	1,891	1,922
8-Jul	0	2,122	2,157	2,199	2,215	2,238	2,258	2,292	2,303	2,326	2,349	2,386
9-Jul	0	1,870	1,901	1,937	1,952	1,972	1,990	2,019	2,029	2,049	2,069	2,102
10-Jul	0	1,548	1,574	1,604	1,616	1,633	1,647	1,672	1,680	1,697	1,713	1,741
11-Jul	0	1,490	1,515	1,544	1,555	1,571	1,586	1,609	1,617	1,633	1,649	1,675
12-Jul	0	1,400	1,423	1,450	1,461	1,476	1,490	1,512	1,519	1,534	1,549	1,574
13-Jul	0	1,624	1,651	1,683	1,695	1,713	1,728	1,754	1,763	1,780	1,797	1,826
14-Jul	0	1,640	1,667	1,699	1,712	1,729	1,745	1,771	1,780	1,797	1,815	1,844
15-Jul	0	1,586	1,612	1,643	1,656	1,673	1,688	1,713	1,721	1,738	1,755	1,783
16-Jul	0	1,575	1,601	1,632	1,644	1,661	1,676	1,701	1,709	1,726	1,743	1,771
17-Jul	0	1,564	1,590	1,620	1,632	1,649	1,664	1,689	1,697	1,714	1,731	1,758
18-Jul	0	1,526	1,551	1,581	1,593	1,609	1,624	1,648	1,656	1,672	1,689	1,716
19-Jul	0	1,328	1,350	1,376	1,387	1,401	1,414	1,435	1,442	1,456	1,470	1,494
20-Jul	0	1,441	1,465	1,493	1,504	1,520	1,533	1,556	1,564	1,579	1,595	1,620
21-Jul	0	1,510	1,535	1,565	1,576	1,593	1,607	1,631	1,639	1,655	1,671	1,698
22-Jul	0	1,495	1,519	1,549	1,560	1,576	1,590	1,614	1,622	1,638	1,654	1,680
23-Jul	0	1,479	1,503	1,532	1,544	1,560	1,574	1,597	1,605	1,621	1,637	1,663
24-Jul	0	1,533	1,558	1,588	1,600	1,616	1,631	1,655	1,663	1,680	1,696	1,723
25-Jul	0	1,559	1,585	1,616	1,628	1,644	1,659	1,684	1,692	1,709	1,726	1,753
26-Jul	0	1,416	1,439	1,467	1,478	1,493	1,506	1,529	1,536	1,551	1,567	1,592
27-Jul	0	1,586	1,612	1,643	1,656	1,673	1,688	1,713	1,721	1,738	1,755	1,783
28-Jul	0	1,586	1,612	1,643	1,656	1,673	1,688	1,713	1,721	1,738	1,755	1,783
29-Jul	0	1,559	1,585	1,616	1,628	1,644	1,659	1,684	1,692	1,709	1,726	1,753
30-Jul	0	1,559	1,585	1,616	1,628	1,644	1,659	1,684	1,692	1,709	1,726	1,753
31-Jul	0	1,544	1,569	1,599	1,611	1,628	1,643	1,667	1,675	1,692	1,708	1,736

Design_AI_S05

Date	AI HDDd	AI SFT2 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	1,602	1,628	1,660	1,672	1,689	1,705	1,730	1,738	1,755	1,773	1,801
2-Aug	0	1,463	1,487	1,515	1,527	1,542	1,556	1,579	1,587	1,603	1,618	1,644
3-Aug	0	1,510	1,535	1,565	1,576	1,593	1,607	1,631	1,639	1,655	1,671	1,698
4-Aug	0	1,483	1,508	1,537	1,548	1,564	1,579	1,602	1,610	1,626	1,642	1,668
5-Aug	0	1,468	1,492	1,521	1,532	1,548	1,562	1,585	1,593	1,609	1,624	1,650
6-Aug	0	1,463	1,488	1,516	1,527	1,543	1,557	1,580	1,588	1,604	1,619	1,645
7-Aug	0	1,544	1,569	1,599	1,611	1,628	1,643	1,667	1,675	1,692	1,708	1,736
8-Aug	0	1,613	1,640	1,671	1,684	1,701	1,716	1,742	1,750	1,768	1,785	1,814
9-Aug	0	1,458	1,482	1,511	1,522	1,538	1,552	1,575	1,582	1,598	1,614	1,639
10-Aug	0	1,559	1,585	1,616	1,628	1,644	1,659	1,684	1,692	1,709	1,726	1,753
11-Aug	0	1,559	1,585	1,616	1,628	1,644	1,659	1,684	1,692	1,709	1,726	1,753
12-Aug	0	1,528	1,553	1,583	1,595	1,611	1,626	1,650	1,658	1,675	1,691	1,718
13-Aug	0	1,597	1,624	1,655	1,667	1,684	1,700	1,725	1,733	1,751	1,768	1,796
14-Aug	0	1,624	1,651	1,683	1,695	1,713	1,728	1,754	1,763	1,780	1,797	1,826
15-Aug	0	1,582	1,608	1,639	1,651	1,668	1,683	1,708	1,716	1,733	1,750	1,778
16-Aug	0	1,496	1,521	1,550	1,562	1,578	1,592	1,616	1,623	1,639	1,656	1,682
17-Aug	0	1,624	1,651	1,683	1,695	1,713	1,728	1,754	1,763	1,780	1,797	1,826
18-Aug	1	1,457	1,481	1,509	1,521	1,536	1,550	1,573	1,581	1,596	1,612	1,638
19-Aug	0	1,807	1,837	1,873	1,887	1,906	1,923	1,952	1,961	1,981	2,000	2,032
20-Aug	0	1,861	1,892	1,928	1,943	1,962	1,980	2,010	2,020	2,039	2,059	2,092
21-Aug	1	1,564	1,590	1,620	1,632	1,649	1,664	1,689	1,697	1,714	1,731	1,758
22-Aug	0	1,861	1,892	1,928	1,943	1,962	1,980	2,010	2,020	2,039	2,059	2,092
23-Aug	0	1,717	1,746	1,779	1,792	1,811	1,827	1,854	1,863	1,882	1,900	1,931
24-Aug	0	1,685	1,712	1,745	1,758	1,776	1,792	1,819	1,828	1,846	1,864	1,894
25-Aug	0	1,711	1,740	1,773	1,786	1,805	1,821	1,848	1,857	1,875	1,894	1,924
26-Aug	0	1,727	1,756	1,789	1,803	1,821	1,838	1,865	1,874	1,893	1,911	1,942
27-Aug	0	1,716	1,744	1,778	1,791	1,809	1,826	1,853	1,862	1,880	1,899	1,929
28-Aug	0	1,678	1,706	1,738	1,751	1,769	1,785	1,812	1,821	1,839	1,857	1,886
29-Aug	0	1,593	1,619	1,650	1,663	1,680	1,695	1,720	1,729	1,746	1,763	1,791
30-Aug	0	1,476	1,500	1,529	1,541	1,556	1,571	1,594	1,602	1,617	1,633	1,659
31-Aug	0	1,685	1,712	1,745	1,758	1,776	1,792	1,819	1,828	1,846	1,864	1,894
1-Sep	0	1,696	1,724	1,757	1,770	1,788	1,804	1,831	1,840	1,858	1,876	1,907
2-Sep	0	1,723	1,751	1,785	1,798	1,816	1,833	1,860	1,869	1,888	1,906	1,937
3-Sep	0	1,749	1,778	1,812	1,826	1,845	1,861	1,889	1,898	1,917	1,936	1,967
4-Sep	0	1,749	1,778	1,812	1,826	1,845	1,861	1,889	1,898	1,917	1,936	1,967
5-Sep	0	1,734	1,762	1,796	1,810	1,828	1,845	1,872	1,881	1,900	1,919	1,949
6-Sep	0	1,632	1,659	1,691	1,704	1,721	1,737	1,763	1,771	1,789	1,806	1,835
7-Sep	0	1,787	1,817	1,852	1,866	1,885	1,902	1,930	1,940	1,959	1,978	2,010
8-Sep	0	1,772	1,801	1,836	1,849	1,868	1,885	1,913	1,923	1,941	1,961	1,992
9-Sep	0	1,798	1,828	1,863	1,877	1,897	1,914	1,942	1,952	1,971	1,990	2,022
10-Sep	3	1,747	1,776	1,810	1,824	1,842	1,859	1,887	1,896	1,915	1,933	1,964
11-Sep	3	1,881	1,912	1,949	1,964	1,984	2,002	2,031	2,041	2,061	2,082	2,115
12-Sep	0	2,078	2,112	2,153	2,169	2,191	2,211	2,244	2,255	2,277	2,299	2,336
13-Sep	0	1,858	1,889	1,925	1,939	1,959	1,977	2,006	2,016	2,036	2,056	2,089
14-Sep	0	1,852	1,883	1,919	1,933	1,953	1,971	2,000	2,010	2,030	2,050	2,082
15-Sep	1	1,778	1,808	1,843	1,856	1,875	1,892	1,921	1,930	1,949	1,968	2,000
16-Sep	3	1,828	1,858	1,893	1,908	1,927	1,945	1,974	1,983	2,003	2,022	2,055
17-Sep	0	2,008	2,042	2,081	2,097	2,118	2,137	2,169	2,180	2,201	2,223	2,258
18-Sep	0	1,982	2,014	2,053	2,069	2,090	2,109	2,140	2,150	2,172	2,193	2,228
19-Sep	2	1,870	1,901	1,937	1,952	1,972	1,990	2,019	2,029	2,049	2,069	2,103
20-Sep	7	2,345	2,383	2,429	2,447	2,472	2,495	2,532	2,544	2,569	2,595	2,636
21-Sep	5	2,109	2,144	2,185	2,201	2,224	2,244	2,277	2,288	2,311	2,333	2,371
22-Sep	0	2,223	2,260	2,303	2,320	2,344	2,365	2,401	2,412	2,436	2,460	2,499
23-Sep	6	2,277	2,315	2,359	2,377	2,401	2,423	2,459	2,471	2,496	2,520	2,561
24-Sep	12	3,959	4,025	4,102	4,133	4,175	4,213	4,276	4,297	4,339	4,382	4,452
25-Sep	1	2,368	2,407	2,454	2,472	2,497	2,520	2,557	2,570	2,595	2,621	2,663
26-Sep	0	2,250	2,287	2,331	2,348	2,372	2,394	2,430	2,441	2,465	2,490	2,530
27-Sep	1	1,784	1,814	1,849	1,862	1,882	1,899	1,927	1,936	1,955	1,974	2,006
28-Sep	5	1,894	1,925	1,963	1,977	1,997	2,016	2,046	2,056	2,076	2,096	2,130
29-Sep	8	2,856	2,903	2,959	2,981	3,012	3,039	3,084	3,099	3,130	3,160	3,211
30-Sep	13	4,423	4,496	4,583	4,617	4,664	4,707	4,777	4,800	4,847	4,895	4,973
1-Oct	0	2,464	2,505	2,553	2,572	2,599	2,622	2,661	2,674	2,700	2,727	2,771
2-Oct	7	2,768	2,813	2,868	2,889	2,919	2,945	2,989	3,003	3,033	3,063	3,112
3-Oct	9	3,159	3,211	3,273	3,297	3,331	3,361	3,411	3,428	3,461	3,495	3,551
4-Oct	1	2,186	2,223	2,265	2,282	2,306	2,327	2,361	2,373	2,396	2,419	2,458
5-Oct	3	2,122	2,158	2,199	2,215	2,238	2,258	2,292	2,303	2,326	2,349	2,386
6-Oct	0	2,008	2,042	2,081	2,097	2,118	2,137	2,169	2,180	2,201	2,223	2,258
7-Oct	2	1,950	1,983	2,021	2,036	2,057	2,075	2,106	2,117	2,137	2,158	2,193
8-Oct	0	1,955	1,987	2,025	2,041	2,061	2,080	2,111	2,121	2,142	2,163	2,198
9-Oct	14	4,404	4,477	4,563	4,597	4,644	4,686	4,756	4,779	4,826	4,874	4,952
10-Oct	23	7,209	7,328	7,469	7,525	7,602	7,671	7,785	7,823	7,900	7,977	8,105
11-Oct	19	6,594	6,703	6,831	6,883	6,953	7,016	7,121	7,155	7,226	7,297	7,414
12-Oct	16	6,028	6,128	6,246	6,292	6,357	6,415	6,510	6,542	6,606	6,671	6,778
13-Oct	9	3,909	3,974	4,050	4,081	4,122	4,160	4,222	4,242	4,284	4,326	4,395
14-Oct	6	2,813	2,860	2,915	2,937	2,967	2,994	3,038	3,053	3,083	3,113	3,163
15-Oct	5	2,270	2,307	2,351	2,369	2,393	2,415	2,451	2,463	2,487	2,511	2,552
16-Oct	15	4,921	5,003	5,099	5,137	5,189	5,237	5,315	5,340	5,393	5,446	5,533
17-Oct	20	6,542	6,650	6,778	6,829	6,899	6,961	7,065	7,099	7,169	7,239	7,356
18-Oct	19	6,540	6,648	6,776	6,827	6,897	6,959	7,063	7,097	7,167	7,237	7,353
19-Oct	13	5,120	5,205	5,305	5,344	5,399	5,448	5,529	5,556	5,611	5,666	5,757
20-Oct	9	3,829	3,892	3,967	3,997	4,038	4,074	4,135	4,155	4,196	4,237	4,305
21-Oct	12	4,388	4,461	4,547	4,581	4,628	4,670	4,739	4,762	4,809	4,856	4,934
22-Oct	21	6,845	6,958	7,092	7,145	7,218	7,283	7,392	7,428	7,501	7,574	7,696
23-Oct	23	7,718	7,846	7,997	8,056	8,139	8,213	8,335	8,376	8,458	8,541	8,678
24-Oct	23	8,013	8,145	8,302	8,364	8,450	8,527	8,653	8,696	8,781	8,867	9,010
25-Oct	22	7,663	7,789	7,939	7,998	8,080	8,154	8,275	8,315	8,397	8,480	8,616
26-Oct	15	5,833	5,929	6,043	6,088	6,151	6,207	6,299	6,330	6,392	6,455	6,558
27-Oct	16	5,894	5,992	6,107	6,152	6,215	6,272	6,365	6,396	6,459	6,523	6,627
28-Oct	16	5,733	5,828	5,940	5,985	6,046	6,101	6,191	6,222	6,283	6,345	6,446
29-Oct	14	5,208	5,294	5,396	5,437	5,492	5,542	5,625	5,652	5,708	5,764	5,856
30-Oct	7	3,223	3,277	3,340	3,365	3,399	3,430	3,481	3,498	3,532	3,567	3,624

Design_AI_S05

	AI	AI SFT2										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	2,433	2,473	2,521	2,540	2,566	2,589	2,627	2,640	2,666	2,692	2,736
Month												
Nov	697	241,762	244,654	248,699	253,480	255,378	257,992	260,335	264,207	265,494	268,106	270,740
Dec	1040	356,955	361,226	367,197	374,257	377,058	380,919	384,378	390,095	391,994	395,852	399,740
Jan	1250	425,353	430,455	437,572	445,986	449,325	453,927	458,051	464,865	467,129	471,726	476,360
Feb	1091	373,020	377,483	383,723	391,100	394,028	398,062	401,677	407,652	409,636	413,667	417,731
Mar	942	326,539	330,446	335,909	342,367	344,930	348,461	351,626	356,856	358,593	362,122	365,679
Apr	518	185,186	188,247	191,867	193,303	195,282	197,056	199,987	200,960	202,938	204,931	208,217
May	228	102,566	104,261	106,266	107,061	108,157	109,140	110,763	111,302	112,398	113,502	115,321
Jun	48	60,206	61,201	62,378	62,845	63,488	64,065	65,017	65,334	65,977	66,625	67,693
Jul	3	48,928	49,737	50,693	51,073	51,596	52,064	52,838	53,096	53,618	54,145	55,013
Aug	2	49,712	50,533	51,505	51,890	52,422	52,898	53,685	53,946	54,477	55,012	55,894
Sep	70	63,011	64,052	65,284	65,772	66,446	67,049	68,046	68,378	69,051	69,729	70,847
Oct	361	141,743	144,087	146,857	147,956	149,471	150,828	153,072	153,817	155,331	156,856	159,371
Total	**6250**	**2,374,980**	**2,406,383**	**2,447,947**	**2,487,090**	**2,507,580**	**2,532,461**	**2,559,477**	**2,590,508**	**2,606,635**	**2,632,274**	**2,662,606**
Peak Day	**68**	**21,795**	**22,069**	**22,434**	**22,867**	**23,039**	**23,277**	**23,489**	**23,840**	**23,956**	**24,192**	**24,430**

Design_AI_S05

	AI					AI FT-1 complete load					
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	272	244	251	255	254	254	254	254	253	254	254
2-Nov	9	205	184	190	192	192	192	192	192	191	191	192
3-Nov	14	257	231	238	241	241	240	240	240	240	240	240
4-Nov	13	243	217	224	227	227	227	226	227	226	226	226
5-Nov	20	336	301	311	315	315	314	314	314	314	314	314
6-Nov	19	328	294	303	308	307	307	306	307	306	306	306
7-Nov	16	295	264	272	276	276	275	275	275	275	275	275
8-Nov	14	268	240	247	251	251	250	250	250	250	250	250
9-Nov	20	339	304	313	317	317	317	316	317	316	316	316
10-Nov	15	277	249	256	260	260	260	259	259	259	259	259
11-Nov	15	278	250	257	261	261	260	260	260	260	260	260
12-Nov	14	261	234	241	245	245	244	244	244	244	244	244
13-Nov	20	338	303	312	317	316	316	315	316	315	315	315
14-Nov	19	329	295	304	309	308	308	307	308	307	307	307
15-Nov	24	400	359	370	375	374	374	373	374	373	373	373
16-Nov	27	440	394	406	412	412	411	411	411	410	410	411
17-Nov	19	343	308	317	322	321	321	320	321	320	320	320
18-Nov	28	455	408	421	427	426	426	425	425	425	425	425
19-Nov	30	482	432	445	452	451	451	450	450	449	450	450
20-Nov	31	504	452	466	472	472	471	470	471	470	470	470
21-Nov	31	506	454	468	475	474	474	473	473	472	473	473
22-Nov	37	587	526	542	550	549	549	548	549	547	548	548
23-Nov	41	641	575	593	601	600	600	599	599	598	598	599
24-Nov	43	676	606	624	633	632	632	631	631	630	630	631
25-Nov	45	706	633	653	662	661	661	659	660	659	659	659
26-Nov	27	477	428	441	448	447	446	446	446	445	445	446
27-Nov	17	335	300	310	314	314	313	313	313	312	313	313
28-Nov	20	350	314	324	328	328	328	327	327	327	327	327
29-Nov	24	398	357	368	373	373	373	372	372	372	372	372
30-Nov	29	467	418	431	437	437	436	435	436	435	435	435
1-Dec	20	358	321	331	335	335	335	334	334	334	334	334
2-Dec	28	458	411	423	429	428	428	427	428	427	427	427
3-Dec	29	470	421	434	440	440	439	439	439	438	438	439
4-Dec	34	542	486	501	508	507	507	506	506	505	506	506
5-Dec	25	431	386	398	404	403	403	402	403	402	402	402
6-Dec	39	610	547	564	572	571	571	570	570	569	569	570
7-Dec	28	470	422	435	441	440	440	439	440	439	439	439
8-Dec	19	357	320	330	334	334	334	333	333	333	333	333
9-Dec	29	469	421	433	440	439	439	438	438	437	438	438
10-Dec	23	392	352	363	368	367	367	366	367	366	366	366
11-Dec	20	357	320	330	335	334	334	333	334	333	333	333
12-Dec	27	440	394	406	412	412	411	411	411	410	410	411
13-Dec	27	445	399	412	418	417	417	416	416	415	416	416
14-Dec	41	630	565	582	590	589	589	588	589	587	587	588
15-Dec	45	693	621	640	650	649	648	647	648	646	647	647
16-Dec	39	631	565	583	591	590	590	589	589	588	588	589
17-Dec	32	539	483	498	505	504	504	503	503	502	502	503
18-Dec	41	644	577	595	604	603	602	601	602	601	601	601
19-Dec	32	529	475	489	496	496	495	494	495	494	494	494
20-Dec	49	751	673	694	704	703	702	701	702	700	701	701
21-Dec	51	781	701	722	732	731	731	729	730	729	729	729
22-Dec	32	552	495	510	517	517	516	515	516	515	515	515
23-Dec	21	396	355	366	371	370	370	369	370	369	369	369
24-Dec	27	448	402	414	420	420	419	418	419	418	418	418
25-Dec	41	625	560	577	586	585	584	583	584	583	583	583
26-Dec	42	654	587	605	613	612	612	611	612	610	610	611
27-Dec	51	785	704	726	736	735	734	733	734	732	732	733
28-Dec	51	791	710	731	742	741	740	739	740	738	738	739
29-Dec	32	554	496	512	519	518	518	517	517	516	516	517
30-Dec	35	576	517	533	540	540	539	538	539	538	538	538
31-Dec	30	499	447	461	467	467	466	465	466	465	465	465
1-Jan	61	897	804	829	841	840	839	837	838	837	837	837
2-Jan	38	622	558	575	583	582	582	580	581	580	580	580
3-Jan	23	437	392	404	410	409	409	408	409	408	408	408
4-Jan	28	468	419	432	439	438	437	437	437	436	436	437
5-Jan	19	343	308	317	322	321	321	320	321	320	320	320
6-Jan	28	456	409	421	428	427	427	426	426	425	426	426
7-Jan	38	585	525	541	549	548	547	546	547	546	546	546
8-Jan	41	640	574	591	600	599	598	597	598	597	597	597
9-Jan	41	651	583	601	610	609	608	607	608	607	607	607
10-Jan	30	513	460	474	481	481	480	479	480	479	479	479
11-Jan	43	670	601	619	628	627	626	625	626	625	625	625
12-Jan	50	762	683	704	714	713	712	711	712	710	711	711
13-Jan	41	662	594	612	621	620	619	618	619	618	618	618
14-Jan	46	725	650	670	680	679	678	677	678	676	676	677
15-Jan	43	683	613	631	640	639	639	638	638	637	637	638
16-Jan	30	517	464	478	485	484	483	483	483	482	482	482
17-Jan	40	635	569	587	595	594	594	593	593	592	592	593
18-Jan	55	824	739	761	772	771	770	769	770	768	768	769
19-Jan	68	1,012	908	935	949	948	947	945	946	944	944	945
20-Jan	54	855	767	790	802	800	800	798	799	797	798	798
21-Jan	44	725	650	670	680	679	678	677	678	676	676	677
22-Jan	34	576	517	532	540	539	539	538	538	537	537	538
23-Jan	32	534	479	493	500	499	499	498	499	498	498	498
24-Jan	44	681	610	629	638	637	637	635	636	635	635	635
25-Jan	24	429	384	396	402	401	401	400	401	400	400	400
26-Jan	41	641	575	593	601	600	600	599	599	598	598	599
27-Jan	46	703	631	650	659	658	658	657	657	656	656	657
28-Jan	32	541	485	500	507	506	506	505	506	505	505	505
29-Jan	46	714	641	660	670	669	668	667	668	666	666	667
30-Jan	47	727	652	672	682	681	680	679	680	678	678	679

Design_AI_S05

	AI	AI FT-1 complete load										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	690	619	638	647	646	646	644	645	644	644	644
1-Feb	17	350	314	323	328	328	327	327	327	326	327	327
2-Feb	28	467	419	431	438	437	437	436	436	436	436	436
3-Feb	45	674	604	623	632	631	630	629	630	628	629	629
4-Feb	45	697	625	644	654	653	652	651	652	650	650	651
5-Feb	56	853	765	789	800	799	798	797	798	796	796	796
6-Feb	56	862	773	797	809	807	807	805	806	804	805	805
7-Feb	57	887	795	819	831	830	829	828	829	827	827	828
8-Feb	42	692	620	639	649	648	647	646	647	645	645	646
9-Feb	44	706	633	652	662	661	660	659	660	658	659	659
10-Feb	39	631	565	583	591	590	590	589	589	588	588	589
11-Feb	42	667	598	616	625	624	624	622	623	622	622	622
12-Feb	37	601	539	555	563	562	562	561	561	560	560	561
13-Feb	43	676	607	625	634	633	633	631	632	631	631	631
14-Feb	45	705	632	652	661	660	660	658	659	658	658	658
15-Feb	32	542	486	501	508	507	507	506	506	505	506	506
16-Feb	33	546	489	504	512	511	510	509	510	509	509	509
17-Feb	35	561	503	519	526	526	525	524	525	524	524	524
18-Feb	31	512	459	473	480	480	479	478	479	478	478	478
19-Feb	37	588	527	543	551	550	550	549	550	549	549	549
20-Feb	22	396	355	366	371	371	371	370	370	370	370	370
21-Feb	39	610	547	564	572	571	571	570	570	569	569	570
22-Feb	43	661	593	611	620	619	619	617	618	617	617	617
23-Feb	22	408	366	377	382	382	381	381	381	380	381	381
24-Feb	35	561	503	519	526	526	525	524	525	524	524	524
25-Feb	43	658	590	608	617	616	615	614	615	614	614	614
26-Feb	43	676	606	624	633	632	632	631	631	630	630	631
27-Feb	41	656	589	607	615	614	614	613	613	612	612	613
28-Feb	39	631	566	583	592	591	590	589	590	589	589	589
1-Mar	47	729	654	673	683	682	682	680	681	680	680	680
2-Mar	32	540	484	499	506	506	505	504	505	504	504	504
3-Mar	43	676	607	625	634	633	633	631	632	631	631	631
4-Mar	42	660	592	610	619	618	617	616	617	616	616	616
5-Mar	27	475	426	439	445	445	444	443	444	443	443	443
6-Mar	36	578	518	534	542	541	540	539	540	539	539	539
7-Mar	32	523	469	484	491	490	489	488	489	488	488	488
8-Mar	41	641	575	593	601	600	600	599	599	598	598	599
9-Mar	45	697	625	644	654	653	652	651	652	650	650	651
10-Mar	46	721	647	666	676	675	674	673	674	672	673	673
11-Mar	21	402	361	372	377	377	376	376	376	375	375	376
12-Mar	16	318	285	294	298	298	297	297	297	297	297	297
13-Mar	22	370	332	342	347	347	346	346	346	345	345	346
14-Mar	20	348	312	321	326	325	325	324	325	324	324	324
15-Mar	25	413	371	382	387	387	386	386	386	385	385	386
16-Mar	27	442	396	408	414	413	413	412	413	412	412	412
17-Mar	35	551	494	509	516	515	515	514	515	514	514	514
18-Mar	27	456	409	421	427	427	426	425	426	425	425	425
19-Mar	28	469	420	433	439	439	438	437	438	437	437	437
20-Mar	28	463	415	428	434	433	433	432	433	432	432	432
21-Mar	28	466	418	430	437	436	436	435	435	435	435	435
22-Mar	21	373	335	345	350	349	349	348	349	348	348	348
23-Mar	24	406	364	375	381	380	380	379	380	379	379	379
24-Mar	29	467	419	432	438	437	437	436	437	436	436	436
25-Mar	21	371	333	343	348	347	347	346	347	346	346	346
26-Mar	26	433	388	400	406	405	405	404	404	404	404	404
27-Mar	41	624	559	576	585	584	583	582	583	582	582	582
28-Mar	42	656	588	606	615	614	613	612	613	612	612	612
29-Mar	29	499	448	461	468	467	467	466	466	465	466	466
30-Mar	20	373	334	345	350	349	349	348	349	348	348	348
31-Mar	21	367	330	340	344	344	344	343	343	343	343	343
1-Apr	23	385	397	402	402	401	401	401	400	400	401	402
2-Apr	24	401	413	419	419	418	418	418	417	417	418	419
3-Apr	25	417	430	436	436	435	434	435	434	434	434	436
4-Apr	21	367	379	384	384	383	382	383	382	382	382	384
5-Apr	39	599	618	627	626	625	624	625	623	624	624	627
6-Apr	31	506	521	529	528	527	526	527	526	526	526	528
7-Apr	19	359	370	375	375	375	374	374	374	374	374	375
8-Apr	29	472	486	493	492	492	491	491	490	491	491	493
9-Apr	12	250	258	262	261	261	261	261	261	261	261	262
10-Apr	22	374	385	391	390	390	389	389	389	389	389	391
11-Apr	21	355	366	371	370	370	369	370	369	369	369	371
12-Apr	19	339	349	354	354	353	353	353	352	353	353	354
13-Apr	7	221	228	231	231	230	230	230	230	230	230	231
14-Apr	15	271	279	283	283	282	282	282	282	282	282	283
15-Apr	17	293	302	307	306	306	305	306	305	305	305	307
16-Apr	21	353	364	369	369	368	368	368	367	367	368	369
17-Apr	21	358	369	375	374	374	373	373	373	373	373	374
18-Apr	13	258	266	270	270	269	269	269	269	269	269	270
19-Apr	15	280	288	292	292	292	291	292	291	291	291	292
20-Apr	5	208	215	218	217	217	217	217	217	217	217	218
21-Apr	14	253	261	264	264	264	263	264	263	263	263	264
22-Apr	7	203	210	213	212	212	212	212	212	212	212	213
23-Apr	15	267	275	279	278	278	278	278	277	277	278	279
24-Apr	15	267	276	280	279	279	278	279	278	278	278	280
25-Apr	14	261	269	273	273	272	272	272	272	272	272	273
26-Apr	10	218	225	228	227	227	227	227	227	227	227	228
27-Apr	7	208	214	217	217	217	216	216	216	216	216	217
28-Apr	8	203	209	212	212	212	211	212	211	211	211	212
29-Apr	13	236	243	247	246	246	245	246	245	245	245	246
30-Apr	16	280	288	292	292	292	291	291	291	291	291	292
1-May	0	203	209	212	212	211	211	211	211	211	211	212

Design_AI_S05

Date	AI HDDd	AI FT-1 complete load 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	192	198	201	200	200	200	200	200	200	200	201
3-May	0	181	186	189	189	188	188	188	188	188	188	189
4-May	0	179	184	187	186	186	186	186	186	186	186	187
5-May	6	186	192	195	194	194	194	194	194	194	194	195
6-May	17	280	288	293	292	292	291	292	291	291	291	293
7-May	23	372	383	388	388	387	387	387	386	387	387	388
8-May	14	270	278	282	281	281	281	281	280	280	281	282
9-May	13	254	262	266	265	265	265	265	264	264	265	266
10-May	2	206	212	215	215	215	214	215	214	214	214	215
11-May	0	191	197	200	199	199	199	199	199	199	199	200
12-May	0	180	186	188	188	188	188	188	187	187	188	188
13-May	3	182	188	191	190	190	190	190	190	190	190	191
14-May	8	191	197	200	200	200	199	199	199	199	199	200
15-May	12	220	226	230	229	229	229	229	228	228	229	230
16-May	17	292	301	305	304	304	304	304	303	303	304	305
17-May	12	237	244	248	247	247	247	247	246	246	247	248
18-May	12	235	242	245	245	245	244	245	244	244	244	245
19-May	1	200	206	209	209	208	208	208	208	208	208	209
20-May	8	200	206	209	208	208	208	208	208	208	208	209
21-May	9	198	204	207	206	206	206	206	206	206	206	207
22-May	9	204	211	214	213	213	213	213	213	213	213	214
23-May	8	204	210	213	213	213	212	213	212	212	212	213
24-May	10	208	214	217	217	217	216	217	216	216	216	217
25-May	7	203	209	212	211	211	211	211	211	211	211	212
26-May	7	202	208	211	211	210	210	210	210	210	210	211
27-May	1	191	197	200	200	200	199	200	199	199	199	200
28-May	5	192	198	200	200	200	200	200	199	199	199	200
29-May	3	187	193	196	196	195	195	195	195	195	195	196
30-May	9	197	203	206	205	205	205	205	205	205	205	206
31-May	12	223	229	233	232	232	232	232	232	232	232	233
1-Jun	6	204	210	213	213	213	212	212	212	212	212	213
2-Jun	7	203	209	212	211	211	211	211	211	211	211	212
3-Jun	2	192	198	201	200	200	200	200	200	200	200	201
4-Jun	0	186	192	194	194	194	194	194	193	194	194	194
5-Jun	0	180	186	188	188	188	188	188	187	187	188	188
6-Jun	0	179	184	187	186	186	186	186	186	186	186	187
7-Jun	0	181	186	189	189	188	188	188	188	188	188	189
8-Jun	0	176	181	184	184	183	183	183	183	183	183	184
9-Jun	0	174	180	182	182	182	181	182	181	181	181	182
10-Jun	0	171	176	179	179	179	178	179	178	178	178	179
11-Jun	0	170	176	178	178	178	177	178	177	177	177	178
12-Jun	0	172	177	180	180	180	179	179	179	179	179	180
13-Jun	0	174	179	182	181	181	181	181	181	181	181	182
14-Jun	0	176	182	184	184	184	184	184	184	184	184	184
15-Jun	9	188	193	196	196	196	195	196	195	195	195	196
16-Jun	7	193	199	202	202	202	201	202	201	201	201	202
17-Jun	1	193	199	202	202	201	201	201	201	201	201	202
18-Jun	5	192	198	200	200	200	200	200	199	199	199	200
19-Jun	6	191	197	200	200	200	199	199	199	199	199	200
20-Jun	5	194	200	203	203	203	202	202	202	202	202	203
21-Jun	0	183	189	192	191	191	191	191	191	191	191	192
22-Jun	0	172	177	180	180	179	179	179	179	179	179	180
23-Jun	0	164	169	171	171	171	170	171	170	170	170	171
24-Jun	0	164	169	171	171	171	170	171	170	170	170	171
25-Jun	0	164	169	171	171	171	170	171	170	170	170	171
26-Jun	0	161	166	168	168	168	168	168	168	168	168	168
27-Jun	0	159	164	167	166	166	166	166	166	166	166	167
28-Jun	0	160	165	167	167	167	167	167	166	166	167	167
29-Jun	0	159	164	166	166	166	166	166	165	165	166	166
30-Jun	0	160	165	167	167	167	166	167	166	166	166	167
1-Jul	0	161	166	168	168	168	167	167	167	167	167	168
2-Jul	0	161	166	168	168	168	167	167	167	167	167	168
3-Jul	0	159	164	167	166	166	166	166	166	166	166	167
4-Jul	0	157	162	164	164	164	164	164	164	164	164	164
5-Jul	0	159	164	166	166	166	166	166	166	166	166	166
6-Jul	1	167	172	175	175	174	174	174	174	174	174	175
7-Jul	2	176	181	184	184	184	183	184	183	183	183	184
8-Jul	0	169	174	177	177	177	176	176	176	176	176	177
9-Jul	0	160	165	167	167	167	166	166	166	166	166	167
10-Jul	0	150	154	156	156	156	156	156	156	156	156	156
11-Jul	0	151	156	158	158	158	158	158	158	158	158	158
12-Jul	0	157	161	164	164	163	163	163	163	163	163	164
13-Jul	0	156	160	163	162	162	162	162	162	162	162	163
14-Jul	0	154	159	161	161	161	161	161	161	161	161	161
15-Jul	0	153	157	160	159	159	159	159	159	159	159	160
16-Jul	0	151	155	157	157	157	157	157	157	157	157	157
17-Jul	0	148	153	155	155	155	154	155	154	154	154	155
18-Jul	0	145	150	152	152	152	151	152	151	151	151	152
19-Jul	0	147	152	154	154	154	153	153	153	153	153	154
20-Jul	0	146	151	153	153	153	152	153	152	152	152	153
21-Jul	0	147	151	153	153	153	153	153	153	153	153	153
22-Jul	0	148	153	155	154	154	154	154	154	154	154	155
23-Jul	0	149	154	156	156	156	155	156	155	155	155	156
24-Jul	0	151	156	158	158	157	157	157	157	157	157	158
25-Jul	0	152	156	159	158	158	158	158	158	158	158	159
26-Jul	0	155	160	162	162	162	162	162	162	162	162	162
27-Jul	0	153	157	160	159	159	159	159	159	159	159	160
28-Jul	0	153	157	160	159	159	159	159	159	159	159	160
29-Jul	0	152	156	159	158	158	158	158	158	158	158	159
30-Jul	0	152	156	159	158	158	158	158	158	158	158	159
31-Jul	0	153	158	160	160	160	159	160	159	159	159	160

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
		AI FT-1 complete load										
1-Aug	0	151	156	158	158	158	158	158	157	157	158	158
2-Aug	0	151	156	158	158	158	158	158	158	158	158	158
3-Aug	0	147	151	153	153	153	153	153	153	153	153	153
4-Aug	0	146	150	152	152	152	152	152	152	152	152	152
5-Aug	0	147	152	154	154	153	153	153	153	153	153	154
6-Aug	0	151	155	157	157	157	157	157	157	157	157	157
7-Aug	0	153	158	160	160	160	159	160	159	159	159	160
8-Aug	0	153	158	160	160	160	160	160	160	160	160	160
9-Aug	0	155	160	162	162	162	161	161	161	161	161	162
10-Aug	0	152	156	159	158	158	158	158	158	158	158	159
11-Aug	0	152	156	159	158	158	158	158	158	158	158	159
12-Aug	0	154	159	161	161	161	161	161	161	161	161	161
13-Aug	0	155	159	162	162	161	161	161	161	161	161	162
14-Aug	0	156	160	163	162	162	162	162	162	162	162	163
15-Aug	0	156	161	163	163	163	162	163	162	162	162	163
16-Aug	0	158	163	165	165	165	164	165	164	164	164	165
17-Aug	0	156	160	163	162	162	162	162	162	162	162	163
18-Aug	1	166	172	174	174	174	173	173	173	173	173	174
19-Aug	0	165	170	172	172	172	172	172	171	172	172	172
20-Aug	0	167	172	174	174	174	173	174	173	173	173	174
21-Aug	1	170	175	177	177	177	177	177	177	177	177	177
22-Aug	0	167	172	174	174	174	173	174	173	173	173	174
23-Aug	0	170	175	178	178	177	177	177	177	177	177	178
24-Aug	0	163	168	170	170	170	170	170	169	169	169	170
25-Aug	0	164	169	171	171	171	170	171	170	170	170	171
26-Aug	0	162	167	170	169	169	169	169	169	169	169	170
27-Aug	0	160	165	168	167	167	167	167	167	167	167	167
28-Aug	0	157	162	164	164	164	164	164	164	164	164	164
29-Aug	0	158	163	165	165	165	165	165	165	165	165	165
30-Aug	0	163	168	170	170	170	169	169	169	169	169	170
31-Aug	0	163	168	170	170	170	170	170	169	169	169	170
1-Sep	0	165	170	172	172	172	172	172	172	172	172	172
2-Sep	0	166	171	173	173	173	173	173	172	172	173	173
3-Sep	0	167	172	174	174	174	173	174	173	173	173	174
4-Sep	0	167	172	174	174	174	173	174	173	173	173	174
5-Sep	0	168	173	176	175	175	175	175	175	175	175	176
6-Sep	0	171	176	179	178	178	178	178	178	178	178	179
7-Sep	0	170	175	177	177	177	177	177	176	176	177	177
8-Sep	0	171	176	179	178	178	178	178	178	178	178	179
9-Sep	0	172	177	180	179	179	179	179	179	179	179	180
10-Sep	3	179	185	187	187	187	186	187	186	186	186	187
11-Sep	3	183	189	192	191	191	191	191	191	191	191	192
12-Sep	0	182	188	190	190	190	190	190	190	190	190	190
13-Sep	0	180	185	188	188	188	187	187	187	187	187	188
14-Sep	0	173	179	181	181	181	181	181	180	180	180	181
15-Sep	1	176	182	184	184	184	184	184	184	184	184	184
16-Sep	3	182	187	190	190	189	189	189	189	189	189	190
17-Sep	0	182	187	190	190	190	189	190	189	189	189	190
18-Sep	0	181	187	189	189	189	188	189	188	188	188	189
19-Sep	2	181	187	189	189	189	189	189	188	188	188	189
20-Sep	7	192	197	200	200	200	199	200	199	199	199	200
21-Sep	5	193	198	201	201	201	200	201	200	200	200	201
22-Sep	0	189	194	197	197	197	196	196	196	196	196	197
23-Sep	6	190	196	199	199	199	198	199	198	198	198	199
24-Sep	12	215	222	225	225	225	224	225	224	224	224	225
25-Sep	1	195	201	204	203	203	203	203	203	203	203	204
26-Sep	0	189	195	198	198	197	197	197	197	197	197	198
27-Sep	1	183	188	191	191	191	190	191	190	190	190	191
28-Sep	5	186	191	194	194	194	193	194	193	193	193	194
29-Sep	8	194	200	203	202	202	202	202	202	202	202	203
30-Sep	13	234	241	245	244	244	244	244	244	244	244	245
1-Oct	0	196	202	205	205	204	204	204	204	204	204	205
2-Oct	7	198	204	207	207	207	207	207	206	206	207	207
3-Oct	9	196	202	205	205	204	204	204	204	204	204	205
4-Oct	1	195	201	204	204	204	203	204	203	203	203	204
5-Oct	3	191	197	199	199	199	199	199	198	198	199	199
6-Oct	0	182	187	190	190	190	189	190	189	189	189	190
7-Oct	2	184	189	192	192	191	191	191	191	191	191	192
8-Oct	0	180	186	188	188	188	188	188	187	187	188	188
9-Oct	14	238	245	249	248	248	248	248	247	247	248	249
10-Oct	23	364	375	381	380	380	379	379	379	379	379	380
11-Oct	19	334	344	349	348	348	348	348	347	347	347	349
12-Oct	16	297	306	311	310	310	309	310	309	309	309	310
13-Oct	9	219	226	229	229	229	228	229	228	228	228	229
14-Oct	6	207	213	217	216	216	216	216	215	216	216	217
15-Oct	5	198	204	206	206	206	206	206	205	205	206	206
16-Oct	15	258	266	270	270	269	269	269	269	269	269	270
17-Oct	20	330	340	345	345	345	344	344	344	344	344	345
18-Oct	19	332	342	347	347	346	346	346	345	346	346	347
19-Oct	13	256	264	267	267	267	266	267	266	266	266	267
20-Oct	9	217	223	227	226	226	226	226	226	226	226	227
21-Oct	12	229	236	239	239	239	238	238	238	238	238	239
22-Oct	21	344	355	360	359	359	358	359	358	358	358	360
23-Oct	23	380	391	397	397	396	395	396	395	395	395	397
24-Oct	23	389	401	407	406	406	405	405	405	405	405	407
25-Oct	22	380	392	397	397	396	396	396	395	395	396	397
26-Oct	15	287	295	300	299	299	298	299	298	298	298	300
27-Oct	16	293	302	306	306	305	305	305	305	305	305	306
28-Oct	16	288	297	301	301	300	300	300	299	300	300	301
29-Oct	14	263	271	275	274	274	274	274	273	274	274	275
30-Oct	7	213	219	222	222	222	221	222	221	221	221	222

Design_AI_S05

	AI	AI FT-1 complete load										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	199	205	208	207	207	207	207	207	207	207	208
Month												
Nov	697	11,795	10,577	10,899	11,057	11,040	11,031	11,010	11,024	11,001	11,004	11,009
Dec	1040	16,876	15,134	15,595	15,821	15,797	15,783	15,754	15,773	15,741	15,744	15,752
Jan	1250	19,918	17,862	18,406	18,672	18,644	18,628	18,593	18,616	18,578	18,582	18,591
Feb	1091	17,475	15,672	16,149	16,382	16,358	16,344	16,313	16,333	16,300	16,303	16,311
Mar	942	15,507	13,906	14,329	14,536	14,515	14,502	14,475	14,493	14,464	14,466	14,473
Apr	518	9,463	9,751	9,892	9,878	9,869	9,851	9,863	9,843	9,845	9,849	9,891
May	228	6,657	6,860	6,959	6,948	6,942	6,929	6,938	6,924	6,925	6,928	6,958
Jun	48	5,336	5,498	5,578	5,569	5,564	5,554	5,561	5,550	5,551	5,553	5,577
Jul	3	4,792	4,938	5,009	5,002	4,998	4,988	4,994	4,984	4,985	4,988	5,009
Aug	2	4,887	5,036	5,109	5,101	5,097	5,087	5,093	5,083	5,084	5,086	5,108
Sep	70	5,475	5,641	5,723	5,714	5,709	5,699	5,705	5,694	5,695	5,698	5,722
Oct	361	8,036	8,281	8,401	8,388	8,381	8,365	8,375	8,359	8,360	8,364	8,399
Total	**6250**	**126,218**	**119,157**	**122,048**	**123,069**	**122,915**	**122,761**	**122,675**	**122,674**	**122,529**	**122,566**	**122,798**
Peak Day	**68**	**1,012**	**908**	**935**	**949**	**948**	**947**	**945**	**946**	**944**	**944**	**945**

Design_AI_S05

Date	AI HDDd	AI FT-1 (Pipeline only) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	272	244	251	255	254	254	254	254	253	254	254
2-Nov	9	205	184	190	192	192	192	192	192	191	191	192
3-Nov	14	257	231	238	241	241	240	240	240	240	240	240
4-Nov	13	243	217	224	227	227	227	226	227	226	226	226
5-Nov	20	336	301	311	315	315	314	314	314	314	314	314
6-Nov	19	328	294	303	308	307	307	306	307	306	306	306
7-Nov	16	295	264	272	276	276	275	275	275	275	275	275
8-Nov	14	268	240	247	251	251	250	250	250	250	250	250
9-Nov	20	339	304	313	317	317	317	316	317	316	316	316
10-Nov	15	277	249	256	260	260	260	259	259	259	259	259
11-Nov	15	278	250	257	261	261	260	260	260	260	260	260
12-Nov	14	261	234	241	245	245	244	244	244	244	244	244
13-Nov	20	338	303	312	317	316	316	315	316	315	315	315
14-Nov	19	329	295	304	309	308	308	307	308	307	307	307
15-Nov	24	400	359	370	375	374	374	373	374	373	373	373
16-Nov	27	440	394	406	412	412	411	411	411	410	410	411
17-Nov	19	343	308	317	322	321	321	320	321	320	320	320
18-Nov	28	455	408	421	427	426	426	425	425	425	425	425
19-Nov	30	482	432	445	452	451	451	450	450	449	450	450
20-Nov	31	504	452	466	472	472	471	470	471	470	470	470
21-Nov	31	506	454	468	475	474	474	473	473	472	473	473
22-Nov	37	587	526	542	550	549	549	548	549	547	548	548
23-Nov	41	641	575	593	601	600	600	599	599	598	598	599
24-Nov	43	659	591	609	618	617	616	615	616	615	615	615
25-Nov	45	659	591	609	618	617	616	615	616	615	615	615
26-Nov	27	477	428	441	448	447	446	446	446	445	445	446
27-Nov	17	335	300	310	314	314	313	313	313	312	313	313
28-Nov	20	350	314	324	328	328	328	327	327	327	327	327
29-Nov	24	398	357	368	373	373	373	372	372	372	372	372
30-Nov	29	467	418	431	437	437	436	435	436	435	435	435
1-Dec	20	358	321	331	335	335	335	334	334	334	334	334
2-Dec	28	458	411	423	429	428	428	427	428	427	427	427
3-Dec	29	470	421	434	440	440	439	439	439	438	438	439
4-Dec	34	542	486	501	508	507	507	506	506	505	506	506
5-Dec	25	431	386	398	404	403	403	402	403	402	402	402
6-Dec	39	610	547	564	572	571	571	570	570	569	569	570
7-Dec	28	470	422	435	441	440	440	439	440	439	439	439
8-Dec	19	357	320	330	334	334	334	333	333	333	333	333
9-Dec	29	469	421	433	440	439	439	438	438	437	438	438
10-Dec	23	392	352	363	368	367	367	366	367	366	366	366
11-Dec	20	357	320	330	335	334	334	333	334	333	333	333
12-Dec	27	440	394	406	412	412	411	411	411	410	410	411
13-Dec	27	445	399	412	418	417	417	416	416	415	416	416
14-Dec	41	630	565	582	590	589	589	588	589	587	587	588
15-Dec	45	659	591	609	618	617	616	615	616	615	615	615
16-Dec	39	631	565	583	591	590	590	589	589	588	588	589
17-Dec	32	539	483	498	505	504	504	503	503	502	502	503
18-Dec	41	644	577	595	604	603	602	601	602	601	601	601
19-Dec	32	529	475	489	496	496	495	494	495	494	494	494
20-Dec	49	659	591	609	618	617	616	615	616	615	615	615
21-Dec	51	659	591	609	618	617	616	615	616	615	615	615
22-Dec	32	552	495	510	517	517	516	515	516	515	515	515
23-Dec	21	396	355	366	371	370	370	369	370	369	369	369
24-Dec	27	448	402	414	420	420	419	418	419	418	418	418
25-Dec	41	625	560	577	586	585	584	583	584	583	583	583
26-Dec	42	654	587	605	613	612	612	611	612	610	610	611
27-Dec	51	659	591	609	618	617	616	615	616	615	615	615
28-Dec	51	659	591	609	618	617	616	615	616	615	615	615
29-Dec	32	554	496	512	519	518	518	517	517	516	516	517
30-Dec	35	576	517	533	540	540	539	538	539	538	538	538
31-Dec	30	499	447	461	467	467	466	465	466	465	465	465
1-Jan	61	659	591	609	618	617	616	615	616	615	615	615
2-Jan	38	622	558	575	583	582	582	580	581	580	580	580
3-Jan	23	437	392	404	410	409	409	408	409	408	408	408
4-Jan	28	468	419	432	439	438	437	437	437	436	436	437
5-Jan	19	343	308	317	322	321	321	320	321	320	320	320
6-Jan	28	456	409	421	428	427	427	426	426	425	426	426
7-Jan	38	585	525	541	549	548	547	546	547	546	546	546
8-Jan	41	640	574	591	600	599	598	597	598	597	597	597
9-Jan	41	651	583	601	610	609	608	607	608	607	607	607
10-Jan	30	513	460	474	481	481	480	479	480	479	479	479
11-Jan	43	659	591	609	618	617	616	615	616	615	615	615
12-Jan	50	659	591	609	618	617	616	615	616	615	615	615
13-Jan	41	659	591	609	618	617	616	615	616	615	615	615
14-Jan	46	659	591	609	618	617	616	615	616	615	615	615
15-Jan	43	659	591	609	618	617	616	615	616	615	615	615
16-Jan	30	517	464	478	485	484	483	483	483	482	482	482
17-Jan	40	635	569	587	595	594	594	593	593	592	592	593
18-Jan	55	659	591	609	618	617	616	615	616	615	615	615
19-Jan	68	659	591	609	618	617	616	615	616	615	615	615
20-Jan	54	659	591	609	618	617	616	615	616	615	615	615
21-Jan	44	659	591	609	618	617	616	615	616	615	615	615
22-Jan	34	576	517	532	540	539	539	538	538	537	537	538
23-Jan	32	534	479	493	500	499	499	498	499	498	498	498
24-Jan	44	659	591	609	618	617	616	615	616	615	615	615
25-Jan	24	429	384	396	402	401	401	400	401	400	400	400
26-Jan	41	641	575	593	601	600	600	599	599	598	598	599
27-Jan	46	659	591	609	618	617	616	615	616	615	615	615
28-Jan	32	541	485	500	507	506	506	505	506	505	505	505
29-Jan	46	659	591	609	618	617	616	615	616	615	615	615
30-Jan	47	659	591	609	618	617	616	615	616	615	615	615

Design_AI_S05

Date	AI HDDd	AI FT-1 (Pipeline only) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	659	591	609	618	617	616	615	616	615	615	615
1-Feb	17	350	314	323	328	328	327	327	327	326	327	327
2-Feb	28	467	419	431	438	437	437	436	436	436	436	436
3-Feb	45	659	591	609	618	617	616	615	616	615	615	615
4-Feb	45	659	591	609	618	617	616	615	616	615	615	615
5-Feb	56	659	591	609	618	617	616	615	616	615	615	615
6-Feb	56	659	591	609	618	617	616	615	616	615	615	615
7-Feb	57	659	591	609	618	617	616	615	616	615	615	615
8-Feb	42	659	591	609	618	617	616	615	616	615	615	615
9-Feb	44	659	591	609	618	617	616	615	616	615	615	615
10-Feb	39	631	565	583	591	590	590	589	589	588	588	589
11-Feb	42	659	591	609	618	617	616	615	616	615	615	615
12-Feb	37	601	539	555	563	562	562	561	561	560	560	561
13-Feb	43	659	591	609	618	617	616	615	616	615	615	615
14-Feb	45	659	591	609	618	617	616	615	616	615	615	615
15-Feb	32	542	486	501	508	507	507	506	506	505	506	506
16-Feb	33	546	489	504	512	511	510	509	510	509	509	509
17-Feb	35	561	503	519	526	526	525	524	525	524	524	524
18-Feb	31	512	459	473	480	480	479	478	479	478	478	478
19-Feb	37	588	527	543	551	550	550	549	550	549	549	549
20-Feb	22	396	355	366	371	371	371	370	370	370	370	370
21-Feb	39	610	547	564	572	571	571	570	570	569	569	570
22-Feb	43	659	591	609	618	617	616	615	616	615	615	615
23-Feb	22	408	366	377	382	382	381	381	381	380	381	381
24-Feb	35	561	503	519	526	526	525	524	525	524	524	524
25-Feb	43	658	590	608	617	616	615	614	615	614	614	614
26-Feb	43	659	591	609	618	617	616	615	616	615	615	615
27-Feb	41	656	589	607	615	614	614	613	613	612	612	613
28-Feb	39	631	566	583	592	591	590	589	590	589	589	589
1-Mar	47	659	591	609	618	617	616	615	616	615	615	615
2-Mar	32	540	484	499	506	506	505	504	505	504	504	504
3-Mar	43	659	591	609	618	617	616	615	616	615	615	615
4-Mar	42	659	591	609	618	617	616	615	616	615	615	615
5-Mar	27	475	426	439	445	445	444	443	444	443	443	443
6-Mar	36	578	518	534	542	541	540	539	540	539	539	539
7-Mar	32	523	469	484	491	490	489	488	489	488	488	488
8-Mar	41	641	575	593	601	600	600	599	599	598	598	599
9-Mar	45	659	591	609	618	617	616	615	616	615	615	615
10-Mar	46	659	591	609	618	617	616	615	616	615	615	615
11-Mar	21	402	361	372	377	377	376	376	376	375	375	376
12-Mar	16	318	285	294	298	298	297	297	297	297	297	297
13-Mar	22	370	332	342	347	347	346	346	346	345	345	346
14-Mar	20	348	312	321	326	325	325	324	325	324	324	324
15-Mar	25	413	371	382	387	387	386	386	386	385	385	386
16-Mar	27	442	396	408	414	413	413	412	413	412	412	412
17-Mar	35	551	494	509	516	515	515	514	515	514	514	514
18-Mar	27	456	409	421	427	427	426	425	426	425	425	425
19-Mar	28	469	420	433	439	439	438	437	438	437	437	437
20-Mar	28	463	415	428	434	433	433	432	433	432	432	432
21-Mar	28	466	418	430	437	436	436	435	435	435	435	435
22-Mar	21	373	335	345	350	349	349	348	349	348	348	348
23-Mar	24	406	364	375	381	380	380	379	380	379	379	379
24-Mar	29	467	419	432	438	437	437	436	437	436	436	436
25-Mar	21	371	333	343	348	347	347	346	347	346	346	346
26-Mar	26	433	388	400	406	405	405	404	404	404	404	404
27-Mar	41	624	559	576	585	584	583	582	583	582	582	582
28-Mar	42	656	588	606	615	614	613	612	613	612	612	612
29-Mar	29	499	448	461	468	467	467	466	466	465	466	466
30-Mar	20	373	334	345	350	349	349	348	349	348	348	348
31-Mar	21	367	330	340	344	344	344	343	343	343	343	343
1-Apr	23	385	397	402	402	401	401	401	400	400	401	402
2-Apr	24	401	413	419	419	418	418	418	417	417	418	419
3-Apr	25	417	430	436	436	435	434	435	434	434	434	436
4-Apr	21	367	379	384	384	383	382	383	382	382	382	384
5-Apr	39	599	618	627	626	625	624	625	623	624	624	627
6-Apr	31	506	521	529	528	527	526	527	526	526	526	528
7-Apr	19	359	370	375	375	375	374	374	374	374	374	375
8-Apr	29	472	486	493	492	492	491	491	490	491	491	493
9-Apr	12	250	258	262	261	261	261	261	261	261	261	262
10-Apr	22	374	385	391	390	390	389	389	389	389	389	391
11-Apr	21	355	366	371	370	370	369	370	369	369	369	371
12-Apr	19	339	349	354	354	353	353	353	352	353	353	354
13-Apr	7	221	228	231	231	230	230	230	230	230	230	231
14-Apr	15	271	279	283	283	282	282	282	282	282	282	283
15-Apr	17	293	302	307	306	306	305	306	305	305	305	307
16-Apr	21	353	364	369	369	368	368	368	367	367	368	369
17-Apr	21	358	369	375	374	374	373	373	373	373	373	374
18-Apr	13	258	266	270	270	269	269	269	269	269	269	270
19-Apr	15	280	288	292	292	292	291	292	291	291	291	292
20-Apr	5	208	215	218	217	217	217	217	217	217	217	218
21-Apr	14	253	261	264	264	264	263	264	263	263	263	264
22-Apr	7	203	210	213	212	212	212	212	212	212	212	213
23-Apr	15	267	275	279	278	278	278	278	277	277	278	279
24-Apr	15	267	276	280	279	279	278	279	278	278	278	280
25-Apr	14	261	269	273	273	272	272	272	272	272	272	273
26-Apr	10	218	225	228	227	227	227	227	227	227	227	228
27-Apr	7	208	214	217	217	217	216	216	216	216	216	217
28-Apr	8	203	209	212	212	212	211	212	211	211	211	212
29-Apr	13	236	243	247	246	246	245	246	245	245	245	246
30-Apr	16	280	288	292	292	292	291	291	291	291	291	292
1-May	0	203	209	212	212	211	211	211	211	211	211	212

Design_AI_S05

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
		AI FT-1 (Pipeline only)										
2-May	0	192	198	201	200	200	200	200	200	200	200	201
3-May	0	181	186	189	189	188	188	188	188	188	188	189
4-May	0	179	184	187	186	186	186	186	186	186	186	187
5-May	6	186	192	195	194	194	194	194	194	194	194	195
6-May	17	280	288	293	292	292	291	292	291	291	291	293
7-May	23	372	383	388	388	387	387	387	386	387	387	388
8-May	14	270	278	282	281	281	281	281	280	280	281	282
9-May	13	254	262	266	265	265	265	265	264	264	265	266
10-May	2	206	212	215	215	215	214	215	214	214	214	215
11-May	0	191	197	200	199	199	199	199	199	199	199	200
12-May	0	180	186	188	188	188	188	188	187	187	188	188
13-May	3	182	188	191	190	190	190	190	190	190	190	191
14-May	8	191	197	200	200	200	199	199	199	199	199	200
15-May	12	220	226	230	229	229	229	229	228	228	229	230
16-May	17	292	301	305	304	304	304	304	303	303	304	305
17-May	12	237	244	248	247	247	247	247	246	246	247	248
18-May	12	235	242	245	245	245	244	245	244	244	244	245
19-May	1	200	206	209	209	208	208	208	208	208	208	209
20-May	8	200	206	209	208	208	208	208	208	208	208	209
21-May	9	198	204	207	206	206	206	206	206	206	206	207
22-May	9	204	211	214	213	213	213	213	213	213	213	214
23-May	8	204	210	213	213	213	212	213	212	212	212	213
24-May	10	208	214	217	217	217	216	217	216	216	216	217
25-May	7	203	209	212	211	211	211	211	211	211	211	212
26-May	7	202	208	211	211	210	210	210	210	210	210	211
27-May	1	191	197	200	200	200	199	200	199	199	199	200
28-May	5	192	198	200	200	200	200	200	199	199	199	200
29-May	3	187	193	196	196	195	195	195	195	195	195	196
30-May	9	197	203	206	205	205	205	205	205	205	205	206
31-May	12	223	229	233	232	232	232	232	232	232	232	233
1-Jun	6	204	210	213	213	213	212	212	212	212	212	213
2-Jun	7	203	209	212	211	211	211	211	211	211	211	212
3-Jun	2	192	198	201	200	200	200	200	200	200	200	201
4-Jun	0	186	192	194	194	194	194	194	193	194	194	194
5-Jun	0	180	186	188	188	188	188	188	187	187	188	188
6-Jun	0	179	184	187	186	186	186	186	186	186	186	187
7-Jun	0	181	186	189	189	188	188	188	188	188	188	189
8-Jun	0	176	181	184	184	183	183	183	183	183	183	184
9-Jun	0	174	180	182	182	182	181	182	181	181	181	182
10-Jun	0	171	176	179	179	179	178	179	178	178	178	179
11-Jun	0	170	176	178	178	178	177	178	177	177	177	178
12-Jun	0	172	177	180	180	180	179	179	179	179	179	180
13-Jun	0	174	179	182	181	181	181	181	181	181	181	182
14-Jun	0	176	182	184	184	184	184	184	184	184	184	184
15-Jun	9	188	193	196	196	196	195	196	195	195	195	196
16-Jun	7	193	199	202	202	202	201	202	201	201	201	202
17-Jun	1	193	199	202	202	201	201	201	201	201	201	202
18-Jun	5	192	198	200	200	200	200	200	199	199	199	200
19-Jun	6	191	197	200	200	200	199	199	199	199	199	200
20-Jun	5	194	200	203	203	203	202	202	202	202	202	203
21-Jun	0	183	189	192	191	191	191	191	191	191	191	192
22-Jun	0	172	177	180	180	179	179	179	179	179	179	180
23-Jun	0	164	169	171	171	171	170	171	170	170	170	171
24-Jun	0	164	169	171	171	171	170	171	170	170	170	171
25-Jun	0	164	169	171	171	171	170	171	170	170	170	171
26-Jun	0	161	166	168	168	168	168	168	168	168	168	168
27-Jun	0	159	164	167	166	166	166	166	166	166	166	167
28-Jun	0	160	165	167	167	167	167	167	166	166	167	167
29-Jun	0	159	164	166	166	166	166	166	165	165	166	166
30-Jun	0	160	165	167	167	167	166	167	166	166	166	167
1-Jul	0	161	166	168	168	168	167	167	167	167	167	168
2-Jul	0	161	166	168	168	168	167	167	167	167	167	168
3-Jul	0	159	164	167	166	166	166	166	166	166	166	167
4-Jul	0	157	162	164	164	164	164	164	164	164	164	164
5-Jul	0	159	164	166	166	166	166	166	166	166	166	166
6-Jul	1	167	172	175	175	174	174	174	174	174	174	175
7-Jul	2	176	181	184	184	184	183	184	183	183	183	184
8-Jul	0	169	174	177	177	177	176	176	176	176	176	177
9-Jul	0	160	165	167	167	167	166	166	166	166	166	167
10-Jul	0	150	154	156	156	156	156	156	156	156	156	156
11-Jul	0	151	156	158	158	158	158	158	158	158	158	158
12-Jul	0	157	161	164	164	163	163	163	163	163	163	164
13-Jul	0	156	160	163	162	162	162	162	162	162	162	163
14-Jul	0	154	159	161	161	161	161	161	161	161	161	161
15-Jul	0	153	157	160	159	159	159	159	159	159	159	160
16-Jul	0	151	155	157	157	157	157	157	157	157	157	157
17-Jul	0	148	153	155	155	155	154	155	154	154	154	155
18-Jul	0	145	150	152	152	152	151	152	151	151	151	152
19-Jul	0	147	152	154	154	154	153	153	153	153	153	154
20-Jul	0	146	151	153	153	153	152	153	152	152	152	153
21-Jul	0	147	151	153	153	153	153	153	153	153	153	153
22-Jul	0	148	153	155	154	154	154	154	154	154	154	155
23-Jul	0	149	154	156	156	156	155	156	155	155	155	156
24-Jul	0	151	156	158	158	157	157	157	157	157	157	158
25-Jul	0	152	156	159	158	158	158	158	158	158	158	159
26-Jul	0	155	160	162	162	162	162	162	162	162	162	162
27-Jul	0	153	157	160	159	159	159	159	159	159	159	160
28-Jul	0	153	157	160	159	159	159	159	159	159	159	160
29-Jul	0	152	156	159	158	158	158	158	158	158	158	159
30-Jul	0	152	156	159	158	158	158	158	158	158	158	159
31-Jul	0	153	158	160	160	160	159	160	159	159	159	160

Design_AI_S05

	AI	AI FT-1 (Pipeline only)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	151	156	158	158	158	158	158	157	157	158	158
2-Aug	0	151	156	158	158	158	158	158	158	158	158	158
3-Aug	0	147	151	153	153	153	153	153	153	153	153	153
4-Aug	0	146	150	152	152	152	152	152	152	152	152	152
5-Aug	0	147	152	154	154	153	153	153	153	153	153	154
6-Aug	0	151	155	157	157	157	157	157	157	157	157	157
7-Aug	0	153	158	160	160	160	159	160	159	159	159	160
8-Aug	0	153	158	160	160	160	160	160	160	160	160	160
9-Aug	0	155	160	162	162	162	161	161	161	161	161	162
10-Aug	0	152	156	159	158	158	158	158	158	158	158	159
11-Aug	0	152	156	159	158	158	158	158	158	158	158	159
12-Aug	0	154	159	161	161	161	161	161	161	161	161	161
13-Aug	0	155	159	162	162	161	161	161	161	161	161	162
14-Aug	0	156	160	163	162	162	162	162	162	162	162	163
15-Aug	0	156	161	163	163	163	162	163	162	162	162	163
16-Aug	0	158	163	165	165	165	164	165	164	164	164	165
17-Aug	0	156	160	163	162	162	162	162	162	162	162	163
18-Aug	1	166	172	174	174	174	173	173	173	173	173	174
19-Aug	0	165	170	172	172	172	172	172	171	172	172	172
20-Aug	0	167	172	174	174	174	173	174	173	173	173	174
21-Aug	1	170	175	177	177	177	177	177	177	177	177	177
22-Aug	0	167	172	174	174	174	173	174	173	173	173	174
23-Aug	0	170	175	178	178	177	177	177	177	177	177	178
24-Aug	0	163	168	170	170	170	170	170	169	169	169	170
25-Aug	0	164	169	171	171	171	170	171	170	170	170	171
26-Aug	0	162	167	170	169	169	169	169	169	169	169	170
27-Aug	0	160	165	168	167	167	167	167	167	167	167	167
28-Aug	0	157	162	164	164	164	164	164	164	164	164	164
29-Aug	0	158	163	165	165	165	165	165	165	165	165	165
30-Aug	0	163	168	170	170	170	169	169	169	169	169	170
31-Aug	0	163	168	170	170	170	170	170	169	169	169	170
1-Sep	0	165	170	172	172	172	172	172	172	172	172	172
2-Sep	0	166	171	173	173	173	173	173	172	172	173	173
3-Sep	0	167	172	174	174	174	173	174	173	173	173	174
4-Sep	0	167	172	174	174	174	173	174	173	173	173	174
5-Sep	0	168	173	176	175	175	175	175	175	175	175	176
6-Sep	0	171	176	179	178	178	178	178	178	178	178	179
7-Sep	0	170	175	177	177	177	177	177	176	176	177	177
8-Sep	0	171	176	179	178	178	178	178	178	178	178	179
9-Sep	0	172	177	180	179	179	179	179	179	179	179	180
10-Sep	3	179	185	187	187	187	186	187	186	186	186	187
11-Sep	3	183	189	192	191	191	191	191	191	191	191	192
12-Sep	0	182	188	190	190	190	190	190	190	190	190	190
13-Sep	0	180	185	188	188	188	187	187	187	187	187	188
14-Sep	0	173	179	181	181	181	181	181	180	180	180	181
15-Sep	1	176	182	184	184	184	184	184	184	184	184	184
16-Sep	3	182	187	190	190	189	189	189	189	189	189	190
17-Sep	0	182	187	190	190	190	189	190	189	189	189	190
18-Sep	0	181	187	189	189	189	188	189	188	188	188	189
19-Sep	2	181	187	189	189	189	189	189	188	188	188	189
20-Sep	7	192	197	200	200	200	199	200	199	199	199	200
21-Sep	5	193	198	201	201	201	200	201	200	200	200	201
22-Sep	0	189	194	197	197	197	196	196	196	196	196	197
23-Sep	6	190	196	199	199	199	198	199	198	198	198	199
24-Sep	12	215	222	225	225	225	224	225	224	224	224	225
25-Sep	1	195	201	204	203	203	203	203	203	203	203	204
26-Sep	0	189	195	198	198	197	197	197	197	197	197	198
27-Sep	1	183	188	191	191	191	190	191	190	190	190	191
28-Sep	5	186	191	194	194	194	193	194	193	193	193	194
29-Sep	8	194	200	203	202	202	202	202	202	202	202	203
30-Sep	13	234	241	245	244	244	244	244	244	244	244	245
1-Oct	0	196	202	205	205	204	204	204	204	204	204	205
2-Oct	7	198	204	207	207	207	207	207	206	206	207	207
3-Oct	9	196	202	205	205	204	204	204	204	204	204	205
4-Oct	1	195	201	204	204	204	203	204	203	203	203	204
5-Oct	3	191	197	199	199	199	199	199	198	198	199	199
6-Oct	0	182	187	190	190	190	189	190	189	189	189	190
7-Oct	2	184	189	192	192	191	191	191	191	191	191	192
8-Oct	0	180	186	188	188	188	188	188	187	187	188	188
9-Oct	14	238	245	249	248	248	248	248	247	247	248	249
10-Oct	23	364	375	381	380	380	379	379	379	379	379	380
11-Oct	19	334	344	349	348	348	348	348	347	347	347	349
12-Oct	16	297	306	311	310	310	309	310	309	309	309	310
13-Oct	9	219	226	229	229	229	228	229	228	228	228	229
14-Oct	6	207	213	217	216	216	216	216	215	216	216	217
15-Oct	5	198	204	206	206	206	206	206	205	205	206	206
16-Oct	15	258	266	270	270	269	269	269	269	269	269	270
17-Oct	20	330	340	345	345	345	344	344	344	344	344	345
18-Oct	19	332	342	347	347	346	346	346	345	346	346	347
19-Oct	13	256	264	267	267	267	266	267	266	266	266	267
20-Oct	9	217	223	227	226	226	226	226	226	226	226	227
21-Oct	12	229	236	239	239	239	238	238	238	238	238	239
22-Oct	21	344	355	360	359	359	358	359	358	358	358	360
23-Oct	23	380	391	397	397	396	395	396	395	395	395	397
24-Oct	23	389	401	407	406	406	405	405	405	405	405	407
25-Oct	22	380	392	397	397	396	396	396	395	395	396	397
26-Oct	15	287	295	300	299	299	298	299	298	298	298	300
27-Oct	16	293	302	306	306	305	305	305	305	305	305	306
28-Oct	16	288	297	301	301	300	300	300	299	300	300	301
29-Oct	14	263	271	275	274	274	274	274	273	274	274	275
30-Oct	7	213	219	222	222	222	221	222	221	221	221	222

Design_AI_S05

AI		AI FT-1 (Pipeline only)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	199	205	208	207	207	207	207	207	207	207	208
Month												
Nov	697	11,731	10,520	10,841	10,997	10,981	10,971	10,951	10,964	10,942	10,944	10,949
Dec	1040	16,371	14,681	15,128	15,346	15,324	15,310	15,282	15,300	15,269	15,272	15,280
Jan	1250	18,475	16,568	17,072	17,319	17,294	17,278	17,246	17,267	17,232	17,236	17,244
Feb	1091	16,629	14,913	15,366	15,589	15,566	15,552	15,523	15,542	15,510	15,513	15,521
Mar	942	15,319	13,738	14,156	14,361	14,339	14,327	14,300	14,318	14,289	14,292	14,298
Apr	518	9,463	9,751	9,892	9,878	9,869	9,851	9,863	9,843	9,845	9,849	9,891
May	228	6,657	6,860	6,959	6,948	6,942	6,929	6,938	6,924	6,925	6,928	6,958
Jun	48	5,336	5,498	5,578	5,569	5,564	5,554	5,561	5,550	5,551	5,553	5,577
Jul	3	4,792	4,938	5,009	5,002	4,998	4,988	4,994	4,984	4,985	4,988	5,009
Aug	2	4,887	5,036	5,109	5,101	5,097	5,087	5,093	5,083	5,084	5,086	5,108
Sep	70	5,475	5,641	5,723	5,714	5,709	5,699	5,705	5,694	5,695	5,698	5,722
Oct	361	8,036	8,281	8,401	8,388	8,381	8,365	8,375	8,359	8,360	8,364	8,399
Total	**6250**	**123,171**	**116,425**	**119,233**	**120,213**	**120,063**	**119,912**	**119,832**	**119,827**	**119,688**	**119,724**	**119,954**
Peak Day	**68**	**659**	**591**	**609**	**618**	**617**	**616**	**615**	**616**	**615**	**615**	**615**

Design_AI_S05

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI FIRM_CE 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	357	346	363	377	376	373	371	368	365	363	361
2-Nov	9	288	279	293	304	304	302	299	297	295	293	292
3-Nov	14	359	348	365	379	378	375	373	370	367	365	363
4-Nov	13	344	334	350	363	362	360	357	355	352	350	348
5-Nov	20	436	423	444	460	459	456	453	450	446	443	441
6-Nov	19	431	418	439	455	454	451	447	445	441	438	436
7-Nov	16	401	389	408	423	423	420	416	414	411	408	406
8-Nov	14	364	353	371	385	384	381	378	376	373	371	369
9-Nov	20	439	426	447	464	463	460	456	454	450	447	445
10-Nov	15	382	371	389	404	403	400	397	395	392	389	387
11-Nov	15	384	372	391	405	404	401	398	396	393	390	388
12-Nov	14	365	354	372	385	385	382	379	377	374	372	369
13-Nov	20	438	425	446	463	462	459	455	452	449	446	443
14-Nov	19	432	419	440	456	455	452	449	446	442	440	437
15-Nov	24	493	478	502	521	520	516	512	509	505	502	499
16-Nov	27	542	526	552	573	572	568	563	560	555	552	549
17-Nov	19	453	439	461	478	478	474	471	468	464	461	459
18-Nov	28	559	542	569	590	589	584	580	576	572	568	565
19-Nov	30	585	567	595	617	616	612	607	603	599	595	592
20-Nov	31	611	592	622	645	644	639	634	630	625	622	618
21-Nov	31	614	596	626	649	648	643	638	634	629	625	622
22-Nov	37	683	663	696	721	720	715	709	705	700	695	691
23-Nov	41	747	724	761	789	787	782	776	771	765	760	756
24-Nov	43	784	761	799	828	827	821	815	809	803	798	794
25-Nov	45	817	792	831	862	861	854	848	843	836	831	826
26-Nov	27	598	580	609	632	631	626	621	617	613	609	605
27-Nov	17	454	441	463	480	479	476	472	469	465	463	460
28-Nov	20	457	443	465	482	481	478	474	471	468	465	462
29-Nov	24	491	476	500	518	517	514	510	507	503	500	497
30-Nov	29	568	551	579	600	599	595	590	587	582	579	575
1-Dec	20	468	454	477	494	493	490	486	483	479	476	474
2-Dec	28	562	545	572	594	593	588	584	580	576	572	569
3-Dec	29	573	556	584	606	604	600	596	592	587	584	580
4-Dec	34	647	627	658	683	681	677	672	667	662	658	654
5-Dec	25	542	526	552	573	572	568	563	560	555	552	549
6-Dec	39	704	683	717	744	742	737	731	727	721	717	713
7-Dec	28	581	563	591	613	612	608	603	599	595	591	588
8-Dec	19	473	459	482	499	499	495	491	488	484	481	479
9-Dec	29	572	555	583	604	603	599	594	590	586	582	579
10-Dec	23	499	484	508	527	526	522	518	515	511	508	505
11-Dec	20	467	453	475	493	492	488	485	482	478	475	472
12-Dec	27	542	526	552	573	572	568	563	560	555	552	549
13-Dec	27	540	524	550	571	570	566	561	558	554	550	547
14-Dec	41	730	708	743	771	769	764	758	753	747	743	738
15-Dec	45	797	773	811	841	840	834	827	822	816	811	806
16-Dec	39	745	722	758	786	785	779	773	768	763	758	754
17-Dec	32	655	636	667	692	691	686	681	676	671	667	663
18-Dec	41	751	728	764	793	791	786	780	775	769	764	760
19-Dec	32	642	622	653	678	676	671	666	662	657	653	649
20-Dec	49	846	820	861	893	891	885	878	873	866	861	856
21-Dec	51	887	860	903	937	935	928	921	916	909	903	898
22-Dec	32	675	655	687	713	712	707	701	697	691	687	683
23-Dec	21	518	502	527	547	546	542	538	534	530	527	524
24-Dec	27	555	538	565	586	585	581	576	573	568	565	561
25-Dec	41	722	700	735	763	761	756	750	745	740	735	731
26-Dec	42	759	737	773	802	800	795	789	784	778	773	769
27-Dec	51	883	856	899	932	930	924	917	911	904	899	893
28-Dec	51	902	875	919	953	951	944	937	931	924	918	913
29-Dec	32	678	657	690	716	714	709	704	699	694	690	686
30-Dec	35	691	670	704	730	729	723	718	713	708	704	700
31-Dec	30	609	591	621	644	642	638	633	629	624	620	617
1-Jan	61	991	961	1,009	1,047	1,045	1,037	1,030	1,023	1,015	1,009	1,003
2-Jan	38	738	716	752	780	778	773	767	762	756	752	747
3-Jan	23	555	539	566	587	585	581	577	573	569	565	562
4-Jan	28	577	560	588	609	608	604	599	596	591	587	584
5-Jan	19	453	439	461	478	478	474	471	468	464	461	459
6-Jan	28	560	543	570	591	590	586	581	578	573	570	567
7-Jan	38	684	663	696	722	721	716	710	706	700	696	692
8-Jan	41	745	722	758	786	785	779	773	768	763	758	754
9-Jan	41	761	738	775	803	802	796	790	785	779	774	770
10-Jan	30	621	602	632	656	655	650	645	641	636	632	629
11-Jan	43	776	752	790	819	817	812	805	800	794	789	785
12-Jan	50	865	839	881	913	912	905	898	893	886	880	875
13-Jan	41	778	755	792	822	820	814	808	803	797	792	787
14-Jan	46	838	812	853	885	883	877	870	864	858	853	848
15-Jan	43	795	771	810	840	838	832	826	821	815	810	805
16-Jan	30	637	617	648	672	671	666	661	657	652	648	644
17-Jan	40	734	712	747	775	774	768	762	758	752	747	743
18-Jan	55	923	895	940	975	973	966	959	953	945	940	934
19-Jan	68	1,115	1,082	1,136	1,178	1,176	1,167	1,158	1,151	1,142	1,135	1,129
20-Jan	54	977	947	994	1,031	1,029	1,022	1,014	1,008	1,000	994	988
21-Jan	44	851	826	867	899	897	891	884	879	872	867	862
22-Jan	34	698	676	710	737	735	730	724	720	714	710	706
23-Jan	32	648	628	660	684	683	678	673	669	663	659	656
24-Jan	44	775	752	789	818	817	811	805	800	794	789	784
25-Jan	24	546	530	556	577	576	572	567	564	559	556	553
26-Jan	41	747	724	761	789	787	782	776	771	765	760	756
27-Jan	46	805	781	820	850	849	843	836	831	825	820	815
28-Jan	32	659	639	671	696	695	690	684	680	675	671	667
29-Jan	46	821	797	836	867	866	860	853	848	841	836	831
30-Jan	47	834	809	849	881	879	873	866	861	854	849	844

Date	AI HDDd	AI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	796	772	811	841	839	833	827	822	815	810	806
1-Feb	17	477	462	485	503	502	499	495	492	488	485	483
2-Feb	28	576	559	586	608	607	603	598	594	590	586	583
3-Feb	45	768	745	782	811	810	804	798	793	787	782	777
4-Feb	45	803	779	818	848	846	840	834	829	822	817	813
5-Feb	56	960	931	978	1,014	1,012	1,005	997	991	984	978	972
6-Feb	56	974	945	992	1,029	1,027	1,019	1,012	1,005	998	991	986
7-Feb	57	993	963	1,011	1,049	1,047	1,039	1,032	1,025	1,017	1,011	1,005
8-Feb	42	815	791	830	861	859	853	847	841	835	830	825
9-Feb	44	823	798	838	869	867	861	854	849	843	837	833
10-Feb	39	745	722	758	786	785	779	773	768	763	758	754
11-Feb	42	778	755	792	822	820	814	808	803	797	792	787
12-Feb	37	714	692	727	754	752	747	741	736	731	726	722
13-Feb	43	786	762	800	829	828	822	816	811	804	800	795
14-Feb	45	805	780	819	850	848	842	836	831	824	819	814
15-Feb	32	660	640	672	697	696	691	686	681	676	672	668
16-Feb	33	659	639	671	696	695	690	684	680	675	671	667
17-Feb	35	669	649	681	706	705	700	695	690	685	681	677
18-Feb	31	623	604	634	658	657	652	647	643	638	634	631
19-Feb	37	695	674	708	734	732	727	722	717	712	707	703
20-Feb	22	511	496	521	540	539	535	531	528	524	521	518
21-Feb	39	704	683	717	744	742	737	731	727	721	717	713
22-Feb	43	763	740	777	806	804	799	793	788	782	777	772
23-Feb	22	529	513	538	558	557	553	549	546	542	538	535
24-Feb	35	669	649	681	706	705	700	695	690	685	681	677
25-Feb	43	758	735	772	801	799	793	787	782	776	772	767
26-Feb	43	784	761	799	828	827	821	815	809	803	798	794
27-Feb	41	769	746	783	812	811	805	799	794	788	783	779
28-Feb	39	735	713	749	776	775	769	764	759	753	748	744
1-Mar	47	836	811	852	883	882	875	869	863	857	851	846
2-Mar	32	658	638	670	695	693	688	683	679	674	670	666
3-Mar	43	786	762	800	829	828	822	816	811	804	800	795
4-Mar	42	768	745	782	811	810	804	798	793	787	782	777
5-Mar	27	595	577	605	628	627	622	617	614	609	605	602
6-Mar	36	686	666	699	725	723	718	713	708	703	699	695
7-Mar	32	622	604	634	657	656	651	646	642	637	634	630
8-Mar	41	747	724	761	789	787	782	776	771	765	760	756
9-Mar	45	803	779	818	848	846	840	834	829	822	817	813
10-Mar	46	831	806	847	878	876	870	863	858	851	846	841
11-Mar	21	528	512	537	557	556	552	548	545	540	537	534
12-Mar	16	436	423	444	460	459	456	453	450	446	444	441
13-Mar	22	473	459	482	499	498	495	491	488	484	481	479
14-Mar	20	443	429	451	467	466	463	460	457	453	450	448
15-Mar	25	516	501	526	545	544	540	536	533	529	526	523
16-Mar	27	545	528	555	575	574	570	566	562	558	555	551
17-Mar	35	653	633	665	689	688	683	678	674	669	664	661
18-Mar	27	566	549	576	598	597	592	588	584	580	576	573
19-Mar	28	578	561	589	611	610	605	601	597	592	589	585
20-Mar	28	570	552	580	602	600	596	592	588	583	580	577
21-Mar	28	564	547	574	596	595	590	586	582	578	574	571
22-Mar	21	484	470	493	511	510	507	503	500	496	493	490
23-Mar	24	513	497	522	541	540	536	532	529	525	522	519
24-Mar	29	570	552	580	602	600	596	592	588	583	580	577
25-Mar	21	480	466	489	507	506	503	499	496	492	489	486
26-Mar	26	539	522	548	569	568	564	559	556	552	548	545
27-Mar	41	721	699	734	761	760	754	749	744	738	734	730
28-Mar	42	751	729	765	793	792	786	780	775	769	765	760
29-Mar	29	617	598	628	651	650	646	641	637	632	628	624
30-Mar	20	490	476	499	518	517	513	509	506	502	499	496
31-Mar	21	475	461	484	502	501	498	494	491	487	484	481
1-Apr	23	488	512	531	530	526	522	519	515	512	509	507
2-Apr	24	505	530	550	549	545	541	538	533	530	527	525
3-Apr	25	523	549	569	568	564	560	556	552	548	545	543
4-Apr	21	475	499	518	517	513	509	506	502	499	496	494
5-Apr	39	688	722	749	748	742	737	732	727	722	718	715
6-Apr	31	613	644	668	666	662	657	652	647	644	640	637
7-Apr	19	477	501	519	518	514	511	507	503	500	497	495
8-Apr	29	576	605	627	626	621	617	613	608	604	601	598
9-Apr	12	363	381	395	394	391	388	386	383	381	378	377
10-Apr	22	478	502	520	519	516	512	509	505	502	499	496
11-Apr	21	457	480	497	496	493	489	486	482	479	477	475
12-Apr	19	436	458	475	474	471	467	464	461	458	455	453
13-Apr	7	291	305	316	316	314	311	309	307	305	303	302
14-Apr	15	372	391	406	405	402	399	396	393	391	389	387
15-Apr	17	392	412	427	426	423	420	417	414	412	409	408
16-Apr	21	454	477	495	494	490	487	483	480	477	474	472
17-Apr	21	462	485	503	502	498	495	491	488	485	482	480
18-Apr	13	368	386	400	399	397	394	391	388	386	384	382
19-Apr	15	376	394	409	408	405	402	400	397	394	392	390
20-Apr	5	251	263	273	273	271	269	267	265	263	262	261
21-Apr	14	353	370	384	383	380	378	375	372	370	368	366
22-Apr	7	265	278	288	288	285	283	282	279	278	276	275
23-Apr	15	366	385	399	398	395	392	390	387	384	382	380
24-Apr	15	367	386	400	399	397	394	391	388	386	384	382
25-Apr	14	365	383	397	397	394	391	388	385	383	381	379
26-Apr	10	307	323	335	334	332	329	327	325	323	321	319
27-Apr	7	271	284	295	294	292	290	288	286	284	283	281
28-Apr	8	274	288	299	298	296	294	292	290	288	286	285
29-Apr	13	334	351	364	363	360	358	355	353	351	349	347
30-Apr	16	379	398	412	412	409	406	403	400	397	395	393
1-May	0	302	317	329	328	326	323	321	319	317	315	314

Design_AI_S05

Date	AI HDDd	AI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	309	325	337	336	334	331	329	327	325	323	321
3-May	0	295	310	321	321	318	316	314	311	310	308	306
4-May	0	303	318	330	329	327	324	322	320	318	316	315
5-May	6	253	266	276	275	273	271	270	268	266	264	263
6-May	17	385	404	419	418	415	412	410	406	404	402	400
7-May	23	468	491	510	509	505	501	498	494	491	488	486
8-May	14	377	396	411	410	407	404	402	399	396	394	392
9-May	13	361	379	393	393	390	387	385	382	379	377	375
10-May	2	232	244	253	253	251	249	247	245	244	243	241
11-May	0	260	273	283	282	280	278	276	274	272	271	270
12-May	0	252	265	275	274	272	270	268	266	265	263	262
13-May	3	223	234	243	243	241	239	238	236	234	233	232
14-May	8	266	279	289	289	287	285	283	281	279	277	276
15-May	12	317	332	345	344	342	339	337	334	332	330	329
16-May	17	390	409	424	424	421	417	415	412	409	407	405
17-May	12	332	349	362	361	358	356	353	351	349	347	345
18-May	12	339	356	369	368	366	363	361	358	356	354	352
19-May	1	235	247	256	256	254	252	251	249	247	246	245
20-May	8	270	283	293	293	291	289	287	285	283	281	280
21-May	9	277	291	302	301	299	297	295	292	291	289	288
22-May	9	287	301	312	312	310	307	305	303	301	299	298
23-May	8	276	289	300	300	298	295	293	291	289	288	286
24-May	10	292	307	318	318	316	313	311	309	307	305	304
25-May	7	263	276	287	286	284	282	280	278	276	275	274
26-May	7	262	275	285	285	283	281	279	277	275	273	272
27-May	1	223	234	243	242	241	239	237	236	234	233	232
28-May	5	226	237	246	246	244	242	241	239	237	236	235
29-May	3	213	224	232	232	230	228	227	225	224	223	222
30-May	9	276	289	300	300	297	295	293	291	289	288	286
31-May	12	311	327	339	338	336	333	331	328	326	325	323
1-Jun	6	255	267	277	277	275	273	271	269	267	266	265
2-Jun	7	263	276	287	286	284	282	280	278	276	275	274
3-Jun	2	222	233	242	241	239	238	236	234	233	232	231
4-Jun	0	217	228	236	236	234	232	231	229	228	226	225
5-Jun	0	209	220	228	228	226	224	223	221	220	219	218
6-Jun	0	208	219	227	226	225	223	222	220	219	217	216
7-Jun	0	203	213	221	220	219	217	216	214	213	211	210
8-Jun	0	209	220	228	227	226	224	223	221	220	218	217
9-Jun	0	204	214	222	222	220	219	217	216	214	213	212
10-Jun	0	200	210	218	218	216	215	213	212	210	209	208
11-Jun	0	199	209	217	216	215	213	212	210	209	208	207
12-Jun	0	198	208	216	215	214	212	211	209	208	207	206
13-Jun	0	201	211	218	218	216	215	213	212	210	209	208
14-Jun	0	196	206	214	213	212	210	209	207	206	205	204
15-Jun	9	262	275	285	285	283	281	279	277	275	273	272
16-Jun	7	250	262	272	271	269	267	266	264	262	261	259
17-Jun	1	226	237	246	245	243	242	240	238	237	235	234
18-Jun	5	226	237	246	246	244	242	241	239	237	236	235
19-Jun	6	236	248	257	256	255	253	251	249	248	246	245
20-Jun	5	230	241	250	250	248	246	245	243	241	240	239
21-Jun	0	212	223	231	230	229	227	226	224	223	221	220
22-Jun	0	205	215	223	223	221	220	218	217	215	214	213
23-Jun	0	193	202	210	210	208	206	205	204	202	201	200
24-Jun	0	193	202	210	210	208	206	205	204	202	201	200
25-Jun	0	193	202	210	210	208	206	205	204	202	201	200
26-Jun	0	193	202	210	209	208	206	205	203	202	201	200
27-Jun	0	190	200	207	207	205	204	202	201	200	198	198
28-Jun	0	181	190	197	196	195	194	192	191	190	189	188
29-Jun	0	188	197	204	204	203	201	200	198	197	196	195
30-Jun	0	189	198	206	205	204	202	201	200	198	197	196
1-Jul	0	190	200	207	207	205	204	202	201	200	199	198
2-Jul	0	190	200	207	207	205	204	202	201	200	199	198
3-Jul	0	190	200	207	207	205	204	202	201	200	198	198
4-Jul	0	189	198	206	205	204	202	201	199	198	197	196
5-Jul	0	180	189	196	195	194	192	191	190	188	187	187
6-Jul	1	187	196	204	203	202	200	199	198	196	195	194
7-Jul	2	198	208	216	216	214	212	211	209	208	207	206
8-Jul	0	209	219	227	227	225	223	222	220	219	218	217
9-Jul	0	196	206	214	213	212	210	209	207	206	205	204
10-Jul	0	181	190	197	197	196	194	193	191	190	189	188
11-Jul	0	180	189	196	196	194	193	192	190	189	188	187
12-Jul	0	176	185	191	191	190	188	187	186	185	183	183
13-Jul	0	186	196	203	203	201	200	198	197	196	194	194
14-Jul	0	186	196	203	202	201	199	198	197	195	194	193
15-Jul	0	184	193	200	200	198	197	196	194	193	192	191
16-Jul	0	182	192	199	198	197	195	194	193	192	190	190
17-Jul	0	181	190	197	197	195	194	193	191	190	189	188
18-Jul	0	179	187	194	194	193	191	190	189	187	186	186
19-Jul	0	169	178	184	184	183	181	180	179	178	177	176
20-Jul	0	176	185	192	192	190	189	188	186	185	184	183
21-Jul	0	179	188	195	194	193	191	190	189	188	186	186
22-Jul	0	179	188	195	194	193	191	190	189	188	187	186
23-Jul	0	179	188	195	194	193	191	190	189	188	187	186
24-Jul	0	181	190	197	197	196	194	193	191	190	189	188
25-Jul	0	183	192	199	198	197	195	194	193	192	190	190
26-Jul	0	176	185	191	191	190	188	187	186	184	183	183
27-Jul	0	184	193	200	200	198	197	196	194	193	192	191
28-Jul	0	184	193	200	200	198	197	196	194	193	192	191
29-Jul	0	183	192	199	198	197	195	194	193	192	190	190
30-Jul	0	183	192	199	198	197	195	194	193	192	190	190
31-Jul	0	183	192	199	198	197	196	194	193	192	191	190

Design_AI_S05

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI FIRM_CE 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	184	193	200	200	198	197	195	194	193	192	191
2-Aug	0	176	184	191	191	189	188	187	185	184	183	182
3-Aug	0	179	188	195	194	193	191	190	189	188	186	186
4-Aug	0	177	186	193	193	191	190	189	187	186	185	184
5-Aug	0	177	186	193	193	192	190	189	187	186	185	184
6-Aug	0	179	188	195	194	193	192	190	189	188	187	186
7-Aug	0	183	192	199	198	197	196	194	193	192	191	190
8-Aug	0	185	194	201	201	200	198	197	195	194	193	192
9-Aug	0	177	186	193	192	191	189	188	187	186	185	184
10-Aug	0	183	192	199	198	197	195	194	193	192	190	190
11-Aug	0	183	192	199	198	197	195	194	193	192	190	190
12-Aug	0	183	192	199	199	197	196	194	193	192	191	190
13-Aug	0	185	194	202	201	200	198	197	195	194	193	192
14-Aug	0	186	196	203	203	201	200	198	197	196	194	194
15-Aug	0	185	194	202	201	200	198	197	196	194	193	192
16-Aug	0	179	188	195	195	194	192	191	190	188	187	186
17-Aug	0	186	196	203	203	201	200	198	197	196	194	194
18-Aug	1	186	195	202	202	200	199	198	196	195	194	193
19-Aug	0	196	206	214	213	212	210	209	207	206	205	204
20-Aug	0	199	209	217	216	215	213	212	210	209	208	207
21-Aug	1	191	200	208	207	206	204	203	201	200	199	198
22-Aug	0	199	209	217	216	215	213	212	210	209	208	207
23-Aug	0	192	202	209	209	207	206	204	203	202	201	200
24-Aug	0	192	201	209	208	207	205	204	202	201	200	199
25-Aug	0	193	202	210	210	208	206	205	204	202	201	200
26-Aug	0	193	202	210	209	208	206	205	203	202	201	200
27-Aug	0	191	201	208	208	207	205	204	202	201	200	199
28-Aug	0	189	198	206	205	204	202	201	199	198	197	196
29-Aug	0	186	196	203	203	201	200	198	197	196	195	194
30-Aug	0	181	190	197	197	195	194	193	191	190	189	188
31-Aug	0	192	201	209	208	207	205	204	202	201	200	199
1-Sep	0	193	202	210	210	208	207	205	204	202	201	200
2-Sep	0	194	204	211	211	209	208	207	205	204	203	202
3-Sep	0	195	205	213	212	211	209	208	206	205	204	203
4-Sep	0	195	205	213	212	211	209	208	206	205	204	203
5-Sep	0	195	205	213	212	211	209	208	206	205	204	203
6-Sep	0	190	199	207	206	205	203	202	200	199	198	197
7-Sep	0	198	208	215	215	214	212	211	209	208	207	206
8-Sep	0	198	208	216	215	214	212	211	209	208	207	206
9-Sep	0	199	209	217	217	215	213	212	210	209	208	207
10-Sep	3	201	211	219	218	217	215	214	212	211	210	209
11-Sep	3	207	217	225	225	223	222	220	219	217	216	215
12-Sep	0	213	224	232	231	230	228	227	225	224	222	221
13-Sep	0	201	211	219	219	217	215	214	212	211	210	209
14-Sep	0	202	212	220	219	218	216	215	213	212	210	210
15-Sep	1	201	211	219	218	217	215	214	212	211	209	208
16-Sep	3	205	215	223	222	221	219	218	216	215	213	213
17-Sep	0	211	221	229	229	227	226	224	222	221	220	219
18-Sep	0	211	221	229	229	227	226	224	222	221	220	219
19-Sep	2	208	219	227	226	225	223	222	220	219	217	216
20-Sep	7	238	250	259	258	257	255	253	251	250	248	247
21-Sep	5	227	239	248	247	245	243	242	240	239	237	236
22-Sep	0	221	232	240	240	238	236	235	233	232	230	229
23-Sep	6	236	248	257	256	255	253	251	249	248	246	245
24-Sep	12	312	327	339	339	336	334	332	329	327	325	324
25-Sep	1	228	239	248	248	246	244	243	241	239	238	237
26-Sep	0	222	233	242	241	240	238	236	234	233	232	231
27-Sep	1	204	214	222	221	220	218	217	215	214	213	212
28-Sep	5	221	232	241	240	239	237	235	234	232	231	230
29-Sep	8	261	274	284	283	281	279	278	275	274	272	271
30-Sep	13	332	348	361	360	358	355	353	350	348	346	344
1-Oct	0	267	280	291	290	288	286	284	282	280	279	277
2-Oct	7	266	279	289	289	287	285	283	281	279	277	276
3-Oct	9	283	297	308	308	306	303	301	299	297	295	294
4-Oct	1	219	230	238	238	236	234	233	231	230	228	227
5-Oct	3	218	229	238	237	235	234	232	230	229	228	227
6-Oct	0	258	271	281	281	279	277	275	273	271	270	268
7-Oct	2	219	230	239	238	237	235	233	232	230	229	228
8-Oct	0	278	292	303	302	300	298	296	294	292	290	289
9-Oct	14	341	358	372	371	368	366	363	361	358	356	355
10-Oct	23	468	491	510	509	505	501	498	494	491	488	486
11-Oct	19	429	450	467	466	463	459	456	453	450	448	446
12-Oct	16	405	425	441	440	437	433	431	427	425	422	420
13-Oct	9	309	325	337	336	334	331	329	327	325	323	321
14-Oct	6	260	273	283	282	280	278	276	274	272	271	270
15-Oct	5	235	247	256	255	253	251	250	248	246	245	244
16-Oct	15	354	371	385	385	382	379	377	374	371	369	368
17-Oct	20	427	448	465	464	461	457	454	451	448	446	444
18-Oct	19	426	448	464	463	460	457	454	450	448	445	443
19-Oct	13	364	382	396	395	393	390	387	384	382	380	378
20-Oct	9	306	321	333	332	330	327	325	323	321	319	317
21-Oct	12	330	347	360	359	356	354	351	349	347	345	343
22-Oct	21	441	463	480	479	476	472	469	465	463	460	458
23-Oct	23	480	504	523	522	518	514	511	507	504	501	499
24-Oct	23	494	519	538	537	533	529	526	522	519	516	513
25-Oct	22	477	501	520	519	515	511	508	504	501	498	496
26-Oct	15	396	416	431	430	427	424	421	418	416	413	411
27-Oct	16	399	418	434	433	430	427	424	421	418	416	414
28-Oct	16	391	411	426	425	422	419	416	413	410	408	406
29-Oct	14	368	386	400	399	397	394	391	388	386	384	382
30-Oct	7	278	292	303	302	300	298	296	294	292	290	289

Design_AI_S05

Date	AI HDDd	AI FIRM_CE 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	232	243	252	252	250	248	247	245	243	242	241
Month												
Nov	697	14,877	14,428	15,148	15,710	15,680	15,569	15,451	15,354	15,236	15,143	15,056
Dec	1040	20,216	19,605	20,584	21,347	21,307	21,156	20,995	20,864	20,703	20,577	20,459
Jan	1250	23,304	22,600	23,728	24,608	24,562	24,387	24,202	24,051	23,865	23,720	23,585
Feb	1091	20,546	19,925	20,920	21,696	21,655	21,501	21,338	21,205	21,041	20,913	20,794
Mar	942	18,844	18,275	19,187	19,899	19,861	19,720	19,571	19,448	19,298	19,181	19,071
Apr	518	12,325	12,940	13,420	13,395	13,300	13,199	13,116	13,015	12,936	12,862	12,804
May	228	9,076	9,529	9,883	9,864	9,794	9,720	9,659	9,584	9,526	9,471	9,429
Jun	48	6,349	6,666	6,914	6,901	6,852	6,800	6,757	6,705	6,664	6,626	6,596
Jul	3	5,701	5,986	6,208	6,196	6,152	6,106	6,067	6,021	5,984	5,950	5,923
Aug	2	5,766	6,053	6,278	6,266	6,221	6,174	6,136	6,088	6,051	6,017	5,990
Sep	70	6,517	6,842	7,096	7,083	7,032	6,979	6,935	6,882	6,840	6,801	6,770
Oct	361	10,618	11,148	11,561	11,539	11,457	11,371	11,299	11,212	11,144	11,080	11,030
Total	**6250**	**154,138**	**153,998**	**160,928**	**164,504**	**163,873**	**162,680**	**161,527**	**160,428**	**159,288**	**158,341**	**157,507**
Peak Day	**68**	**1,115**	**1,082**	**1,136**	**1,178**	**1,176**	**1,167**	**1,158**	**1,151**	**1,142**	**1,135**	**1,129**

Design_AI_S05

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI NFS+NFT 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	0	0	0	0	0	0	0	0	0	0	0
2-Nov	9	0	0	0	0	0	0	0	0	0	0	0
3-Nov	14	0	0	0	0	0	0	0	0	0	0	0
4-Nov	13	0	0	0	0	0	0	0	0	0	0	0
5-Nov	20	0	0	0	0	0	0	0	0	0	0	0
6-Nov	19	0	0	0	0	0	0	0	0	0	0	0
7-Nov	16	0	0	0	0	0	0	0	0	0	0	0
8-Nov	14	0	0	0	0	0	0	0	0	0	0	0
9-Nov	20	0	0	0	0	0	0	0	0	0	0	0
10-Nov	15	0	0	0	0	0	0	0	0	0	0	0
11-Nov	15	0	0	0	0	0	0	0	0	0	0	0
12-Nov	14	0	0	0	0	0	0	0	0	0	0	0
13-Nov	20	0	0	0	0	0	0	0	0	0	0	0
14-Nov	19	0	0	0	0	0	0	0	0	0	0	0
15-Nov	24	0	0	0	0	0	0	0	0	0	0	0
16-Nov	27	0	0	0	0	0	0	0	0	0	0	0
17-Nov	19	0	0	0	0	0	0	0	0	0	0	0
18-Nov	28	0	0	0	0	0	0	0	0	0	0	0
19-Nov	30	0	0	0	0	0	0	0	0	0	0	0
20-Nov	31	0	0	0	0	0	0	0	0	0	0	0
21-Nov	31	0	0	0	0	0	0	0	0	0	0	0
22-Nov	37	0	0	0	0	0	0	0	0	0	0	0
23-Nov	41	0	0	0	0	0	0	0	0	0	0	0
24-Nov	43	0	0	0	0	0	0	0	0	0	0	0
25-Nov	45	0	0	0	0	0	0	0	0	0	0	0
26-Nov	27	0	0	0	0	0	0	0	0	0	0	0
27-Nov	17	0	0	0	0	0	0	0	0	0	0	0
28-Nov	20	0	0	0	0	0	0	0	0	0	0	0
29-Nov	24	0	0	0	0	0	0	0	0	0	0	0
30-Nov	29	0	0	0	0	0	0	0	0	0	0	0
1-Dec	20	0	0	0	0	0	0	0	0	0	0	0
2-Dec	28	0	0	0	0	0	0	0	0	0	0	0
3-Dec	29	0	0	0	0	0	0	0	0	0	0	0
4-Dec	34	0	0	0	0	0	0	0	0	0	0	0
5-Dec	25	0	0	0	0	0	0	0	0	0	0	0
6-Dec	39	0	0	0	0	0	0	0	0	0	0	0
7-Dec	28	0	0	0	0	0	0	0	0	0	0	0
8-Dec	19	0	0	0	0	0	0	0	0	0	0	0
9-Dec	29	0	0	0	0	0	0	0	0	0	0	0
10-Dec	23	0	0	0	0	0	0	0	0	0	0	0
11-Dec	20	0	0	0	0	0	0	0	0	0	0	0
12-Dec	27	0	0	0	0	0	0	0	0	0	0	0
13-Dec	27	0	0	0	0	0	0	0	0	0	0	0
14-Dec	41	0	0	0	0	0	0	0	0	0	0	0
15-Dec	45	0	0	0	0	0	0	0	0	0	0	0
16-Dec	39	0	0	0	0	0	0	0	0	0	0	0
17-Dec	32	0	0	0	0	0	0	0	0	0	0	0
18-Dec	41	0	0	0	0	0	0	0	0	0	0	0
19-Dec	32	0	0	0	0	0	0	0	0	0	0	0
20-Dec	49	0	0	0	0	0	0	0	0	0	0	0
21-Dec	51	0	0	0	0	0	0	0	0	0	0	0
22-Dec	32	0	0	0	0	0	0	0	0	0	0	0
23-Dec	21	0	0	0	0	0	0	0	0	0	0	0
24-Dec	27	0	0	0	0	0	0	0	0	0	0	0
25-Dec	41	0	0	0	0	0	0	0	0	0	0	0
26-Dec	42	0	0	0	0	0	0	0	0	0	0	0
27-Dec	51	0	0	0	0	0	0	0	0	0	0	0
28-Dec	51	0	0	0	0	0	0	0	0	0	0	0
29-Dec	32	0	0	0	0	0	0	0	0	0	0	0
30-Dec	35	0	0	0	0	0	0	0	0	0	0	0
31-Dec	30	0	0	0	0	0	0	0	0	0	0	0
1-Jan	61	0	0	0	0	0	0	0	0	0	0	0
2-Jan	38	0	0	0	0	0	0	0	0	0	0	0
3-Jan	23	0	0	0	0	0	0	0	0	0	0	0
4-Jan	28	0	0	0	0	0	0	0	0	0	0	0
5-Jan	19	0	0	0	0	0	0	0	0	0	0	0
6-Jan	28	0	0	0	0	0	0	0	0	0	0	0
7-Jan	38	0	0	0	0	0	0	0	0	0	0	0
8-Jan	41	0	0	0	0	0	0	0	0	0	0	0
9-Jan	41	0	0	0	0	0	0	0	0	0	0	0
10-Jan	30	0	0	0	0	0	0	0	0	0	0	0
11-Jan	43	0	0	0	0	0	0	0	0	0	0	0
12-Jan	50	0	0	0	0	0	0	0	0	0	0	0
13-Jan	41	0	0	0	0	0	0	0	0	0	0	0
14-Jan	46	0	0	0	0	0	0	0	0	0	0	0
15-Jan	43	0	0	0	0	0	0	0	0	0	0	0
16-Jan	30	0	0	0	0	0	0	0	0	0	0	0
17-Jan	40	0	0	0	0	0	0	0	0	0	0	0
18-Jan	55	0	0	0	0	0	0	0	0	0	0	0
19-Jan	68	0	0	0	0	0	0	0	0	0	0	0
20-Jan	54	0	0	0	0	0	0	0	0	0	0	0
21-Jan	44	0	0	0	0	0	0	0	0	0	0	0
22-Jan	34	0	0	0	0	0	0	0	0	0	0	0
23-Jan	32	0	0	0	0	0	0	0	0	0	0	0
24-Jan	44	0	0	0	0	0	0	0	0	0	0	0
25-Jan	24	0	0	0	0	0	0	0	0	0	0	0
26-Jan	41	0	0	0	0	0	0	0	0	0	0	0
27-Jan	46	0	0	0	0	0	0	0	0	0	0	0
28-Jan	32	0	0	0	0	0	0	0	0	0	0	0
29-Jan	46	0	0	0	0	0	0	0	0	0	0	0
30-Jan	47	0	0	0	0	0	0	0	0	0	0	0

Design_AI_S05

Date	AI HDDd	AI NFS+NFT 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	0	0	0	0	0	0	0	0	0	0	0
1-Feb	17	0	0	0	0	0	0	0	0	0	0	0
2-Feb	28	0	0	0	0	0	0	0	0	0	0	0
3-Feb	45	0	0	0	0	0	0	0	0	0	0	0
4-Feb	45	0	0	0	0	0	0	0	0	0	0	0
5-Feb	56	0	0	0	0	0	0	0	0	0	0	0
6-Feb	56	0	0	0	0	0	0	0	0	0	0	0
7-Feb	57	0	0	0	0	0	0	0	0	0	0	0
8-Feb	42	0	0	0	0	0	0	0	0	0	0	0
9-Feb	44	0	0	0	0	0	0	0	0	0	0	0
10-Feb	39	0	0	0	0	0	0	0	0	0	0	0
11-Feb	42	0	0	0	0	0	0	0	0	0	0	0
12-Feb	37	0	0	0	0	0	0	0	0	0	0	0
13-Feb	43	0	0	0	0	0	0	0	0	0	0	0
14-Feb	45	0	0	0	0	0	0	0	0	0	0	0
15-Feb	32	0	0	0	0	0	0	0	0	0	0	0
16-Feb	33	0	0	0	0	0	0	0	0	0	0	0
17-Feb	35	0	0	0	0	0	0	0	0	0	0	0
18-Feb	31	0	0	0	0	0	0	0	0	0	0	0
19-Feb	37	0	0	0	0	0	0	0	0	0	0	0
20-Feb	22	0	0	0	0	0	0	0	0	0	0	0
21-Feb	39	0	0	0	0	0	0	0	0	0	0	0
22-Feb	43	0	0	0	0	0	0	0	0	0	0	0
23-Feb	22	0	0	0	0	0	0	0	0	0	0	0
24-Feb	35	0	0	0	0	0	0	0	0	0	0	0
25-Feb	43	0	0	0	0	0	0	0	0	0	0	0
26-Feb	43	0	0	0	0	0	0	0	0	0	0	0
27-Feb	41	0	0	0	0	0	0	0	0	0	0	0
28-Feb	39	0	0	0	0	0	0	0	0	0	0	0
1-Mar	47	0	0	0	0	0	0	0	0	0	0	0
2-Mar	32	0	0	0	0	0	0	0	0	0	0	0
3-Mar	43	0	0	0	0	0	0	0	0	0	0	0
4-Mar	42	0	0	0	0	0	0	0	0	0	0	0
5-Mar	27	0	0	0	0	0	0	0	0	0	0	0
6-Mar	36	0	0	0	0	0	0	0	0	0	0	0
7-Mar	32	0	0	0	0	0	0	0	0	0	0	0
8-Mar	41	0	0	0	0	0	0	0	0	0	0	0
9-Mar	45	0	0	0	0	0	0	0	0	0	0	0
10-Mar	46	0	0	0	0	0	0	0	0	0	0	0
11-Mar	21	0	0	0	0	0	0	0	0	0	0	0
12-Mar	16	0	0	0	0	0	0	0	0	0	0	0
13-Mar	22	0	0	0	0	0	0	0	0	0	0	0
14-Mar	20	0	0	0	0	0	0	0	0	0	0	0
15-Mar	25	0	0	0	0	0	0	0	0	0	0	0
16-Mar	27	0	0	0	0	0	0	0	0	0	0	0
17-Mar	35	0	0	0	0	0	0	0	0	0	0	0
18-Mar	27	0	0	0	0	0	0	0	0	0	0	0
19-Mar	28	0	0	0	0	0	0	0	0	0	0	0
20-Mar	28	0	0	0	0	0	0	0	0	0	0	0
21-Mar	28	0	0	0	0	0	0	0	0	0	0	0
22-Mar	21	0	0	0	0	0	0	0	0	0	0	0
23-Mar	24	0	0	0	0	0	0	0	0	0	0	0
24-Mar	29	0	0	0	0	0	0	0	0	0	0	0
25-Mar	21	0	0	0	0	0	0	0	0	0	0	0
26-Mar	26	0	0	0	0	0	0	0	0	0	0	0
27-Mar	41	0	0	0	0	0	0	0	0	0	0	0
28-Mar	42	0	0	0	0	0	0	0	0	0	0	0
29-Mar	29	0	0	0	0	0	0	0	0	0	0	0
30-Mar	20	0	0	0	0	0	0	0	0	0	0	0
31-Mar	21	0	0	0	0	0	0	0	0	0	0	0
1-Apr	23	0	0	0	0	0	0	0	0	0	0	0
2-Apr	24	0	0	0	0	0	0	0	0	0	0	0
3-Apr	25	0	0	0	0	0	0	0	0	0	0	0
4-Apr	21	0	0	0	0	0	0	0	0	0	0	0
5-Apr	39	0	0	0	0	0	0	0	0	0	0	0
6-Apr	31	0	0	0	0	0	0	0	0	0	0	0
7-Apr	19	0	0	0	0	0	0	0	0	0	0	0
8-Apr	29	0	0	0	0	0	0	0	0	0	0	0
9-Apr	12	0	0	0	0	0	0	0	0	0	0	0
10-Apr	22	0	0	0	0	0	0	0	0	0	0	0
11-Apr	21	0	0	0	0	0	0	0	0	0	0	0
12-Apr	19	0	0	0	0	0	0	0	0	0	0	0
13-Apr	7	0	0	0	0	0	0	0	0	0	0	0
14-Apr	15	0	0	0	0	0	0	0	0	0	0	0
15-Apr	17	0	0	0	0	0	0	0	0	0	0	0
16-Apr	21	0	0	0	0	0	0	0	0	0	0	0
17-Apr	21	0	0	0	0	0	0	0	0	0	0	0
18-Apr	13	0	0	0	0	0	0	0	0	0	0	0
19-Apr	15	0	0	0	0	0	0	0	0	0	0	0
20-Apr	5	0	0	0	0	0	0	0	0	0	0	0
21-Apr	14	0	0	0	0	0	0	0	0	0	0	0
22-Apr	7	0	0	0	0	0	0	0	0	0	0	0
23-Apr	15	0	0	0	0	0	0	0	0	0	0	0
24-Apr	15	0	0	0	0	0	0	0	0	0	0	0
25-Apr	14	0	0	0	0	0	0	0	0	0	0	0
26-Apr	10	0	0	0	0	0	0	0	0	0	0	0
27-Apr	7	0	0	0	0	0	0	0	0	0	0	0
28-Apr	8	0	0	0	0	0	0	0	0	0	0	0
29-Apr	13	0	0	0	0	0	0	0	0	0	0	0
30-Apr	16	0	0	0	0	0	0	0	0	0	0	0
1-May	0	0	0	0	0	0	0	0	0	0	0	0

	AI						AI NFS+NFT					
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	0	0	0	0	0	0	0	0	0	0	0
3-May	0	0	0	0	0	0	0	0	0	0	0	0
4-May	0	0	0	0	0	0	0	0	0	0	0	0
5-May	6	0	0	0	0	0	0	0	0	0	0	0
6-May	17	0	0	0	0	0	0	0	0	0	0	0
7-May	23	0	0	0	0	0	0	0	0	0	0	0
8-May	14	0	0	0	0	0	0	0	0	0	0	0
9-May	13	0	0	0	0	0	0	0	0	0	0	0
10-May	2	0	0	0	0	0	0	0	0	0	0	0
11-May	0	0	0	0	0	0	0	0	0	0	0	0
12-May	0	0	0	0	0	0	0	0	0	0	0	0
13-May	3	0	0	0	0	0	0	0	0	0	0	0
14-May	8	0	0	0	0	0	0	0	0	0	0	0
15-May	12	0	0	0	0	0	0	0	0	0	0	0
16-May	17	0	0	0	0	0	0	0	0	0	0	0
17-May	12	0	0	0	0	0	0	0	0	0	0	0
18-May	12	0	0	0	0	0	0	0	0	0	0	0
19-May	1	0	0	0	0	0	0	0	0	0	0	0
20-May	8	0	0	0	0	0	0	0	0	0	0	0
21-May	9	0	0	0	0	0	0	0	0	0	0	0
22-May	9	0	0	0	0	0	0	0	0	0	0	0
23-May	8	0	0	0	0	0	0	0	0	0	0	0
24-May	10	0	0	0	0	0	0	0	0	0	0	0
25-May	7	0	0	0	0	0	0	0	0	0	0	0
26-May	7	0	0	0	0	0	0	0	0	0	0	0
27-May	1	0	0	0	0	0	0	0	0	0	0	0
28-May	5	0	0	0	0	0	0	0	0	0	0	0
29-May	3	0	0	0	0	0	0	0	0	0	0	0
30-May	9	0	0	0	0	0	0	0	0	0	0	0
31-May	12	0	0	0	0	0	0	0	0	0	0	0
1-Jun	6	0	0	0	0	0	0	0	0	0	0	0
2-Jun	7	0	0	0	0	0	0	0	0	0	0	0
3-Jun	2	0	0	0	0	0	0	0	0	0	0	0
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0
9-Jun	0	0	0	0	0	0	0	0	0	0	0	0
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0
12-Jun	0	0	0	0	0	0	0	0	0	0	0	0
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0
14-Jun	0	0	0	0	0	0	0	0	0	0	0	0
15-Jun	9	0	0	0	0	0	0	0	0	0	0	0
16-Jun	7	0	0	0	0	0	0	0	0	0	0	0
17-Jun	1	0	0	0	0	0	0	0	0	0	0	0
18-Jun	5	0	0	0	0	0	0	0	0	0	0	0
19-Jun	6	0	0	0	0	0	0	0	0	0	0	0
20-Jun	5	0	0	0	0	0	0	0	0	0	0	0
21-Jun	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun	0	0	0	0	0	0	0	0	0	0	0	0
23-Jun	0	0	0	0	0	0	0	0	0	0	0	0
24-Jun	0	0	0	0	0	0	0	0	0	0	0	0
25-Jun	0	0	0	0	0	0	0	0	0	0	0	0
26-Jun	0	0	0	0	0	0	0	0	0	0	0	0
27-Jun	0	0	0	0	0	0	0	0	0	0	0	0
28-Jun	0	0	0	0	0	0	0	0	0	0	0	0
29-Jun	0	0	0	0	0	0	0	0	0	0	0	0
30-Jun	0	0	0	0	0	0	0	0	0	0	0	0
1-Jul	0	0	0	0	0	0	0	0	0	0	0	0
2-Jul	0	0	0	0	0	0	0	0	0	0	0	0
3-Jul	0	0	0	0	0	0	0	0	0	0	0	0
4-Jul	0	0	0	0	0	0	0	0	0	0	0	0
5-Jul	0	0	0	0	0	0	0	0	0	0	0	0
6-Jul	1	0	0	0	0	0	0	0	0	0	0	0
7-Jul	2	0	0	0	0	0	0	0	0	0	0	0
8-Jul	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	0	0	0	0	0	0	0	0	0	0	0	0
14-Jul	0	0	0	0	0	0	0	0	0	0	0	0
15-Jul	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul	0	0	0	0	0	0	0	0	0	0	0	0
17-Jul	0	0	0	0	0	0	0	0	0	0	0	0
18-Jul	0	0	0	0	0	0	0	0	0	0	0	0
19-Jul	0	0	0	0	0	0	0	0	0	0	0	0
20-Jul	0	0	0	0	0	0	0	0	0	0	0	0
21-Jul	0	0	0	0	0	0	0	0	0	0	0	0
22-Jul	0	0	0	0	0	0	0	0	0	0	0	0
23-Jul	0	0	0	0	0	0	0	0	0	0	0	0
24-Jul	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	0	0	0	0	0	0	0	0	0	0	0	0
26-Jul	0	0	0	0	0	0	0	0	0	0	0	0
27-Jul	0	0	0	0	0	0	0	0	0	0	0	0
28-Jul	0	0	0	0	0	0	0	0	0	0	0	0
29-Jul	0	0	0	0	0	0	0	0	0	0	0	0
30-Jul	0	0	0	0	0	0	0	0	0	0	0	0
31-Jul	0	0	0	0	0	0	0	0	0	0	0	0

Design_AI_S05

	AI						AI NFS+NFT					
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	0	0	0	0	0	0	0	0	0	0	0
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0
4-Aug	0	0	0	0	0	0	0	0	0	0	0	0
5-Aug	0	0	0	0	0	0	0	0	0	0	0	0
6-Aug	0	0	0	0	0	0	0	0	0	0	0	0
7-Aug	0	0	0	0	0	0	0	0	0	0	0	0
8-Aug	0	0	0	0	0	0	0	0	0	0	0	0
9-Aug	0	0	0	0	0	0	0	0	0	0	0	0
10-Aug	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug	0	0	0	0	0	0	0	0	0	0	0	0
13-Aug	0	0	0	0	0	0	0	0	0	0	0	0
14-Aug	0	0	0	0	0	0	0	0	0	0	0	0
15-Aug	0	0	0	0	0	0	0	0	0	0	0	0
16-Aug	0	0	0	0	0	0	0	0	0	0	0	0
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0
18-Aug	1	0	0	0	0	0	0	0	0	0	0	0
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0
21-Aug	1	0	0	0	0	0	0	0	0	0	0	0
22-Aug	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	0	0	0	0	0	0	0	0	0	0	0	0
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0
10-Sep	3	0	0	0	0	0	0	0	0	0	0	0
11-Sep	3	0	0	0	0	0	0	0	0	0	0	0
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	1	0	0	0	0	0	0	0	0	0	0	0
16-Sep	3	0	0	0	0	0	0	0	0	0	0	0
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	2	0	0	0	0	0	0	0	0	0	0	0
20-Sep	7	0	0	0	0	0	0	0	0	0	0	0
21-Sep	5	0	0	0	0	0	0	0	0	0	0	0
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	6	0	0	0	0	0	0	0	0	0	0	0
24-Sep	12	0	0	0	0	0	0	0	0	0	0	0
25-Sep	1	0	0	0	0	0	0	0	0	0	0	0
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	1	0	0	0	0	0	0	0	0	0	0	0
28-Sep	5	0	0	0	0	0	0	0	0	0	0	0
29-Sep	8	0	0	0	0	0	0	0	0	0	0	0
30-Sep	13	0	0	0	0	0	0	0	0	0	0	0
1-Oct	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	7	0	0	0	0	0	0	0	0	0	0	0
3-Oct	9	0	0	0	0	0	0	0	0	0	0	0
4-Oct	1	0	0	0	0	0	0	0	0	0	0	0
5-Oct	3	0	0	0	0	0	0	0	0	0	0	0
6-Oct	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	2	0	0	0	0	0	0	0	0	0	0	0
8-Oct	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	14	0	0	0	0	0	0	0	0	0	0	0
10-Oct	23	0	0	0	0	0	0	0	0	0	0	0
11-Oct	19	0	0	0	0	0	0	0	0	0	0	0
12-Oct	16	0	0	0	0	0	0	0	0	0	0	0
13-Oct	9	0	0	0	0	0	0	0	0	0	0	0
14-Oct	6	0	0	0	0	0	0	0	0	0	0	0
15-Oct	5	0	0	0	0	0	0	0	0	0	0	0
16-Oct	15	0	0	0	0	0	0	0	0	0	0	0
17-Oct	20	0	0	0	0	0	0	0	0	0	0	0
18-Oct	19	0	0	0	0	0	0	0	0	0	0	0
19-Oct	13	0	0	0	0	0	0	0	0	0	0	0
20-Oct	9	0	0	0	0	0	0	0	0	0	0	0
21-Oct	12	0	0	0	0	0	0	0	0	0	0	0
22-Oct	21	0	0	0	0	0	0	0	0	0	0	0
23-Oct	23	0	0	0	0	0	0	0	0	0	0	0
24-Oct	23	0	0	0	0	0	0	0	0	0	0	0
25-Oct	22	0	0	0	0	0	0	0	0	0	0	0
26-Oct	15	0	0	0	0	0	0	0	0	0	0	0
27-Oct	16	0	0	0	0	0	0	0	0	0	0	0
28-Oct	16	0	0	0	0	0	0	0	0	0	0	0
29-Oct	14	0	0	0	0	0	0	0	0	0	0	0
30-Oct	7	0	0	0	0	0	0	0	0	0	0	0

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI NFS+NFT 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	0	0	0	0	0	0	0	0	0	0	0
Month												
Nov	697	0	0	0	0	0	0	0	0	0	0	0
Dec	1040	0	0	0	0	0	0	0	0	0	0	0
Jan	1250	0	0	0	0	0	0	0	0	0	0	0
Feb	1091	0	0	0	0	0	0	0	0	0	0	0
Mar	942	0	0	0	0	0	0	0	0	0	0	0
Apr	518	0	0	0	0	0	0	0	0	0	0	0
May	228	0	0	0	0	0	0	0	0	0	0	0
Jun	48	0	0	0	0	0	0	0	0	0	0	0
Jul	3	0	0	0	0	0	0	0	0	0	0	0
Aug	2	0	0	0	0	0	0	0	0	0	0	0
Sep	70	0	0	0	0	0	0	0	0	0	0	0
Oct	361	0	0	0	0	0	0	0	0	0	0	0
Total	**6250**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Day	**68**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Design_AI_S05

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI TSO 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	5,657	5,695	5,825	5,946	5,975	6,012	6,043	6,103	6,116	6,155	6,194
2-Nov	9	3,948	3,970	4,071	4,157	4,173	4,193	4,209	4,243	4,248	4,269	4,291
3-Nov	14	5,652	5,682	5,814	5,936	5,964	6,000	6,030	6,089	6,101	6,139	6,177
4-Nov	13	5,294	5,323	5,448	5,562	5,588	5,620	5,647	5,701	5,712	5,746	5,781
5-Nov	20	7,512	7,553	7,720	7,879	7,920	7,973	8,019	8,105	8,126	8,181	8,238
6-Nov	19	7,384	7,426	7,589	7,745	7,786	7,839	7,884	7,969	7,990	8,045	8,101
7-Nov	16	6,656	6,693	6,842	6,984	7,020	7,067	7,107	7,182	7,200	7,248	7,298
8-Nov	14	5,806	5,836	5,970	6,094	6,124	6,163	6,195	6,258	6,271	6,311	6,352
9-Nov	20	7,598	7,639	7,808	7,968	8,010	8,064	8,111	8,198	8,219	8,275	8,333
10-Nov	15	6,212	6,243	6,385	6,518	6,550	6,591	6,626	6,694	6,708	6,751	6,795
11-Nov	15	6,240	6,272	6,415	6,548	6,580	6,622	6,657	6,725	6,739	6,783	6,827
12-Nov	14	5,796	5,826	5,961	6,085	6,114	6,151	6,183	6,244	6,257	6,296	6,336
13-Nov	20	7,569	7,613	7,780	7,940	7,982	8,036	8,083	8,171	8,192	8,249	8,307
14-Nov	19	7,413	7,457	7,620	7,776	7,818	7,872	7,918	8,004	8,025	8,081	8,138
15-Nov	24	8,924	8,974	9,165	9,353	9,405	9,473	9,531	9,639	9,666	9,736	9,807
16-Nov	27	10,075	10,128	10,343	10,554	10,613	10,691	10,758	10,881	10,913	10,993	11,074
17-Nov	19	7,903	7,940	8,114	8,281	8,325	8,382	8,432	8,523	8,546	8,605	8,665
18-Nov	28	10,462	10,517	10,738	10,957	11,019	11,101	11,171	11,300	11,333	11,417	11,502
19-Nov	30	11,092	11,150	11,383	11,615	11,681	11,769	11,845	11,982	12,018	12,108	12,199
20-Nov	31	11,709	11,770	12,014	12,258	12,329	12,423	12,506	12,653	12,692	12,789	12,887
21-Nov	31	11,796	11,858	12,102	12,348	12,421	12,517	12,600	12,750	12,791	12,889	12,989
22-Nov	37	13,492	13,560	13,836	14,117	14,201	14,312	14,410	14,583	14,631	14,745	14,861
23-Nov	41	15,001	15,056	15,359	15,671	15,766	15,893	16,004	16,200	16,255	16,384	16,515
24-Nov	43	15,890	15,938	16,256	16,587	16,689	16,825	16,945	17,155	17,214	17,353	17,494
25-Nov	45	16,664	16,705	17,036	17,384	17,492	17,636	17,763	17,985	18,049	18,196	18,345
26-Nov	27	11,372	11,420	11,658	11,896	11,965	12,055	12,134	12,276	12,314	12,406	12,501
27-Nov	17	7,908	7,940	8,113	8,281	8,325	8,384	8,434	8,526	8,549	8,609	8,671
28-Nov	20	8,002	8,046	8,219	8,388	8,434	8,494	8,545	8,640	8,664	8,725	8,788
29-Nov	24	8,867	8,916	9,107	9,293	9,345	9,412	9,470	9,577	9,604	9,673	9,744
30-Nov	29	10,705	10,762	10,988	11,211	11,275	11,359	11,432	11,563	11,598	11,684	11,772
1-Dec	20	8,261	8,300	8,480	8,655	8,701	8,762	8,814	8,911	8,935	8,998	9,062
2-Dec	28	10,549	10,603	10,826	11,047	11,109	11,192	11,263	11,393	11,427	11,511	11,597
3-Dec	29	10,820	10,876	11,104	11,331	11,395	11,480	11,554	11,687	11,722	11,810	11,898
4-Dec	34	12,581	12,648	12,908	13,170	13,247	13,350	13,439	13,599	13,642	13,747	13,854
5-Dec	25	10,051	10,102	10,314	10,524	10,585	10,664	10,733	10,858	10,891	10,972	11,055
6-Dec	39	14,006	14,069	14,354	14,645	14,733	14,851	14,953	15,135	15,186	15,306	15,427
7-Dec	28	10,981	11,033	11,264	11,494	11,560	11,647	11,722	11,858	11,893	11,982	12,073
8-Dec	19	8,364	8,399	8,581	8,758	8,806	8,868	8,921	9,019	9,043	9,107	9,172
9-Dec	29	10,791	10,848	11,075	11,301	11,365	11,450	11,523	11,656	11,691	11,778	11,867
10-Dec	23	9,018	9,063	9,257	9,447	9,499	9,567	9,626	9,733	9,760	9,830	9,902
11-Dec	20	8,232	8,273	8,452	8,626	8,673	8,734	8,787	8,884	8,908	8,971	9,036
12-Dec	27	10,075	10,133	10,345	10,556	10,616	10,696	10,765	10,889	10,922	11,004	11,087
13-Dec	27	10,056	10,110	10,323	10,533	10,593	10,672	10,740	10,864	10,896	10,977	11,059
14-Dec	41	14,597	14,654	14,950	15,253	15,346	15,469	15,576	15,766	15,819	15,944	16,071
15-Dec	45	16,202	16,246	16,569	16,906	17,011	17,151	17,274	17,489	17,551	17,693	17,838
16-Dec	39	14,919	14,977	15,280	15,590	15,685	15,810	15,919	16,113	16,167	16,295	16,425
17-Dec	32	12,759	12,816	13,080	13,347	13,425	13,529	13,619	13,780	13,824	13,930	14,038
18-Dec	41	15,087	15,144	15,447	15,761	15,858	15,986	16,099	16,297	16,353	16,484	16,617
19-Dec	32	12,442	12,505	12,761	13,020	13,097	13,200	13,289	13,448	13,491	13,596	13,702
20-Dec	49	17,413	17,457	17,800	18,162	18,277	18,430	18,565	18,800	18,869	19,024	19,182
21-Dec	51	18,379	18,423	18,786	19,168	19,289	19,450	19,592	19,840	19,912	20,076	20,242
22-Dec	32	13,220	13,276	13,548	13,824	13,906	14,014	14,108	14,276	14,322	14,433	14,545
23-Dec	21	9,426	9,463	9,665	9,864	9,919	9,990	10,053	10,167	10,196	10,270	10,345
24-Dec	27	10,363	10,415	10,635	10,852	10,913	10,994	11,064	11,191	11,224	11,307	11,391
25-Dec	41	14,424	14,484	14,775	15,075	15,167	15,289	15,395	15,584	15,637	15,761	15,888
26-Dec	42	15,301	15,357	15,662	15,981	16,080	16,212	16,327	16,531	16,589	16,723	16,859
27-Dec	51	18,302	18,350	18,710	19,090	19,211	19,373	19,515	19,763	19,835	19,999	20,165
28-Dec	51	18,725	18,770	19,139	19,529	19,652	19,817	19,961	20,214	20,287	20,454	20,624
29-Dec	32	13,278	13,333	13,606	13,884	13,966	14,074	14,169	14,338	14,385	14,496	14,609
30-Dec	35	13,631	13,694	13,975	14,259	14,343	14,455	14,552	14,726	14,774	14,888	15,005
31-Dec	30	11,668	11,724	11,968	12,212	12,282	12,375	12,456	12,602	12,641	12,736	12,833
1-Jan	61	20,922	20,984	21,392	21,825	21,965	22,152	22,316	22,602	22,686	22,875	23,067
2-Jan	38	14,763	14,827	15,125	15,432	15,526	15,651	15,761	15,954	16,009	16,136	16,266
3-Jan	23	10,354	10,393	10,611	10,829	10,891	10,973	11,044	11,173	11,207	11,291	11,376
4-Jan	28	10,894	10,947	11,177	11,405	11,470	11,556	11,630	11,765	11,800	11,888	11,978
5-Jan	19	7,903	7,940	8,114	8,281	8,325	8,382	8,432	8,523	8,546	8,605	8,665
6-Jan	28	10,491	10,545	10,767	10,987	11,049	11,131	11,202	11,331	11,364	11,448	11,534
7-Jan	38	13,494	13,560	13,837	14,118	14,202	14,312	14,409	14,582	14,629	14,743	14,858
8-Jan	41	14,943	14,998	15,300	15,611	15,706	15,832	15,943	16,138	16,193	16,321	16,452
9-Jan	41	15,318	15,375	15,681	16,000	16,099	16,231	16,346	16,549	16,607	16,741	16,877
10-Jan	30	11,966	12,021	12,269	12,519	12,593	12,690	12,774	12,926	12,967	13,066	13,167
11-Jan	43	15,688	15,737	16,052	16,378	16,479	16,613	16,731	16,938	16,996	17,133	17,272
12-Jan	50	17,848	17,890	18,242	18,613	18,731	18,887	19,025	19,265	19,335	19,494	19,655
13-Jan	41	15,722	15,773	16,089	16,417	16,517	16,651	16,768	16,975	17,033	17,170	17,308
14-Jan	46	17,166	17,203	17,544	17,901	18,013	18,163	18,295	18,525	18,591	18,743	18,897
15-Jan	43	16,149	16,198	16,519	16,856	16,961	17,100	17,223	17,438	17,499	17,641	17,785
16-Jan	30	12,302	12,360	12,613	12,869	12,946	13,047	13,135	13,292	13,335	13,439	13,544
17-Jan	40	14,710	14,768	15,065	15,371	15,465	15,590	15,699	15,892	15,946	16,073	16,202
18-Jan	55	19,264	19,313	19,691	20,091	20,219	20,389	20,538	20,799	20,875	21,048	21,223
19-Jan	68	23,889	23,973	24,439	24,935	25,096	25,311	25,501	25,829	25,926	26,143	26,363
20-Jan	54	20,491	20,544	20,947	21,372	21,508	21,688	21,848	22,125	22,206	22,390	22,576
21-Jan	44	17,459	17,498	17,844	18,208	18,322	18,474	18,607	18,841	18,908	19,062	19,219
22-Jan	34	13,763	13,825	14,106	14,393	14,479	14,593	14,693	14,870	14,919	15,035	15,154
23-Jan	32	12,586	12,648	12,907	13,169	13,248	13,351	13,442	13,603	13,647	13,753	13,861
24-Jan	44	15,710	15,758	16,071	16,398	16,500	16,636	16,755	16,964	17,024	17,162	17,302
25-Jan	24	10,125	10,169	10,384	10,597	10,656	10,735	10,803	10,927	10,959	11,040	11,122
26-Jan	41	15,001	15,056	15,359	15,671	15,766	15,893	16,004	16,200	16,255	16,384	16,515
27-Jan	46	16,416	16,457	16,784	17,126	17,233	17,375	17,500	17,719	17,782	17,926	18,073
28-Jan	32	12,845	12,902	13,168	13,436	13,515	13,620	13,711	13,873	13,918	14,024	14,133
29-Jan	46	16,791	16,832	17,164	17,513	17,624	17,771	17,900	18,126	18,191	18,340	18,492
30-Jan	47	17,091	17,137	17,473	17,828	17,942	18,092	18,225	18,456	18,523	18,677	18,832

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI TSO 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	16,188	16,235	16,557	16,894	17,000	17,140	17,263	17,478	17,540	17,683	17,828
1-Feb	17	8,427	8,454	8,638	8,817	8,865	8,927	8,981	9,080	9,105	9,170	9,235
2-Feb	28	10,866	10,919	11,147	11,375	11,440	11,525	11,599	11,734	11,769	11,857	11,946
3-Feb	45	15,539	15,586	15,897	16,220	16,321	16,454	16,571	16,776	16,835	16,971	17,108
4-Feb	45	16,346	16,389	16,715	17,055	17,162	17,303	17,427	17,644	17,707	17,850	17,996
5-Feb	56	20,140	20,197	20,592	21,009	21,143	21,322	21,479	21,754	21,834	22,015	22,199
6-Feb	56	20,458	20,520	20,919	21,343	21,480	21,662	21,823	22,102	22,184	22,370	22,557
7-Feb	57	20,941	21,001	21,411	21,844	21,984	22,170	22,334	22,619	22,703	22,892	23,084
8-Feb	42	16,598	16,644	16,976	17,322	17,429	17,572	17,697	17,917	17,980	18,125	18,273
9-Feb	44	16,796	16,838	17,172	17,522	17,631	17,777	17,904	18,128	18,192	18,340	18,490
10-Feb	39	14,919	14,977	15,280	15,590	15,685	15,810	15,919	16,113	16,167	16,295	16,425
11-Feb	42	15,734	15,784	16,100	16,427	16,528	16,662	16,780	16,987	17,046	17,183	17,321
12-Feb	37	14,174	14,240	14,529	14,824	14,913	15,031	15,134	15,318	15,368	15,489	15,612
13-Feb	43	15,919	15,970	16,286	16,617	16,721	16,859	16,981	17,194	17,255	17,396	17,538
14-Feb	45	16,414	16,457	16,783	17,124	17,232	17,375	17,500	17,720	17,784	17,929	18,077
15-Feb	32	12,874	12,931	13,197	13,466	13,545	13,650	13,741	13,904	13,949	14,056	14,165
16-Feb	33	12,857	12,918	13,184	13,452	13,531	13,635	13,726	13,889	13,933	14,040	14,149
17-Feb	35	13,112	13,178	13,449	13,722	13,802	13,909	14,002	14,168	14,214	14,323	14,434
18-Feb	31	11,997	12,055	12,305	12,555	12,628	12,724	12,808	12,959	12,999	13,098	13,198
19-Feb	37	13,742	13,810	14,091	14,377	14,462	14,576	14,676	14,853	14,901	15,018	15,136
20-Feb	22	9,294	9,339	9,536	9,732	9,787	9,859	9,922	10,035	10,065	10,139	10,215
21-Feb	39	14,006	14,069	14,354	14,645	14,733	14,851	14,953	15,135	15,186	15,306	15,427
22-Feb	43	15,400	15,450	15,759	16,080	16,179	16,310	16,425	16,628	16,685	16,819	16,955
23-Feb	22	9,698	9,736	9,943	10,148	10,205	10,279	10,344	10,461	10,492	10,568	10,646
24-Feb	35	13,112	13,178	13,449	13,722	13,802	13,909	14,002	14,168	14,214	14,323	14,434
25-Feb	43	15,284	15,335	15,642	15,961	16,059	16,189	16,303	16,504	16,561	16,693	16,828
26-Feb	43	15,890	15,939	16,257	16,587	16,690	16,827	16,948	17,159	17,219	17,359	17,500
27-Feb	41	15,520	15,576	15,886	16,209	16,309	16,443	16,560	16,766	16,825	16,961	17,099
28-Feb	39	14,727	14,787	15,084	15,391	15,484	15,609	15,718	15,910	15,964	16,091	16,220
1-Mar	47	17,149	17,186	17,526	17,883	17,995	18,145	18,277	18,507	18,573	18,725	18,880
2-Mar	32	12,817	12,874	13,139	13,406	13,485	13,589	13,680	13,842	13,886	13,993	14,101
3-Mar	43	15,919	15,966	16,285	16,617	16,719	16,856	16,975	17,186	17,245	17,384	17,525
4-Mar	42	15,503	15,554	15,866	16,189	16,288	16,420	16,535	16,739	16,797	16,931	17,068
5-Mar	27	11,286	11,336	11,571	11,808	11,876	11,967	12,045	12,187	12,225	12,318	12,412
6-Mar	36	13,528	13,599	13,875	14,157	14,241	14,354	14,452	14,627	14,675	14,790	14,907
7-Mar	32	12,019	12,081	12,330	12,580	12,654	12,751	12,836	12,988	13,029	13,129	13,231
8-Mar	41	15,001	15,056	15,359	15,671	15,766	15,893	16,004	16,200	16,255	16,384	16,515
9-Mar	45	16,346	16,389	16,715	17,055	17,162	17,303	17,427	17,644	17,707	17,850	17,996
10-Mar	46	17,022	17,060	17,397	17,752	17,863	18,011	18,142	18,370	18,435	18,586	18,739
11-Mar	21	9,657	9,692	9,898	10,102	10,159	10,233	10,297	10,414	10,445	10,521	10,599
12-Mar	16	7,463	7,494	7,659	7,818	7,859	7,913	7,959	8,046	8,066	8,122	8,179
13-Mar	22	8,400	8,449	8,631	8,807	8,856	8,919	8,974	9,075	9,100	9,166	9,232
14-Mar	20	7,694	7,736	7,905	8,067	8,111	8,167	8,215	8,305	8,327	8,385	8,445
15-Mar	25	9,446	9,495	9,698	9,896	9,951	10,023	10,085	10,199	10,228	10,302	10,377
16-Mar	27	10,133	10,186	10,401	10,613	10,673	10,751	10,819	10,943	10,975	11,056	11,138
17-Mar	35	12,738	12,805	13,069	13,334	13,412	13,515	13,604	13,765	13,809	13,914	14,022
18-Mar	27	10,623	10,674	10,898	11,121	11,184	11,267	11,339	11,470	11,504	11,590	11,677
19-Mar	28	10,923	10,978	11,207	11,435	11,501	11,588	11,664	11,800	11,836	11,925	12,016
20-Mar	28	10,722	10,780	11,003	11,228	11,293	11,378	11,453	11,587	11,623	11,711	11,800
21-Mar	28	10,616	10,671	10,894	11,116	11,180	11,264	11,337	11,469	11,503	11,590	11,678
22-Mar	21	8,648	8,688	8,876	9,058	9,107	9,172	9,227	9,330	9,355	9,422	9,490
23-Mar	24	9,347	9,394	9,594	9,791	9,845	9,916	9,977	10,090	10,118	10,192	10,266
24-Mar	29	10,734	10,790	11,017	11,241	11,305	11,389	11,462	11,594	11,629	11,715	11,803
25-Mar	21	8,561	8,602	8,788	8,969	9,017	9,081	9,136	9,237	9,262	9,328	9,395
26-Mar	26	9,977	10,029	10,241	10,450	10,509	10,587	10,654	10,776	10,808	10,888	10,970
27-Mar	41	14,396	14,457	14,746	15,046	15,138	15,260	15,368	15,557	15,611	15,736	15,863
28-Mar	42	15,138	15,191	15,495	15,810	15,907	16,037	16,150	16,350	16,407	16,539	16,673
29-Mar	29	11,829	11,881	12,128	12,375	12,447	12,542	12,624	12,772	12,812	12,909	13,008
30-Mar	20	8,780	8,816	9,006	9,192	9,242	9,308	9,364	9,469	9,495	9,563	9,632
31-Mar	21	8,446	8,487	8,671	8,849	8,897	8,960	9,013	9,113	9,137	9,202	9,268
1-Apr	23	8,758	8,947	9,131	9,180	9,245	9,301	9,405	9,431	9,498	9,566	9,687
2-Apr	24	9,174	9,371	9,563	9,615	9,684	9,744	9,853	9,881	9,952	10,024	10,152
3-Apr	25	9,590	9,793	9,993	10,049	10,123	10,187	10,303	10,333	10,409	10,486	10,621
4-Apr	21	8,446	8,627	8,804	8,853	8,916	8,971	9,072	9,098	9,163	9,230	9,348
5-Apr	39	13,632	13,908	14,190	14,275	14,388	14,487	14,663	14,712	14,827	14,944	15,147
6-Apr	31	11,767	12,011	12,256	12,327	12,420	12,501	12,648	12,687	12,783	12,880	13,050
7-Apr	19	8,451	8,634	8,812	8,860	8,922	8,976	9,075	9,100	9,164	9,230	9,346
8-Apr	29	10,878	11,106	11,332	11,397	11,482	11,555	11,689	11,724	11,812	11,901	12,056
9-Apr	12	5,714	5,847	5,969	5,998	6,034	6,065	6,125	6,137	6,175	6,214	6,286
10-Apr	22	8,516	8,699	8,877	8,926	8,989	9,044	9,145	9,170	9,236	9,303	9,420
11-Apr	21	8,014	8,187	8,355	8,400	8,459	8,511	8,605	8,628	8,690	8,752	8,863
12-Apr	19	7,538	7,703	7,861	7,903	7,958	8,005	8,092	8,113	8,170	8,227	8,329
13-Apr	7	3,982	4,081	4,168	4,185	4,206	4,223	4,259	4,264	4,286	4,309	4,354
14-Apr	15	5,981	6,118	6,245	6,276	6,314	6,347	6,411	6,424	6,465	6,507	6,582
15-Apr	17	6,466	6,613	6,749	6,783	6,826	6,863	6,934	6,949	6,995	7,041	7,125
16-Apr	21	7,956	8,130	8,297	8,341	8,398	8,448	8,540	8,562	8,621	8,682	8,790
17-Apr	21	8,129	8,305	8,476	8,521	8,581	8,633	8,728	8,751	8,813	8,876	8,988
18-Apr	13	5,841	5,975	6,100	6,130	6,168	6,201	6,264	6,278	6,318	6,359	6,434
19-Apr	15	6,077	6,215	6,344	6,376	6,416	6,451	6,517	6,532	6,574	6,618	6,696
20-Apr	5	3,035	3,112	3,178	3,190	3,206	3,218	3,244	3,248	3,264	3,281	3,314
21-Apr	14	5,508	5,636	5,754	5,781	5,815	5,844	5,901	5,912	5,948	5,985	6,053
22-Apr	7	3,376	3,464	3,538	3,551	3,566	3,578	3,606	3,608	3,625	3,642	3,677
23-Apr	15	5,837	5,971	6,096	6,125	6,162	6,194	6,255	6,268	6,307	6,348	6,421
24-Apr	15	5,866	6,000	6,125	6,155	6,193	6,225	6,288	6,301	6,341	6,382	6,456
25-Apr	14	5,796	5,928	6,052	6,081	6,120	6,152	6,214	6,228	6,268	6,308	6,382
26-Apr	10	4,431	4,539	4,635	4,655	4,680	4,700	4,743	4,750	4,777	4,804	4,855
27-Apr	7	3,520	3,611	3,688	3,702	3,718	3,731	3,761	3,764	3,782	3,801	3,838
28-Apr	8	3,619	3,713	3,792	3,806	3,822	3,835	3,865	3,868	3,886	3,904	3,942
29-Apr	13	5,063	5,183	5,292	5,316	5,346	5,371	5,421	5,431	5,463	5,495	5,556
30-Apr	16	6,137	6,277	6,407	6,439	6,479	6,513	6,579	6,593	6,635	6,678	6,757
1-May	0	3,109	3,188	3,257	3,269	3,284	3,296	3,323	3,327	3,343	3,360	3,393

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI TSO 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	2,734	2,806	2,867	2,877	2,889	2,898	2,920	2,922	2,935	2,948	2,976
3-May	0	2,139	2,198	2,246	2,252	2,260	2,265	2,280	2,280	2,289	2,298	2,317
4-May	0	2,273	2,336	2,387	2,394	2,402	2,408	2,423	2,424	2,433	2,442	2,463
5-May	6	2,528	2,597	2,653	2,662	2,671	2,678	2,696	2,697	2,707	2,718	2,742
6-May	17	6,005	6,143	6,270	6,301	6,340	6,372	6,436	6,450	6,490	6,532	6,608
7-May	23	8,297	8,477	8,651	8,698	8,758	8,810	8,907	8,931	8,993	9,057	9,170
8-May	14	6,084	6,223	6,352	6,384	6,424	6,458	6,524	6,539	6,581	6,624	6,702
9-May	13	5,697	5,828	5,950	5,979	6,016	6,047	6,108	6,121	6,160	6,200	6,273
10-May	2	2,886	2,959	3,022	3,034	3,049	3,060	3,086	3,090	3,105	3,122	3,153
11-May	0	2,706	2,776	2,835	2,846	2,858	2,867	2,889	2,891	2,904	2,918	2,946
12-May	0	2,331	2,394	2,445	2,453	2,462	2,469	2,486	2,487	2,497	2,508	2,530
13-May	3	2,227	2,287	2,336	2,344	2,352	2,359	2,375	2,376	2,385	2,395	2,416
14-May	8	3,215	3,302	3,373	3,384	3,396	3,406	3,430	3,431	3,445	3,460	3,491
15-May	12	4,647	4,759	4,859	4,881	4,907	4,929	4,974	4,982	5,010	5,039	5,094
16-May	17	6,409	6,552	6,687	6,722	6,765	6,803	6,874	6,890	6,936	6,983	7,067
17-May	12	5,032	5,151	5,258	5,283	5,313	5,339	5,390	5,400	5,433	5,466	5,527
18-May	12	5,166	5,289	5,400	5,424	5,455	5,481	5,533	5,543	5,576	5,610	5,672
19-May	1	2,950	3,024	3,089	3,101	3,116	3,127	3,153	3,156	3,172	3,188	3,220
20-May	8	3,504	3,595	3,672	3,685	3,700	3,712	3,740	3,743	3,760	3,777	3,813
21-May	9	3,689	3,784	3,864	3,879	3,895	3,909	3,940	3,943	3,962	3,981	4,020
22-May	9	3,919	4,018	4,104	4,120	4,139	4,155	4,189	4,194	4,215	4,236	4,279
23-May	8	3,648	3,742	3,822	3,836	3,853	3,866	3,897	3,900	3,919	3,938	3,976
24-May	10	4,085	4,186	4,275	4,293	4,314	4,332	4,369	4,375	4,398	4,422	4,468
25-May	7	3,347	3,435	3,508	3,521	3,536	3,547	3,574	3,577	3,594	3,611	3,645
26-May	7	3,319	3,405	3,478	3,491	3,505	3,517	3,543	3,546	3,562	3,579	3,613
27-May	1	2,661	2,730	2,789	2,799	2,811	2,821	2,842	2,845	2,858	2,872	2,899
28-May	5	2,458	2,523	2,577	2,586	2,596	2,604	2,624	2,625	2,637	2,649	2,673
29-May	3	2,400	2,463	2,516	2,525	2,535	2,542	2,561	2,562	2,573	2,585	2,609
30-May	9	3,660	3,754	3,834	3,848	3,865	3,879	3,909	3,913	3,932	3,951	3,989
31-May	12	4,542	4,651	4,749	4,770	4,796	4,817	4,861	4,869	4,897	4,925	4,978
1-Jun	6	3,134	3,214	3,283	3,295	3,310	3,321	3,347	3,350	3,366	3,383	3,416
2-Jun	7	3,347	3,435	3,508	3,521	3,536	3,547	3,574	3,577	3,594	3,611	3,645
3-Jun	2	2,617	2,685	2,743	2,752	2,764	2,773	2,795	2,797	2,810	2,823	2,850
4-Jun	0	2,533	2,599	2,655	2,664	2,675	2,684	2,704	2,706	2,718	2,730	2,756
5-Jun	0	2,331	2,393	2,445	2,453	2,462	2,469	2,487	2,488	2,498	2,509	2,532
6-Jun	0	2,273	2,334	2,385	2,392	2,401	2,408	2,425	2,426	2,436	2,446	2,468
7-Jun	0	2,139	2,196	2,244	2,251	2,259	2,266	2,281	2,282	2,292	2,301	2,322
8-Jun	0	2,304	2,366	2,417	2,425	2,434	2,441	2,458	2,459	2,469	2,480	2,502
9-Jun	0	2,247	2,307	2,357	2,365	2,373	2,380	2,396	2,397	2,407	2,417	2,438
10-Jun	0	2,204	2,264	2,313	2,320	2,329	2,335	2,351	2,351	2,361	2,371	2,391
11-Jun	0	2,176	2,235	2,283	2,290	2,298	2,304	2,320	2,320	2,329	2,339	2,359
12-Jun	0	2,116	2,174	2,221	2,227	2,235	2,240	2,255	2,256	2,264	2,273	2,293
13-Jun	0	2,173	2,232	2,281	2,288	2,296	2,302	2,317	2,318	2,327	2,337	2,357
14-Jun	0	2,112	2,169	2,216	2,223	2,231	2,237	2,253	2,254	2,263	2,272	2,292
15-Jun	9	3,343	3,431	3,504	3,516	3,530	3,541	3,567	3,568	3,584	3,600	3,633
16-Jun	7	3,030	3,111	3,178	3,189	3,201	3,210	3,233	3,234	3,247	3,262	3,291
17-Jun	1	2,719	2,789	2,849	2,860	2,872	2,882	2,904	2,907	2,921	2,935	2,963
18-Jun	5	2,458	2,523	2,577	2,586	2,596	2,604	2,624	2,625	2,637	2,649	2,673
19-Jun	6	2,701	2,773	2,833	2,842	2,853	2,861	2,882	2,883	2,895	2,908	2,934
20-Jun	5	2,545	2,611	2,667	2,677	2,688	2,697	2,717	2,719	2,731	2,744	2,770
21-Jun	0	2,533	2,599	2,656	2,665	2,677	2,686	2,706	2,708	2,721	2,734	2,760
22-Jun	0	2,351	2,414	2,466	2,474	2,483	2,491	2,508	2,509	2,520	2,531	2,553
23-Jun	0	2,062	2,119	2,165	2,172	2,179	2,184	2,198	2,198	2,207	2,215	2,234
24-Jun	0	2,062	2,119	2,165	2,172	2,179	2,184	2,198	2,198	2,207	2,215	2,234
25-Jun	0	2,062	2,119	2,165	2,172	2,179	2,184	2,198	2,198	2,207	2,215	2,234
26-Jun	0	2,094	2,151	2,198	2,205	2,212	2,217	2,232	2,232	2,240	2,249	2,268
27-Jun	0	2,036	2,093	2,138	2,145	2,151	2,156	2,169	2,169	2,177	2,185	2,203
28-Jun	0	1,844	1,895	1,937	1,942	1,948	1,952	1,964	1,964	1,971	1,978	1,994
29-Jun	0	1,963	2,017	2,061	2,067	2,073	2,078	2,091	2,091	2,098	2,106	2,123
30-Jun	0	1,992	2,047	2,091	2,097	2,104	2,109	2,122	2,122	2,129	2,138	2,155
1-Jul	0	2,020	2,076	2,121	2,128	2,134	2,139	2,153	2,153	2,161	2,169	2,187
2-Jul	0	2,020	2,076	2,121	2,128	2,134	2,139	2,153	2,153	2,161	2,169	2,187
3-Jul	0	2,036	2,092	2,138	2,144	2,151	2,156	2,170	2,170	2,177	2,186	2,204
4-Jul	0	2,023	2,079	2,125	2,131	2,137	2,142	2,155	2,155	2,163	2,171	2,188
5-Jul	0	1,815	1,866	1,907	1,912	1,918	1,922	1,933	1,933	1,940	1,947	1,962
6-Jul	1	1,825	1,876	1,917	1,922	1,928	1,932	1,943	1,943	1,949	1,956	1,972
7-Jul	2	2,069	2,126	2,172	2,178	2,185	2,191	2,205	2,206	2,214	2,223	2,242
8-Jul	0	2,499	2,566	2,621	2,630	2,641	2,649	2,668	2,670	2,681	2,694	2,718
9-Jul	0	2,227	2,287	2,337	2,344	2,353	2,359	2,375	2,375	2,385	2,395	2,415
10-Jul	0	1,881	1,934	1,976	1,982	1,987	1,991	2,003	2,002	2,009	2,016	2,031
11-Jul	0	1,821	1,873	1,914	1,919	1,924	1,927	1,938	1,937	1,943	1,949	1,964
12-Jul	0	1,728	1,777	1,816	1,821	1,826	1,830	1,840	1,840	1,846	1,852	1,867
13-Jul	0	1,965	2,020	2,064	2,070	2,076	2,080	2,093	2,093	2,101	2,108	2,125
14-Jul	0	1,980	2,036	2,080	2,086	2,092	2,097	2,110	2,110	2,117	2,125	2,143
15-Jul	0	1,923	1,977	2,020	2,026	2,031	2,036	2,048	2,048	2,055	2,062	2,079
16-Jul	0	1,909	1,963	2,006	2,012	2,017	2,022	2,034	2,033	2,040	2,048	2,064
17-Jul	0	1,896	1,950	1,993	1,998	2,004	2,007	2,019	2,019	2,025	2,032	2,048
18-Jul	0	1,854	1,907	1,949	1,954	1,959	1,963	1,974	1,973	1,979	1,985	2,000
19-Jul	0	1,646	1,694	1,731	1,735	1,740	1,743	1,752	1,751	1,757	1,762	1,776
20-Jul	0	1,765	1,816	1,856	1,860	1,865	1,868	1,879	1,878	1,884	1,890	1,905
21-Jul	0	1,838	1,891	1,932	1,937	1,943	1,946	1,958	1,957	1,963	1,970	1,985
22-Jul	0	1,823	1,875	1,916	1,921	1,926	1,930	1,941	1,940	1,946	1,953	1,968
23-Jul	0	1,807	1,859	1,900	1,905	1,910	1,913	1,924	1,924	1,930	1,936	1,951
24-Jul	0	1,865	1,918	1,960	1,965	1,971	1,974	1,986	1,985	1,992	1,999	2,014
25-Jul	0	1,894	1,948	1,991	1,996	2,001	2,005	2,017	2,016	2,023	2,029	2,045
26-Jul	0	1,744	1,793	1,833	1,838	1,843	1,846	1,857	1,857	1,863	1,869	1,884
27-Jul	0	1,923	1,977	2,020	2,026	2,031	2,036	2,048	2,048	2,055	2,062	2,079
28-Jul	0	1,923	1,977	2,020	2,026	2,031	2,036	2,048	2,048	2,055	2,062	2,079
29-Jul	0	1,894	1,947	1,990	1,995	2,001	2,005	2,017	2,017	2,023	2,031	2,047
30-Jul	0	1,894	1,947	1,990	1,995	2,001	2,005	2,017	2,017	2,023	2,031	2,047
31-Jul	0	1,878	1,932	1,974	1,979	1,985	1,988	2,000	2,000	2,006	2,013	2,029

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	AI						AI TSO					
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	1,938	1,993	2,037	2,043	2,048	2,052	2,064	2,064	2,071	2,078	2,094
2-Aug	0	1,791	1,841	1,882	1,887	1,892	1,896	1,907	1,907	1,913	1,920	1,935
3-Aug	0	1,838	1,891	1,932	1,937	1,943	1,946	1,958	1,957	1,963	1,970	1,985
4-Aug	0	1,810	1,861	1,902	1,907	1,912	1,916	1,927	1,926	1,932	1,939	1,953
5-Aug	0	1,794	1,845	1,886	1,891	1,896	1,899	1,910	1,909	1,915	1,922	1,936
6-Aug	0	1,792	1,843	1,883	1,888	1,893	1,897	1,908	1,907	1,913	1,919	1,934
7-Aug	0	1,878	1,932	1,974	1,979	1,985	1,988	2,000	2,000	2,006	2,013	2,029
8-Aug	0	1,952	2,007	2,051	2,056	2,062	2,066	2,079	2,078	2,085	2,093	2,109
9-Aug	0	1,788	1,839	1,879	1,884	1,890	1,893	1,905	1,904	1,911	1,918	1,933
10-Aug	0	1,894	1,947	1,990	1,995	2,001	2,005	2,017	2,017	2,023	2,031	2,047
11-Aug	0	1,894	1,947	1,990	1,995	2,001	2,005	2,017	2,017	2,023	2,031	2,047
12-Aug	0	1,863	1,915	1,957	1,963	1,968	1,972	1,984	1,983	1,990	1,997	2,013
13-Aug	0	1,936	1,990	2,034	2,039	2,045	2,050	2,062	2,062	2,069	2,077	2,094
14-Aug	0	1,965	2,020	2,064	2,070	2,076	2,080	2,093	2,093	2,100	2,108	2,125
15-Aug	0	1,921	1,975	2,018	2,024	2,029	2,033	2,045	2,045	2,052	2,059	2,075
16-Aug	0	1,830	1,882	1,923	1,928	1,934	1,938	1,950	1,950	1,957	1,964	1,979
17-Aug	0	1,965	2,020	2,064	2,070	2,076	2,080	2,093	2,093	2,101	2,108	2,125
18-Aug	1	1,796	1,847	1,887	1,892	1,897	1,901	1,912	1,912	1,918	1,925	1,940
19-Aug	0	2,164	2,223	2,272	2,279	2,287	2,293	2,308	2,308	2,317	2,327	2,347
20-Aug	0	2,222	2,282	2,332	2,339	2,348	2,354	2,370	2,371	2,380	2,390	2,411
21-Aug	1	1,912	1,965	2,008	2,013	2,019	2,023	2,036	2,036	2,043	2,050	2,067
22-Aug	0	2,222	2,283	2,332	2,340	2,348	2,354	2,370	2,371	2,380	2,390	2,410
23-Aug	0	2,072	2,128	2,175	2,182	2,189	2,195	2,210	2,210	2,219	2,228	2,248
24-Aug	0	2,034	2,090	2,135	2,142	2,148	2,153	2,167	2,167	2,175	2,184	2,202
25-Aug	0	2,062	2,119	2,165	2,172	2,179	2,184	2,198	2,198	2,207	2,215	2,234
26-Aug	0	2,078	2,135	2,182	2,188	2,195	2,201	2,215	2,215	2,223	2,232	2,251
27-Aug	0	2,065	2,122	2,168	2,174	2,181	2,186	2,201	2,201	2,209	2,218	2,236
28-Aug	0	2,023	2,079	2,124	2,130	2,137	2,142	2,155	2,155	2,163	2,171	2,189
29-Aug	0	1,934	1,988	2,032	2,037	2,043	2,047	2,060	2,059	2,066	2,073	2,090
30-Aug	0	1,813	1,863	1,904	1,909	1,915	1,919	1,931	1,931	1,937	1,944	1,960
31-Aug	0	2,034	2,090	2,135	2,142	2,148	2,153	2,167	2,167	2,175	2,184	2,202
1-Sep	0	2,047	2,103	2,149	2,155	2,162	2,167	2,182	2,182	2,190	2,198	2,217
2-Sep	0	2,076	2,133	2,179	2,186	2,193	2,198	2,213	2,213	2,221	2,230	2,249
3-Sep	0	2,105	2,162	2,209	2,216	2,223	2,229	2,244	2,244	2,252	2,261	2,281
4-Sep	0	2,105	2,162	2,209	2,216	2,223	2,229	2,243	2,244	2,252	2,261	2,280
5-Sep	0	2,089	2,147	2,193	2,200	2,207	2,212	2,227	2,227	2,235	2,244	2,263
6-Sep	0	1,984	2,038	2,082	2,088	2,095	2,101	2,115	2,115	2,123	2,131	2,149
7-Sep	0	2,147	2,205	2,253	2,260	2,268	2,274	2,289	2,289	2,298	2,308	2,327
8-Sep	0	2,131	2,189	2,237	2,244	2,251	2,257	2,272	2,273	2,281	2,291	2,310
9-Sep	0	2,160	2,219	2,267	2,274	2,282	2,288	2,303	2,304	2,313	2,322	2,342
10-Sep	3	2,111	2,169	2,215	2,222	2,230	2,236	2,251	2,251	2,260	2,269	2,289
11-Sep	3	2,255	2,316	2,366	2,373	2,382	2,389	2,406	2,407	2,416	2,427	2,448
12-Sep	0	2,462	2,527	2,581	2,590	2,601	2,609	2,628	2,630	2,641	2,653	2,678
13-Sep	0	2,227	2,287	2,336	2,344	2,353	2,360	2,377	2,378	2,388	2,399	2,420
14-Sep	0	2,218	2,278	2,327	2,334	2,343	2,349	2,365	2,366	2,375	2,385	2,406
15-Sep	1	2,142	2,200	2,248	2,255	2,263	2,269	2,284	2,285	2,293	2,303	2,323
16-Sep	3	2,198	2,257	2,306	2,313	2,321	2,328	2,344	2,344	2,354	2,364	2,384
17-Sep	0	2,388	2,452	2,505	2,513	2,523	2,530	2,549	2,550	2,561	2,572	2,596
18-Sep	0	2,360	2,422	2,475	2,483	2,492	2,500	2,518	2,519	2,530	2,541	2,564
19-Sep	2	2,242	2,302	2,352	2,360	2,368	2,375	2,391	2,392	2,402	2,412	2,433
20-Sep	7	2,752	2,826	2,887	2,896	2,906	2,914	2,934	2,935	2,946	2,958	2,984
21-Sep	5	2,487	2,553	2,607	2,616	2,627	2,635	2,655	2,656	2,668	2,680	2,705
22-Sep	0	2,619	2,687	2,745	2,755	2,767	2,776	2,797	2,799	2,812	2,825	2,852
23-Sep	6	2,672	2,744	2,803	2,812	2,822	2,830	2,851	2,852	2,864	2,876	2,902
24-Sep	12	4,503	4,613	4,710	4,730	4,755	4,775	4,818	4,825	4,851	4,878	4,930
25-Sep	1	2,777	2,848	2,909	2,920	2,933	2,943	2,967	2,970	2,984	2,999	3,028
26-Sep	0	2,648	2,716	2,775	2,785	2,797	2,807	2,828	2,831	2,844	2,858	2,885
27-Sep	1	2,152	2,210	2,258	2,265	2,273	2,280	2,296	2,297	2,306	2,316	2,337
28-Sep	5	2,257	2,317	2,367	2,375	2,383	2,390	2,407	2,407	2,417	2,427	2,449
29-Sep	8	3,302	3,390	3,462	3,474	3,487	3,497	3,523	3,524	3,539	3,555	3,587
30-Sep	13	5,005	5,125	5,232	5,255	5,285	5,309	5,359	5,368	5,400	5,432	5,492
1-Oct	0	2,879	2,953	3,016	3,027	3,040	3,051	3,075	3,078	3,093	3,108	3,138
2-Oct	7	3,203	3,288	3,359	3,370	3,384	3,394	3,420	3,422	3,437	3,452	3,484
3-Oct	9	3,631	3,725	3,804	3,819	3,835	3,848	3,879	3,882	3,900	3,919	3,957
4-Oct	1	2,584	2,651	2,708	2,718	2,730	2,740	2,761	2,764	2,777	2,790	2,817
5-Oct	3	2,515	2,581	2,636	2,645	2,656	2,665	2,685	2,687	2,699	2,711	2,736
6-Oct	0	2,388	2,453	2,505	2,513	2,523	2,530	2,547	2,548	2,559	2,570	2,593
7-Oct	2	2,329	2,391	2,443	2,451	2,460	2,467	2,485	2,486	2,496	2,507	2,530
8-Oct	0	2,331	2,394	2,446	2,453	2,462	2,469	2,485	2,486	2,496	2,506	2,528
9-Oct	14	4,989	5,107	5,214	5,237	5,267	5,292	5,342	5,351	5,382	5,415	5,475
10-Oct	23	8,038	8,211	8,380	8,425	8,484	8,536	8,630	8,653	8,715	8,777	8,888
11-Oct	19	7,365	7,527	7,682	7,722	7,775	7,820	7,905	7,926	7,980	8,036	8,136
12-Oct	16	6,742	6,894	7,037	7,073	7,119	7,158	7,233	7,250	7,297	7,346	7,435
13-Oct	9	4,438	4,547	4,644	4,663	4,688	4,707	4,749	4,755	4,781	4,808	4,858
14-Oct	6	3,249	3,332	3,403	3,416	3,431	3,444	3,472	3,475	3,492	3,510	3,544
15-Oct	5	2,660	2,729	2,788	2,798	2,810	2,819	2,841	2,843	2,856	2,870	2,897
16-Oct	15	5,548	5,677	5,795	5,823	5,858	5,887	5,945	5,957	5,994	6,032	6,101
17-Oct	20	7,310	7,470	7,623	7,663	7,716	7,761	7,845	7,866	7,920	7,976	8,075
18-Oct	19	7,307	7,468	7,622	7,662	7,714	7,759	7,843	7,863	7,917	7,972	8,071
19-Oct	13	5,755	5,888	6,011	6,040	6,077	6,108	6,168	6,181	6,219	6,259	6,331
20-Oct	9	4,352	4,459	4,554	4,573	4,596	4,615	4,655	4,662	4,687	4,712	4,762
21-Oct	12	4,965	5,083	5,190	5,213	5,242	5,266	5,315	5,324	5,355	5,387	5,446
22-Oct	21	7,639	7,807	7,967	8,009	8,063	8,110	8,197	8,218	8,274	8,332	8,435
23-Oct	23	8,586	8,770	8,950	8,999	9,063	9,118	9,220	9,245	9,311	9,379	9,498
24-Oct	23	8,903	9,092	9,278	9,330	9,398	9,456	9,564	9,591	9,661	9,732	9,858
25-Oct	22	8,526	8,709	8,887	8,936	9,000	9,055	9,156	9,182	9,248	9,315	9,433
26-Oct	15	6,529	6,676	6,815	6,849	6,893	6,931	7,002	7,018	7,064	7,111	7,196
27-Oct	16	6,598	6,747	6,887	6,922	6,966	7,004	7,077	7,093	7,140	7,187	7,273
28-Oct	16	6,425	6,571	6,707	6,741	6,784	6,820	6,890	6,906	6,951	6,997	7,080
29-Oct	14	5,854	5,989	6,113	6,143	6,180	6,212	6,274	6,287	6,326	6,367	6,441
30-Oct	7	3,693	3,787	3,868	3,883	3,901	3,916	3,948	3,952	3,972	3,993	4,033

Date	AI HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	AI TSO 2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	2,848	2,920	2,983	2,994	3,008	3,019	3,044	3,047	3,062	3,078	3,108
Month												
Nov	697	268,596	269,907	275,677	281,333	282,890	284,929	286,691	289,921	290,741	292,843	294,984
Dec	1040	393,926	395,545	403,639	411,864	414,310	417,547	420,373	425,413	426,794	430,105	433,469
Jan	1250	468,253	469,866	479,291	489,044	492,043	496,028	499,519	505,676	507,415	511,476	515,596
Feb	1091	410,784	412,277	420,579	429,136	431,749	435,219	438,257	443,628	445,135	448,675	452,267
Mar	942	360,859	362,396	369,887	377,435	379,643	382,558	385,097	389,651	390,879	393,866	396,901
Apr	518	207,097	211,702	216,079	217,195	218,639	219,874	222,203	222,745	224,247	225,780	228,528
May	228	117,667	120,575	123,128	123,638	124,262	124,775	125,858	126,027	126,700	127,394	128,720
Jun	48	71,501	73,416	75,002	75,248	75,527	75,742	76,278	76,308	76,625	76,956	77,641
Jul	3	59,387	61,053	62,390	62,563	62,745	62,875	63,259	63,249	63,465	63,695	64,204
Aug	2	60,279	61,962	63,317	63,495	63,686	63,823	64,220	64,213	64,437	64,676	65,199
Sep	70	74,621	76,597	78,244	78,510	78,816	79,054	79,631	79,674	80,018	80,377	81,109
Oct	361	160,178	163,894	167,314	168,111	169,123	169,978	171,652	171,997	173,063	174,154	176,155
Total	**6250**	**2,653,147**	**2,679,192**	**2,734,547**	**2,777,571**	**2,793,435**	**2,812,402**	**2,833,038**	**2,858,501**	**2,869,517**	**2,889,997**	**2,914,773**
Peak Day	**68**	**23,889**	**23,973**	**24,439**	**24,935**	**25,096**	**25,311**	**25,501**	**25,829**	**25,926**	**26,143**	**26,363**

Design_AI_S05

	AI	AI TSO (Total by Component)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Nov	16	5,644	5,665	5,774	5,890	5,928	5,980	6,025	6,103	6,127	6,179	6,231
2-Nov	9	3,947	3,958	4,036	4,118	4,144	4,179	4,210	4,263	4,279	4,315	4,351
3-Nov	14	5,637	5,659	5,768	5,884	5,922	5,974	6,019	6,097	6,121	6,173	6,226
4-Nov	13	5,278	5,298	5,400	5,509	5,545	5,593	5,635	5,708	5,730	5,779	5,828
5-Nov	20	7,501	7,534	7,677	7,831	7,883	7,952	8,013	8,118	8,150	8,220	8,291
6-Nov	19	7,374	7,406	7,546	7,698	7,748	7,816	7,877	7,980	8,011	8,080	8,150
7-Nov	16	6,643	6,672	6,799	6,936	6,981	7,042	7,096	7,189	7,217	7,279	7,341
8-Nov	14	5,793	5,816	5,927	6,046	6,086	6,139	6,185	6,266	6,290	6,343	6,398
9-Nov	20	7,588	7,621	7,766	7,922	7,974	8,044	8,106	8,212	8,244	8,315	8,387
10-Nov	15	6,198	6,224	6,342	6,470	6,512	6,569	6,619	6,706	6,732	6,789	6,848
11-Nov	15	6,227	6,253	6,372	6,500	6,543	6,600	6,650	6,737	6,763	6,821	6,880
12-Nov	14	5,781	5,805	5,916	6,035	6,074	6,127	6,174	6,254	6,278	6,332	6,386
13-Nov	20	7,559	7,592	7,736	7,891	7,943	8,013	8,075	8,181	8,213	8,284	8,355
14-Nov	19	7,402	7,435	7,576	7,728	7,779	7,847	7,907	8,011	8,043	8,112	8,182
15-Nov	24	8,920	8,960	9,129	9,312	9,373	9,456	9,529	9,655	9,693	9,777	9,862
16-Nov	27	10,072	10,119	10,309	10,515	10,585	10,679	10,762	10,905	10,948	11,043	11,139
17-Nov	19	7,894	7,929	8,079	8,241	8,296	8,369	8,433	8,545	8,578	8,652	8,727
18-Nov	28	10,460	10,509	10,707	10,921	10,993	11,091	11,177	11,325	11,370	11,469	11,569
19-Nov	30	11,091	11,144	11,353	11,580	11,656	11,760	11,852	12,009	12,057	12,162	12,268
20-Nov	31	11,710	11,766	11,987	12,226	12,308	12,417	12,514	12,680	12,731	12,842	12,954
21-Nov	31	11,797	11,854	12,076	12,317	12,399	12,509	12,607	12,775	12,825	12,937	13,050
22-Nov	37	13,500	13,565	13,819	14,094	14,188	14,315	14,427	14,619	14,678	14,806	14,935
23-Nov	41	15,011	15,085	15,367	15,673	15,777	15,919	16,044	16,258	16,323	16,466	16,610
24-Nov	43	15,902	15,982	16,280	16,604	16,715	16,864	16,997	17,224	17,293	17,445	17,598
25-Nov	45	16,678	16,762	17,074	17,414	17,530	17,688	17,827	18,065	18,138	18,297	18,457
26-Nov	27	11,372	11,428	11,642	11,875	11,953	12,060	12,154	12,316	12,365	12,472	12,581
27-Nov	17	7,898	7,934	8,085	8,247	8,301	8,374	8,439	8,550	8,584	8,658	8,733
28-Nov	20	7,993	8,029	8,180	8,344	8,399	8,473	8,539	8,651	8,685	8,760	8,836
29-Nov	24	8,862	8,902	9,070	9,251	9,312	9,395	9,467	9,592	9,630	9,713	9,797
30-Nov	29	10,703	10,754	10,956	11,175	11,249	11,349	11,437	11,589	11,635	11,736	11,838
1-Dec	20	8,252	8,290	8,447	8,616	8,673	8,750	8,817	8,934	8,969	9,046	9,124
2-Dec	28	10,547	10,596	10,795	11,011	11,084	11,183	11,270	11,419	11,464	11,564	11,665
3-Dec	29	10,819	10,870	11,074	11,295	11,370	11,471	11,561	11,714	11,761	11,863	11,966
4-Dec	34	12,585	12,646	12,882	13,140	13,227	13,345	13,449	13,628	13,683	13,802	13,923
5-Dec	25	10,047	10,095	10,285	10,491	10,560	10,654	10,737	10,879	10,922	11,017	11,113
6-Dec	39	14,016	14,084	14,347	14,633	14,730	14,862	14,978	15,178	15,239	15,371	15,506
7-Dec	28	10,980	11,033	11,240	11,464	11,540	11,643	11,734	11,889	11,937	12,041	12,146
8-Dec	19	8,356	8,395	8,553	8,725	8,782	8,860	8,928	9,046	9,082	9,160	9,240
9-Dec	29	10,790	10,841	11,045	11,265	11,340	11,441	11,530	11,683	11,729	11,831	11,934
10-Dec	23	9,012	9,053	9,224	9,409	9,471	9,555	9,629	9,756	9,794	9,879	9,965
11-Dec	20	8,224	8,261	8,417	8,586	8,643	8,719	8,786	8,902	8,937	9,014	9,092
12-Dec	27	10,072	10,119	10,309	10,515	10,585	10,679	10,762	10,905	10,948	11,043	11,139
13-Dec	27	10,055	10,101	10,291	10,497	10,566	10,660	10,743	10,885	10,928	11,023	11,119
14-Dec	41	14,607	14,678	14,952	15,250	15,352	15,489	15,611	15,819	15,882	16,021	16,161
15-Dec	45	16,216	16,296	16,600	16,931	17,044	17,197	17,332	17,563	17,634	17,788	17,944
16-Dec	39	14,928	15,003	15,283	15,588	15,692	15,832	15,956	16,169	16,234	16,376	16,520
17-Dec	32	12,762	12,825	13,065	13,326	13,415	13,535	13,641	13,822	13,877	13,998	14,121
18-Dec	41	15,098	15,172	15,456	15,764	15,869	16,011	16,136	16,352	16,417	16,561	16,706
19-Dec	32	12,445	12,505	12,740	12,994	13,080	13,197	13,300	13,477	13,531	13,649	13,768
20-Dec	49	17,432	17,519	17,845	18,200	18,322	18,486	18,631	18,880	18,956	19,122	19,290
21-Dec	51	18,398	18,491	18,835	19,210	19,339	19,512	19,666	19,929	20,010	20,185	20,362
22-Dec	32	13,224	13,291	13,539	13,809	13,901	14,026	14,135	14,324	14,381	14,507	14,634
23-Dec	21	9,420	9,466	9,644	9,837	9,902	9,990	10,067	10,201	10,241	10,330	10,420
24-Dec	27	10,361	10,410	10,605	10,817	10,889	10,986	11,071	11,218	11,263	11,360	11,459
25-Dec	41	14,433	14,504	14,774	15,069	15,169	15,305	15,425	15,631	15,693	15,830	15,969
26-Dec	42	15,312	15,388	15,675	15,987	16,094	16,238	16,366	16,584	16,651	16,796	16,944
27-Dec	51	18,323	18,415	18,758	19,131	19,259	19,432	19,585	19,847	19,927	20,101	20,278
28-Dec	51	18,745	18,840	19,191	19,573	19,703	19,880	20,037	20,305	20,387	20,566	20,747
29-Dec	32	13,282	13,349	13,598	13,870	13,962	14,087	14,197	14,387	14,444	14,570	14,698
30-Dec	35	13,637	13,705	13,961	14,239	14,334	14,462	14,576	14,770	14,829	14,959	15,090
31-Dec	30	11,669	11,725	11,945	12,184	12,265	12,374	12,471	12,636	12,687	12,797	12,909
1-Jan	61	20,948	21,054	21,445	21,871	22,018	22,216	22,391	22,691	22,783	22,983	23,185
2-Jan	38	14,772	14,846	15,123	15,424	15,527	15,666	15,789	16,000	16,064	16,205	16,347
3-Jan	23	10,352	10,402	10,597	10,809	10,881	10,978	11,063	11,210	11,255	11,352	11,451
4-Jan	28	10,893	10,945	11,151	11,374	11,449	11,551	11,641	11,795	11,842	11,945	12,049
5-Jan	19	7,894	7,929	8,079	8,241	8,296	8,369	8,433	8,545	8,578	8,652	8,727
6-Jan	28	10,489	10,538	10,736	10,951	11,023	11,121	11,208	11,356	11,401	11,500	11,601
7-Jan	38	13,501	13,566	13,820	14,095	14,189	14,316	14,428	14,620	14,679	14,807	14,936
8-Jan	41	14,953	15,027	15,308	15,613	15,717	15,857	15,982	16,195	16,260	16,402	16,546
9-Jan	41	15,329	15,405	15,692	16,005	16,112	16,256	16,384	16,603	16,669	16,815	16,963
10-Jan	30	11,969	12,027	12,253	12,497	12,580	12,692	12,792	12,962	13,013	13,127	13,241
11-Jan	43	15,700	15,778	16,072	16,392	16,502	16,650	16,780	17,005	17,073	17,222	17,373
12-Jan	50	17,866	17,956	18,290	18,654	18,779	18,947	19,096	19,352	19,430	19,600	19,772
13-Jan	41	15,733	15,812	16,107	16,428	16,538	16,686	16,817	17,042	17,110	17,260	17,411
14-Jan	46	17,181	17,268	17,590	17,940	18,060	18,222	18,365	18,611	18,686	18,850	19,015
15-Jan	43	16,162	16,243	16,546	16,876	16,988	17,141	17,275	17,506	17,577	17,731	17,886
16-Jan	30	12,304	12,365	12,597	12,848	12,934	13,049	13,151	13,326	13,379	13,496	13,614
17-Jan	40	14,721	14,793	15,070	15,370	15,472	15,611	15,733	15,943	16,007	16,147	16,288
18-Jan	55	19,285	19,382	19,743	20,136	20,270	20,452	20,614	20,890	20,974	21,158	21,344
19-Jan	68	23,923	24,058	24,506	24,994	25,163	25,391	25,593	25,937	26,043	26,272	26,504
20-Jan	54	20,515	20,621	21,004	21,422	21,565	21,760	21,931	22,225	22,315	22,511	22,709
21-Jan	44	17,474	17,564	17,891	18,247	18,369	18,534	18,680	18,930	19,007	19,173	19,342
22-Jan	34	13,769	13,838	14,097	14,378	14,474	14,603	14,718	14,914	14,974	15,105	15,237
23-Jan	32	12,589	12,651	12,888	13,145	13,232	13,350	13,455	13,634	13,689	13,808	13,929
24-Jan	44	15,724	15,801	16,096	16,416	16,526	16,674	16,805	17,029	17,097	17,247	17,398
25-Jan	24	10,122	10,170	10,361	10,569	10,639	10,733	10,817	10,960	11,004	11,099	11,196
26-Jan	41	15,011	15,085	15,367	15,673	15,777	15,919	16,044	16,258	16,323	16,466	16,610
27-Jan	46	16,430	16,512	16,820	17,155	17,269	17,424	17,561	17,795	17,867	18,023	18,182
28-Jan	32	12,849	12,913	13,154	13,417	13,506	13,627	13,733	13,916	13,972	14,094	14,217
29-Jan	46	16,806	16,890	17,205	17,547	17,664	17,823	17,963	18,203	18,276	18,437	18,598
30-Jan	47	17,107	17,193	17,513	17,862	17,981	18,142	18,285	18,529	18,604	18,767	18,932

Design_AI_S05

Date	AI HDDd	AI TSO (Total by Component) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Jan	43	16,203	16,283	16,587	16,917	17,030	17,183	17,318	17,549	17,620	17,774	17,930
1-Feb	17	8,418	8,458	8,618	8,790	8,848	8,927	8,996	9,115	9,151	9,230	9,310
2-Feb	28	10,864	10,916	11,121	11,343	11,419	11,520	11,610	11,764	11,811	11,913	12,017
3-Feb	45	15,551	15,627	15,919	16,236	16,344	16,491	16,620	16,842	16,910	17,057	17,207
4-Feb	45	16,360	16,442	16,748	17,082	17,196	17,350	17,486	17,720	17,791	17,947	18,105
5-Feb	56	20,164	20,267	20,644	21,054	21,195	21,386	21,554	21,843	21,931	22,124	22,319
6-Feb	56	20,482	20,587	20,969	21,386	21,530	21,723	21,895	22,188	22,278	22,473	22,671
7-Feb	57	20,968	21,075	21,467	21,894	22,040	22,238	22,414	22,714	22,806	23,007	23,209
8-Feb	42	16,612	16,697	17,008	17,346	17,462	17,619	17,758	17,995	18,068	18,226	18,386
9-Feb	44	16,810	16,895	17,210	17,553	17,670	17,828	17,969	18,209	18,282	18,442	18,604
10-Feb	39	14,928	15,003	15,283	15,588	15,692	15,832	15,956	16,169	16,234	16,376	16,520
11-Feb	42	15,745	15,824	16,119	16,440	16,550	16,698	16,830	17,054	17,123	17,273	17,424
12-Feb	37	14,182	14,252	14,518	14,808	14,906	15,040	15,158	15,360	15,422	15,556	15,693
13-Feb	43	15,931	16,011	16,309	16,634	16,745	16,895	17,028	17,255	17,325	17,476	17,630
14-Feb	45	16,430	16,511	16,819	17,154	17,268	17,423	17,560	17,794	17,866	18,022	18,181
15-Feb	32	12,878	12,942	13,184	13,447	13,536	13,657	13,764	13,948	14,003	14,126	14,249
16-Feb	33	12,861	12,925	13,166	13,429	13,518	13,639	13,746	13,929	13,985	14,107	14,230
17-Feb	35	13,117	13,181	13,428	13,696	13,787	13,910	14,019	14,205	14,262	14,387	14,513
18-Feb	31	11,999	12,057	12,283	12,528	12,612	12,724	12,824	12,994	13,046	13,160	13,274
19-Feb	37	13,748	13,816	14,074	14,355	14,450	14,579	14,694	14,890	14,949	15,080	15,212
20-Feb	22	9,288	9,332	9,508	9,698	9,762	9,849	9,925	10,057	10,096	10,184	10,272
21-Feb	39	14,016	14,084	14,347	14,633	14,730	14,862	14,978	15,178	15,239	15,371	15,506
22-Feb	43	15,411	15,487	15,776	16,090	16,198	16,343	16,471	16,691	16,758	16,905	17,053
23-Feb	22	9,693	9,739	9,922	10,121	10,188	10,279	10,358	10,496	10,537	10,629	10,721
24-Feb	35	13,117	13,181	13,428	13,696	13,787	13,910	14,019	14,205	14,262	14,387	14,513
25-Feb	43	15,296	15,371	15,658	15,970	16,076	16,220	16,347	16,565	16,632	16,777	16,925
26-Feb	43	15,902	15,982	16,280	16,604	16,715	16,864	16,997	17,224	17,293	17,445	17,598
27-Feb	41	15,531	15,609	15,900	16,217	16,325	16,471	16,601	16,822	16,890	17,038	17,187
28-Feb	39	14,738	14,811	15,087	15,388	15,490	15,629	15,752	15,962	16,026	16,166	16,307
1-Mar	47	17,165	17,251	17,572	17,922	18,042	18,204	18,347	18,592	18,667	18,831	18,996
2-Mar	32	12,820	12,883	13,125	13,386	13,476	13,596	13,702	13,885	13,940	14,062	14,185
3-Mar	43	15,931	16,011	16,309	16,634	16,745	16,895	17,028	17,255	17,325	17,476	17,630
4-Mar	42	15,514	15,592	15,882	16,199	16,307	16,453	16,582	16,804	16,871	17,019	17,168
5-Mar	27	11,285	11,340	11,553	11,784	11,862	11,968	12,061	12,222	12,270	12,377	12,485
6-Mar	36	13,534	13,600	13,855	14,131	14,225	14,352	14,465	14,657	14,716	14,844	14,974
7-Mar	32	12,023	12,080	12,307	12,552	12,636	12,748	12,848	13,019	13,070	13,184	13,299
8-Mar	41	15,011	15,085	15,367	15,673	15,777	15,919	16,044	16,258	16,323	16,466	16,610
9-Mar	45	16,360	16,442	16,748	17,082	17,196	17,350	17,486	17,720	17,791	17,947	18,105
10-Mar	46	17,037	17,123	17,442	17,789	17,908	18,068	18,211	18,454	18,528	18,691	18,855
11-Mar	21	9,651	9,698	9,881	10,078	10,145	10,235	10,315	10,452	10,493	10,584	10,676
12-Mar	16	7,452	7,486	7,628	7,781	7,833	7,901	7,962	8,067	8,099	8,168	8,239
13-Mar	22	8,393	8,431	8,590	8,762	8,820	8,898	8,966	9,085	9,120	9,199	9,279
14-Mar	20	7,686	7,720	7,866	8,024	8,076	8,147	8,210	8,318	8,351	8,423	8,495
15-Mar	25	9,441	9,484	9,663	9,856	9,922	10,009	10,087	10,220	10,261	10,350	10,440
16-Mar	27	10,130	10,177	10,369	10,576	10,646	10,740	10,824	10,967	11,011	11,106	11,203
17-Mar	35	12,742	12,803	13,043	13,303	13,391	13,511	13,617	13,798	13,853	13,974	14,096
18-Mar	27	10,621	10,672	10,872	11,089	11,163	11,262	11,350	11,500	11,546	11,646	11,748
19-Mar	28	10,922	10,974	11,180	11,404	11,479	11,582	11,672	11,827	11,874	11,977	12,081
20-Mar	28	10,720	10,771	10,973	11,192	11,267	11,367	11,455	11,607	11,653	11,755	11,857
21-Mar	28	10,616	10,666	10,866	11,083	11,156	11,256	11,343	11,494	11,539	11,639	11,741
22-Mar	21	8,640	8,680	8,844	9,021	9,081	9,161	9,232	9,354	9,391	9,472	9,554
23-Mar	24	9,342	9,385	9,562	9,753	9,818	9,905	9,982	10,114	10,154	10,242	10,330
24-Mar	29	10,732	10,783	10,985	11,205	11,279	11,379	11,468	11,620	11,666	11,768	11,870
25-Mar	21	8,554	8,593	8,755	8,931	8,990	9,069	9,139	9,260	9,296	9,377	9,458
26-Mar	26	9,973	10,020	10,208	10,412	10,481	10,574	10,657	10,798	10,841	10,935	11,030
27-Mar	41	14,404	14,474	14,745	15,039	15,139	15,274	15,394	15,599	15,662	15,798	15,937
28-Mar	42	15,150	15,225	15,509	15,818	15,923	16,066	16,192	16,408	16,474	16,618	16,763
29-Mar	29	11,830	11,888	12,111	12,352	12,435	12,545	12,644	12,812	12,863	12,975	13,088
30-Mar	20	8,772	8,814	8,980	9,160	9,220	9,302	9,374	9,498	9,536	9,618	9,701
31-Mar	21	8,438	8,477	8,637	8,810	8,868	8,946	9,016	9,135	9,170	9,250	9,330
1-Apr	23	8,752	8,918	9,097	9,156	9,236	9,307	9,429	9,466	9,547	9,629	9,768
2-Apr	24	9,168	9,342	9,530	9,592	9,676	9,750	9,878	9,917	10,002	10,088	10,234
3-Apr	25	9,585	9,767	9,962	10,028	10,116	10,193	10,327	10,368	10,457	10,547	10,699
4-Apr	21	8,438	8,599	8,771	8,828	8,906	8,974	9,091	9,126	9,205	9,284	9,418
5-Apr	39	13,640	13,897	14,174	14,268	14,394	14,505	14,697	14,755	14,883	15,012	15,230
6-Apr	31	11,768	11,990	12,229	12,310	12,419	12,515	12,680	12,730	12,839	12,951	13,139
7-Apr	19	8,442	8,603	8,775	8,833	8,910	8,978	9,096	9,131	9,210	9,289	9,423
8-Apr	29	10,877	11,082	11,304	11,378	11,478	11,567	11,719	11,765	11,866	11,969	12,143
9-Apr	12	5,698	5,808	5,926	5,964	6,015	6,060	6,139	6,162	6,214	6,267	6,356
10-Apr	22	8,508	8,670	8,844	8,902	8,980	9,048	9,167	9,202	9,281	9,361	9,496
11-Apr	21	8,005	8,157	8,321	8,375	8,448	8,513	8,624	8,657	8,731	8,806	8,933
12-Apr	19	7,530	7,673	7,827	7,878	7,947	8,007	8,112	8,143	8,212	8,283	8,402
13-Apr	7	4,003	4,082	4,165	4,191	4,226	4,257	4,310	4,326	4,361	4,397	4,459
14-Apr	15	5,967	6,081	6,204	6,244	6,298	6,345	6,427	6,452	6,506	6,561	6,655
15-Apr	17	6,453	6,577	6,710	6,753	6,812	6,863	6,952	6,978	7,038	7,098	7,199
16-Apr	21	7,947	8,099	8,261	8,315	8,387	8,451	8,562	8,595	8,668	8,743	8,869
17-Apr	21	8,120	8,275	8,441	8,496	8,570	8,636	8,749	8,782	8,858	8,934	9,062
18-Apr	13	5,826	5,939	6,058	6,098	6,150	6,196	6,276	6,300	6,354	6,407	6,499
19-Apr	15	6,065	6,182	6,306	6,347	6,402	6,450	6,533	6,558	6,613	6,669	6,765
20-Apr	5	3,077	3,139	3,203	3,223	3,249	3,271	3,311	3,323	3,349	3,376	3,422
21-Apr	14	5,492	5,598	5,711	5,748	5,797	5,841	5,916	5,938	5,988	6,039	6,125
22-Apr	7	3,397	3,464	3,535	3,557	3,586	3,611	3,656	3,669	3,699	3,729	3,780
23-Apr	15	5,822	5,934	6,054	6,093	6,145	6,192	6,272	6,295	6,349	6,402	6,494
24-Apr	15	5,851	5,964	6,084	6,123	6,176	6,222	6,303	6,327	6,380	6,434	6,526
25-Apr	14	5,781	5,892	6,011	6,050	6,102	6,148	6,227	6,251	6,304	6,357	6,448
26-Apr	10	4,421	4,508	4,599	4,628	4,667	4,702	4,762	4,779	4,819	4,859	4,928
27-Apr	7	3,541	3,611	3,685	3,708	3,738	3,765	3,812	3,825	3,856	3,888	3,942
28-Apr	8	3,628	3,700	3,776	3,799	3,831	3,858	3,906	3,920	3,952	3,985	4,040
29-Apr	13	5,046	5,144	5,248	5,282	5,327	5,367	5,436	5,456	5,502	5,548	5,627
30-Apr	16	6,123	6,241	6,367	6,408	6,463	6,512	6,596	6,621	6,677	6,734	6,830
1-May	0	3,183	3,249	3,316	3,336	3,362	3,385	3,425	3,436	3,463	3,490	3,537

Design_AI_S05

Date	AI HDDd	AI TSO (Total by Component) 2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
2-May	0	2,831	2,891	2,951	2,969	2,991	3,010	3,045	3,055	3,078	3,101	3,142
3-May	0	2,249	2,298	2,347	2,360	2,376	2,391	2,417	2,424	2,441	2,458	2,489
4-May	0	2,383	2,435	2,486	2,500	2,518	2,533	2,562	2,569	2,587	2,606	2,639
5-May	6	2,583	2,637	2,691	2,707	2,728	2,746	2,778	2,787	2,808	2,830	2,868
6-May	17	6,004	6,120	6,243	6,283	6,337	6,385	6,467	6,491	6,546	6,601	6,695
7-May	23	8,290	8,447	8,617	8,673	8,749	8,815	8,931	8,965	9,042	9,119	9,251
8-May	14	6,070	6,186	6,311	6,352	6,407	6,455	6,539	6,564	6,619	6,675	6,771
9-May	13	5,682	5,791	5,908	5,947	5,998	6,043	6,121	6,144	6,196	6,248	6,338
10-May	2	2,904	2,963	3,023	3,041	3,066	3,087	3,125	3,135	3,160	3,185	3,229
11-May	0	2,754	2,811	2,869	2,886	2,908	2,928	2,963	2,972	2,995	3,019	3,059
12-May	0	2,387	2,438	2,488	2,503	2,521	2,538	2,567	2,575	2,594	2,614	2,648
13-May	3	2,260	2,307	2,355	2,369	2,387	2,402	2,430	2,438	2,456	2,475	2,507
14-May	8	3,233	3,298	3,365	3,386	3,413	3,437	3,480	3,492	3,520	3,548	3,597
15-May	12	4,630	4,720	4,816	4,846	4,887	4,924	4,986	5,005	5,047	5,089	5,161
16-May	17	6,396	6,519	6,650	6,693	6,751	6,802	6,890	6,916	6,975	7,034	7,135
17-May	12	5,017	5,114	5,218	5,251	5,296	5,335	5,404	5,424	5,469	5,515	5,594
18-May	12	5,150	5,249	5,356	5,390	5,436	5,477	5,547	5,568	5,615	5,662	5,743
19-May	1	2,964	3,024	3,086	3,104	3,129	3,151	3,190	3,201	3,226	3,252	3,297
20-May	8	3,513	3,583	3,656	3,678	3,709	3,735	3,782	3,795	3,826	3,857	3,911
21-May	9	3,687	3,760	3,836	3,860	3,892	3,920	3,970	3,984	4,016	4,049	4,106
22-May	9	3,918	3,995	4,076	4,102	4,136	4,166	4,219	4,234	4,269	4,304	4,364
23-May	8	3,657	3,730	3,806	3,829	3,861	3,889	3,938	3,952	3,984	4,016	4,072
24-May	10	4,075	4,155	4,239	4,266	4,302	4,333	4,388	4,404	4,440	4,477	4,540
25-May	7	3,368	3,435	3,505	3,527	3,555	3,581	3,625	3,638	3,667	3,697	3,748
26-May	7	3,339	3,406	3,475	3,496	3,525	3,550	3,594	3,606	3,635	3,665	3,716
27-May	1	2,675	2,730	2,786	2,802	2,825	2,844	2,879	2,888	2,911	2,934	2,974
28-May	5	2,500	2,551	2,603	2,619	2,639	2,657	2,689	2,697	2,718	2,739	2,776
29-May	3	2,416	2,466	2,516	2,531	2,551	2,568	2,599	2,607	2,627	2,648	2,683
30-May	9	3,658	3,730	3,806	3,830	3,862	3,890	3,939	3,953	3,985	4,018	4,074
31-May	12	4,526	4,614	4,708	4,738	4,778	4,813	4,874	4,892	4,933	4,974	5,044
1-Jun	6	3,165	3,228	3,294	3,314	3,341	3,365	3,406	3,418	3,445	3,473	3,520
2-Jun	7	3,368	3,435	3,505	3,527	3,555	3,581	3,625	3,638	3,667	3,697	3,748
3-Jun	2	2,632	2,686	2,741	2,757	2,779	2,798	2,832	2,841	2,864	2,886	2,926
4-Jun	0	2,545	2,597	2,650	2,666	2,687	2,706	2,738	2,747	2,769	2,791	2,829
5-Jun	0	2,344	2,393	2,442	2,456	2,475	2,492	2,522	2,530	2,549	2,569	2,604
6-Jun	0	2,288	2,335	2,383	2,397	2,416	2,432	2,461	2,469	2,488	2,507	2,541
7-Jun	0	2,156	2,201	2,247	2,260	2,277	2,292	2,319	2,326	2,344	2,362	2,393
8-Jun	0	2,318	2,365	2,414	2,428	2,447	2,463	2,493	2,501	2,520	2,540	2,574
9-Jun	0	2,257	2,304	2,351	2,365	2,383	2,399	2,428	2,436	2,455	2,474	2,507
10-Jun	0	2,213	2,258	2,305	2,318	2,336	2,352	2,380	2,387	2,406	2,425	2,457
11-Jun	0	2,184	2,229	2,275	2,288	2,306	2,321	2,349	2,356	2,374	2,393	2,425
12-Jun	0	2,126	2,170	2,215	2,228	2,245	2,260	2,287	2,294	2,311	2,329	2,360
13-Jun	0	2,184	2,229	2,275	2,288	2,306	2,321	2,349	2,356	2,374	2,393	2,425
14-Jun	0	2,123	2,167	2,212	2,225	2,242	2,257	2,283	2,290	2,308	2,326	2,357
15-Jun	9	3,340	3,407	3,476	3,498	3,527	3,552	3,596	3,609	3,638	3,668	3,718
16-Jun	7	3,050	3,111	3,175	3,194	3,220	3,243	3,282	3,294	3,320	3,347	3,393
17-Jun	1	2,733	2,789	2,846	2,863	2,886	2,905	2,941	2,951	2,974	2,998	3,039
18-Jun	5	2,500	2,551	2,603	2,619	2,639	2,657	2,689	2,697	2,718	2,739	2,776
19-Jun	6	2,731	2,787	2,844	2,861	2,884	2,904	2,939	2,949	2,972	2,995	3,036
20-Jun	5	2,586	2,639	2,693	2,709	2,731	2,749	2,782	2,791	2,813	2,835	2,873
21-Jun	0	2,542	2,593	2,646	2,662	2,683	2,702	2,734	2,744	2,765	2,787	2,825
22-Jun	0	2,357	2,405	2,454	2,469	2,488	2,505	2,535	2,544	2,563	2,584	2,619
23-Jun	0	2,068	2,111	2,154	2,167	2,183	2,198	2,224	2,231	2,248	2,265	2,296
24-Jun	0	2,068	2,111	2,154	2,167	2,183	2,198	2,224	2,231	2,248	2,265	2,296
25-Jun	0	2,068	2,111	2,154	2,167	2,183	2,198	2,224	2,231	2,248	2,265	2,296
26-Jun	0	2,096	2,140	2,184	2,196	2,213	2,228	2,255	2,262	2,279	2,297	2,328
27-Jun	0	2,039	2,081	2,124	2,136	2,152	2,167	2,192	2,199	2,216	2,233	2,263
28-Jun	0	1,848	1,887	1,926	1,937	1,951	1,964	1,987	1,993	2,008	2,023	2,050
29-Jun	0	1,967	2,008	2,049	2,061	2,076	2,090	2,115	2,121	2,137	2,154	2,182
30-Jun	0	1,995	2,037	2,079	2,091	2,107	2,121	2,146	2,153	2,169	2,186	2,215
1-Jul	0	2,024	2,066	2,109	2,121	2,137	2,152	2,177	2,184	2,201	2,218	2,247
2-Jul	0	2,024	2,066	2,109	2,121	2,137	2,152	2,177	2,184	2,201	2,218	2,247
3-Jul	0	2,039	2,081	2,124	2,136	2,152	2,167	2,192	2,199	2,216	2,233	2,263
4-Jul	0	2,024	2,066	2,108	2,121	2,137	2,151	2,177	2,184	2,200	2,217	2,247
5-Jul	0	1,819	1,857	1,896	1,907	1,921	1,933	1,956	1,962	1,976	1,991	2,017
6-Jul	1	1,838	1,877	1,916	1,926	1,941	1,953	1,975	1,981	1,996	2,011	2,037
7-Jul	2	2,084	2,127	2,171	2,183	2,200	2,214	2,240	2,247	2,264	2,282	2,312
8-Jul	0	2,500	2,551	2,603	2,619	2,640	2,658	2,690	2,700	2,721	2,743	2,780
9-Jul	0	2,226	2,271	2,318	2,332	2,350	2,366	2,395	2,402	2,421	2,440	2,473
10-Jul	0	1,879	1,918	1,958	1,969	1,984	1,997	2,021	2,027	2,043	2,058	2,085
11-Jul	0	1,822	1,860	1,898	1,909	1,924	1,936	1,959	1,965	1,980	1,995	2,021
12-Jul	0	1,732	1,769	1,806	1,816	1,829	1,841	1,862	1,868	1,882	1,896	1,920
13-Jul	0	1,966	2,007	2,048	2,060	2,076	2,090	2,114	2,121	2,137	2,154	2,182
14-Jul	0	1,980	2,022	2,063	2,075	2,091	2,105	2,130	2,137	2,153	2,170	2,199
15-Jul	0	1,923	1,963	2,003	2,015	2,030	2,044	2,068	2,074	2,090	2,106	2,134
16-Jul	0	1,908	1,948	1,988	1,999	2,015	2,028	2,052	2,058	2,074	2,090	2,118
17-Jul	0	1,893	1,933	1,973	1,984	1,999	2,013	2,036	2,043	2,058	2,074	2,102
18-Jul	0	1,850	1,888	1,927	1,939	1,953	1,966	1,989	1,996	2,011	2,026	2,053
19-Jul	0	1,645	1,680	1,715	1,724	1,737	1,748	1,768	1,774	1,787	1,800	1,824
20-Jul	0	1,764	1,801	1,838	1,848	1,862	1,874	1,896	1,902	1,916	1,931	1,956
21-Jul	0	1,836	1,874	1,913	1,924	1,938	1,951	1,974	1,980	1,995	2,010	2,037
22-Jul	0	1,821	1,859	1,898	1,909	1,923	1,936	1,959	1,965	1,979	1,995	2,021
23-Jul	0	1,807	1,845	1,883	1,894	1,908	1,921	1,943	1,949	1,964	1,979	2,005
24-Jul	0	1,865	1,904	1,943	1,954	1,969	1,982	2,005	2,012	2,027	2,042	2,069
25-Jul	0	1,894	1,933	1,973	1,985	2,000	2,013	2,037	2,043	2,058	2,074	2,102
26-Jul	0	1,747	1,784	1,820	1,831	1,844	1,856	1,878	1,883	1,897	1,912	1,937
27-Jul	0	1,923	1,963	2,003	2,015	2,030	2,044	2,068	2,074	2,090	2,106	2,134
28-Jul	0	1,923	1,963	2,003	2,015	2,030	2,044	2,068	2,074	2,090	2,106	2,134
29-Jul	0	1,894	1,933	1,973	1,985	2,000	2,013	2,037	2,043	2,058	2,074	2,102
30-Jul	0	1,894	1,933	1,973	1,985	2,000	2,013	2,037	2,043	2,058	2,074	2,102
31-Jul	0	1,879	1,919	1,958	1,970	1,985	1,998	2,021	2,027	2,043	2,058	2,085

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	AI	AI TSO (Total by Component)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1-Aug	0	1,937	1,977	2,018	2,030	2,045	2,059	2,083	2,090	2,106	2,122	2,150
2-Aug	0	1,789	1,827	1,865	1,875	1,890	1,902	1,924	1,930	1,944	1,959	1,985
3-Aug	0	1,836	1,874	1,913	1,924	1,938	1,951	1,974	1,980	1,995	2,010	2,037
4-Aug	0	1,807	1,845	1,883	1,894	1,908	1,920	1,943	1,949	1,964	1,979	2,005
5-Aug	0	1,792	1,830	1,868	1,879	1,893	1,905	1,927	1,933	1,948	1,963	1,989
6-Aug	0	1,793	1,831	1,868	1,879	1,893	1,905	1,928	1,934	1,948	1,963	1,989
7-Aug	0	1,879	1,919	1,958	1,970	1,985	1,998	2,021	2,027	2,043	2,058	2,085
8-Aug	0	1,952	1,992	2,033	2,045	2,061	2,074	2,099	2,105	2,121	2,138	2,166
9-Aug	0	1,790	1,828	1,865	1,876	1,890	1,902	1,924	1,930	1,945	1,959	1,985
10-Aug	0	1,894	1,933	1,973	1,985	2,000	2,013	2,037	2,043	2,058	2,074	2,102
11-Aug	0	1,894	1,933	1,973	1,985	2,000	2,013	2,037	2,043	2,058	2,074	2,102
12-Aug	0	1,865	1,904	1,944	1,955	1,970	1,982	2,006	2,012	2,027	2,042	2,069
13-Aug	0	1,937	1,978	2,018	2,030	2,046	2,059	2,083	2,090	2,106	2,122	2,150
14-Aug	0	1,966	2,007	2,048	2,060	2,076	2,090	2,114	2,121	2,137	2,154	2,182
15-Aug	0	1,923	1,963	2,004	2,015	2,031	2,044	2,068	2,074	2,090	2,106	2,134
16-Aug	0	1,833	1,872	1,910	1,921	1,936	1,948	1,971	1,977	1,992	2,007	2,034
17-Aug	0	1,966	2,007	2,048	2,060	2,076	2,090	2,114	2,121	2,137	2,154	2,182
18-Aug	1	1,809	1,847	1,886	1,896	1,910	1,922	1,944	1,950	1,964	1,979	2,005
19-Aug	0	2,169	2,213	2,259	2,272	2,290	2,305	2,333	2,340	2,358	2,377	2,409
20-Aug	0	2,226	2,272	2,319	2,333	2,351	2,367	2,395	2,403	2,421	2,440	2,473
21-Aug	1	1,924	1,965	2,006	2,017	2,032	2,045	2,069	2,075	2,091	2,106	2,134
22-Aug	0	2,226	2,272	2,319	2,333	2,351	2,367	2,395	2,403	2,421	2,440	2,473
23-Aug	0	2,079	2,123	2,166	2,179	2,196	2,210	2,236	2,243	2,260	2,278	2,308
24-Aug	0	2,039	2,081	2,124	2,136	2,153	2,167	2,193	2,200	2,216	2,234	2,263
25-Aug	0	2,068	2,111	2,154	2,167	2,183	2,198	2,224	2,231	2,248	2,265	2,296
26-Aug	0	2,082	2,125	2,169	2,182	2,198	2,213	2,239	2,246	2,264	2,281	2,312
27-Aug	0	2,067	2,110	2,154	2,166	2,183	2,198	2,224	2,231	2,248	2,265	2,295
28-Aug	0	2,024	2,066	2,108	2,121	2,137	2,151	2,177	2,184	2,200	2,217	2,247
29-Aug	0	1,938	1,978	2,019	2,031	2,046	2,059	2,084	2,090	2,106	2,122	2,150
30-Aug	0	1,819	1,858	1,896	1,907	1,921	1,934	1,956	1,962	1,976	1,991	2,017
31-Aug	0	2,039	2,081	2,124	2,136	2,153	2,167	2,193	2,200	2,216	2,234	2,263
1-Sep	0	2,054	2,096	2,139	2,152	2,168	2,183	2,208	2,215	2,232	2,249	2,279
2-Sep	0	2,082	2,126	2,169	2,182	2,199	2,213	2,240	2,247	2,264	2,281	2,312
3-Sep	0	2,111	2,155	2,199	2,212	2,229	2,244	2,271	2,278	2,295	2,313	2,344
4-Sep	0	2,111	2,155	2,199	2,212	2,229	2,244	2,271	2,278	2,295	2,313	2,344
5-Sep	0	2,097	2,141	2,185	2,197	2,214	2,229	2,255	2,262	2,280	2,297	2,328
6-Sep	0	1,993	2,035	2,077	2,089	2,104	2,118	2,143	2,150	2,166	2,182	2,211
7-Sep	0	2,155	2,199	2,245	2,258	2,275	2,290	2,318	2,325	2,343	2,361	2,392
8-Sep	0	2,141	2,185	2,230	2,243	2,260	2,275	2,302	2,309	2,327	2,345	2,376
9-Sep	0	2,169	2,214	2,260	2,273	2,291	2,306	2,333	2,341	2,359	2,377	2,409
10-Sep	3	2,127	2,171	2,216	2,229	2,246	2,261	2,287	2,294	2,312	2,329	2,360
11-Sep	3	2,271	2,318	2,366	2,380	2,398	2,414	2,443	2,451	2,469	2,489	2,522
12-Sep	0	2,473	2,523	2,575	2,590	2,611	2,629	2,660	2,669	2,690	2,711	2,748
13-Sep	0	2,239	2,285	2,332	2,346	2,364	2,380	2,408	2,416	2,434	2,453	2,486
14-Sep	0	2,227	2,273	2,320	2,333	2,352	2,367	2,395	2,403	2,422	2,441	2,473
15-Sep	1	2,156	2,200	2,246	2,259	2,276	2,291	2,318	2,325	2,343	2,361	2,392
16-Sep	3	2,214	2,260	2,306	2,319	2,337	2,353	2,381	2,388	2,406	2,425	2,457
17-Sep	0	2,401	2,450	2,500	2,515	2,535	2,552	2,583	2,591	2,611	2,632	2,667
18-Sep	0	2,373	2,422	2,472	2,486	2,506	2,523	2,553	2,561	2,581	2,601	2,636
19-Sep	2	2,259	2,306	2,353	2,367	2,385	2,401	2,430	2,438	2,456	2,475	2,508
20-Sep	7	2,774	2,830	2,888	2,906	2,929	2,949	2,985	2,995	3,018	3,042	3,083
21-Sep	5	2,529	2,581	2,633	2,649	2,670	2,688	2,720	2,729	2,750	2,771	2,808
22-Sep	0	2,632	2,686	2,740	2,757	2,779	2,798	2,832	2,841	2,864	2,886	2,926
23-Sep	6	2,704	2,759	2,816	2,832	2,855	2,874	2,909	2,919	2,941	2,965	3,005
24-Sep	12	4,487	4,574	4,667	4,697	4,736	4,771	4,832	4,850	4,890	4,931	5,001
25-Sep	1	2,791	2,847	2,906	2,923	2,946	2,967	3,003	3,013	3,037	3,061	3,103
26-Sep	0	2,661	2,715	2,771	2,787	2,809	2,829	2,863	2,873	2,895	2,918	2,958
27-Sep	1	2,171	2,216	2,262	2,275	2,292	2,307	2,334	2,342	2,359	2,377	2,409
28-Sep	5	2,301	2,349	2,398	2,412	2,430	2,446	2,475	2,482	2,501	2,520	2,554
29-Sep	8	3,311	3,377	3,446	3,467	3,495	3,520	3,564	3,576	3,605	3,634	3,685
30-Sep	13	4,989	5,086	5,188	5,222	5,266	5,305	5,373	5,393	5,439	5,484	5,562
1-Oct	0	2,927	2,987	3,049	3,067	3,091	3,112	3,150	3,160	3,185	3,210	3,253
2-Oct	7	3,232	3,297	3,364	3,385	3,412	3,436	3,479	3,491	3,518	3,547	3,595
3-Oct	9	3,638	3,710	3,786	3,809	3,841	3,868	3,917	3,931	3,963	3,995	4,050
4-Oct	1	2,600	2,653	2,708	2,724	2,745	2,764	2,797	2,807	2,829	2,851	2,890
5-Oct	3	2,531	2,583	2,636	2,652	2,673	2,691	2,723	2,732	2,753	2,775	2,812
6-Oct	0	2,449	2,500	2,552	2,567	2,586	2,603	2,633	2,641	2,661	2,681	2,717
7-Oct	2	2,353	2,402	2,452	2,466	2,485	2,501	2,531	2,539	2,559	2,578	2,613
8-Oct	0	2,413	2,465	2,517	2,531	2,550	2,566	2,595	2,603	2,622	2,641	2,675
9-Oct	14	4,983	5,080	5,183	5,216	5,261	5,300	5,367	5,387	5,432	5,478	5,555
10-Oct	23	8,041	8,194	8,359	8,413	8,486	8,551	8,662	8,696	8,770	8,845	8,972
11-Oct	19	7,356	7,497	7,647	7,697	7,764	7,823	7,925	7,955	8,023	8,092	8,208
12-Oct	16	6,730	6,859	6,997	7,042	7,103	7,157	7,250	7,278	7,340	7,402	7,509
13-Oct	9	4,438	4,525	4,616	4,646	4,685	4,719	4,779	4,797	4,837	4,877	4,946
14-Oct	6	3,280	3,346	3,414	3,435	3,463	3,487	3,531	3,543	3,571	3,600	3,650
15-Oct	5	2,702	2,757	2,813	2,830	2,853	2,872	2,907	2,916	2,939	2,962	3,002
16-Oct	15	5,533	5,640	5,754	5,791	5,841	5,884	5,960	5,983	6,033	6,084	6,171
17-Oct	20	7,299	7,439	7,588	7,638	7,704	7,762	7,863	7,894	7,961	8,029	8,144
18-Oct	19	7,299	7,438	7,587	7,637	7,703	7,762	7,863	7,893	7,960	8,028	8,143
19-Oct	13	5,740	5,850	5,968	6,007	6,059	6,104	6,183	6,206	6,259	6,312	6,402
20-Oct	9	4,351	4,436	4,526	4,555	4,593	4,627	4,686	4,703	4,742	4,782	4,849
21-Oct	12	4,947	5,043	5,146	5,179	5,223	5,262	5,329	5,349	5,394	5,439	5,516
22-Oct	21	7,629	7,775	7,931	7,983	8,052	8,113	8,219	8,251	8,321	8,392	8,513
23-Oct	23	8,578	8,742	8,917	8,975	9,053	9,123	9,242	9,278	9,357	9,438	9,574
24-Oct	23	8,896	9,065	9,247	9,307	9,389	9,461	9,585	9,622	9,704	9,788	9,929
25-Oct	22	8,520	8,682	8,856	8,914	8,992	9,060	9,179	9,215	9,293	9,373	9,509
26-Oct	15	6,515	6,640	6,774	6,818	6,877	6,929	7,019	7,046	7,106	7,166	7,269
27-Oct	16	6,586	6,712	6,847	6,891	6,951	7,004	7,095	7,122	7,182	7,243	7,347
28-Oct	16	6,412	6,535	6,667	6,710	6,768	6,819	6,908	6,934	6,993	7,052	7,153
29-Oct	14	5,839	5,951	6,071	6,110	6,163	6,209	6,290	6,313	6,367	6,421	6,513
30-Oct	7	3,714	3,788	3,865	3,889	3,921	3,949	3,999	4,013	4,046	4,079	4,136

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	AI	AI TSO (Total by Component)										
Date	HDDd	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
31-Oct	2	2,863	2,921	2,981	2,999	3,023	3,044	3,081	3,092	3,116	3,141	3,184
Month												
Nov	697	268,433	269,659	274,746	280,247	282,098	284,592	286,796	290,585	291,730	294,253	296,805
Dec	1040	394,047	395,965	403,376	411,425	414,162	417,857	421,127	426,732	428,438	432,173	435,951
Jan	1250	468,575	470,917	479,706	489,266	492,531	496,942	500,847	507,531	509,572	514,028	518,535
Feb	1091	411,041	413,080	420,792	429,179	432,041	435,907	439,329	445,189	446,977	450,884	454,835
Mar	942	360,890	362,627	369,425	376,802	379,306	382,683	385,672	390,797	392,355	395,769	399,224
Apr	518	206,975	210,939	215,179	216,576	218,451	220,105	222,965	223,818	225,718	227,643	230,911
May	228	118,299	120,650	123,107	123,874	124,894	125,789	127,359	127,810	128,849	129,902	131,708
Jun	48	71,891	73,365	74,869	75,314	75,904	76,418	77,335	77,588	78,192	78,804	79,866
Jul	3	59,422	60,661	61,911	62,271	62,745	63,158	63,900	64,101	64,587	65,082	65,944
Aug	2	60,364	61,623	62,891	63,257	63,740	64,159	64,913	65,117	65,612	66,115	66,991
Sep	70	75,002	76,536	78,103	78,569	79,187	79,727	80,687	80,954	81,586	82,228	83,339
Oct	361	160,398	163,515	166,819	167,884	169,309	170,564	172,747	173,388	174,835	176,301	178,801
Total	**6250**	**2,655,335**	**2,679,538**	**2,730,924**	**2,774,663**	**2,794,368**	**2,817,902**	**2,843,679**	**2,873,610**	**2,888,452**	**2,913,181**	**2,942,911**
Peak Day	**68**	**23,923**	**24,058**	**24,506**	**24,994**	**25,163**	**25,391**	**25,593**	**25,937**	**26,043**	**26,272**	**26,504**

Appendix D:

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Summary of Communications

The following is a summary of the communication with the Municipalities and residents during our portable LNG setup at Old Mill Lane, Portsmouth.

2018—Old Mill Lane

- Notified and met with Portsmouth and Middletown to provide a review of the need for the Old Mill Lane setup, due to AGT maintenance/pigging operation (We just notified the Newport Fire Chief and did not meet with them)
- Since the setup is in Portsmouth the remainder of the outreach was focused in Portsmouth (there was no request from Middletown to attend a Town Council meeting, open house or provide further outreach)
- Sent letters to abutters within 200'-400' of the property in Portsmouth and Middletown – distance was based on zoning and discussion with Portsmouth Town Administrator
- Presented at a Portsmouth Town Council meeting
- Held an Open House at the Portsmouth Town Hall
- Met with Portsmouth DPW, Town Administrator, Solicitor, Fire and Police Chief to review the detailed/finalized plan
- Received Portsmouth Zoning approval for LNG Operation at Old Mill Lane (April 3, 2018)
- Conducted tours of the setup/site with Portsmouth and Middletown Fire Chiefs
- Continued communication post setup for removing equipment and maintain property/landscape/fence

2019—Old Mill Lane

- 5/17/19: NGRID call with Portsmouth, Middletown, and Newport Municipal Administrators/Manager – Future of energy solution on Aquidneck Island
- 6/6/19: Division/OER – Old Mill Lane site visit
- 6/17/19: Aquidneck Island Advisory Group Meeting – I (Portsmouth, Middletown and Newport Municipal Administrators/Manager attended)
- 6/24/19: NGRID meeting with Portsmouth, Middletown, and Newport Municipal Administrators/Manager – action item from Advisory Group Meeting I where Administrators requested additional information
- 8/29/19: Received confirmation from Portsmouth Town Administrator that a new zoning certificate is not required (and later confirmed on 9/19/19 to be valid through 2023)
- 9/16/19: Advisory Group Meeting – II (Portsmouth, Middletown and Newport Municipal Administrators/Manager attended)
- 10/11/19: OML meeting with Portsmouth Town Officials (Admin, Fire, Police, DPW) and LNG Team – reviewed site setup schedule and communication plan.

An open house was discussed but determined not needed based on 2018 results.

- 10/28/19: NGRID attended Portsmouth Town Council Meeting – Winter Operations at OML
- 10/28/19: Mailed Portsmouth & Middletown Abutter Letters/FAQs for OML
- 11/01/19: 12/01/19 – Setup OML
- 12/06/19: OML site visit with Portsmouth and Middletown Fire departments – printed NGRID emergency procedures were provided at this time to both Municipal Fire Departments, followed by email/electronic copies (12/18/19)
- 12/09/19: Received Middletown Resident (A) questions/concerns
- 12/12/19: Received Middletown Resident (A) questions/concerns
- 12/16/19: Advisory Group Meeting – III (Portsmouth, Middletown and Newport Municipal Administrators/Manager attended)
- 12/16/19: Meeting with Middletown Fire and concerned Resident (A) regarding OML.

2020—Old Mill Lane

- 1/02/20: Meeting with Portsmouth, Middletown, and Newport Fire Chiefs – review emergency response – Portsmouth Fire Chief requested various scenarios with evacuation distances
- 1/16/20: Received Middletown Resident (A) update request
- 1/16/20: Meeting with Portsmouth and Middletown Fire to review hazard distance scenarios
- 1/21/20: Scenarios emailed to Portsmouth and Middletown Fire Chiefs
- 2/10/2020: NGRID Mailed additional letters/FAQs to expanded abutter radius (radius/increase was provided by both Portsmouth and Middletown Fire after their review of scenarios) – same letter that was mailed in the Fall 2019
- 2/12/2020: Received request to contact Portsmouth resident (B). Follow-up call/meeting took place end of February.
- 2/26/2020: Old Mill Lane site visit with Municipal and State Officials
- March 2020: Public Open House scheduled but postponed due to COVID. Due to COVID, most meetings and discussions were further deferred to Fall.
- 9/14/2020: Advisory Group Meeting – IV (Portsmouth, Middletown and Newport Municipal Administrators/Manager attended)
- 10/08/2020: Old Mill Lane Abutter Notifications/FAQ's sent
- 10/14/2020: Aquidneck Island Open House (Public, State and Town officials attended) - https://www.nationalgridus.com/aquidneck-long-term-gas-capacity-study
- 10/20/2020: Portsmouth Town Administrator, Police, and Fire meeting regarding winter operations at Old Mill Lane
- 10/27/2020: Portsmouth Town Council Meeting

- 10/28/2020: Middletown Town Council Meeting
- 11/04/2020: LNG Firefighting School, sponsored by NG – Portsmouth and Middletown (4 attendees)
- 11/12/2020: Newport Town Council Meeting (1 of 2)
- 11/18/2020: Newport Town Council Meeting (2 of 2)
- 11/30/2020: LNG Firefighting School, sponsored by NG – Portsmouth, Middletown, and Newport FD's (25 attendees)
- 12/4/2020: Old Mill Lane Site Tour and Training – Portsmouth and Middletown Fire Departments
- 12/15/2020: Old Mill Lane Site Tour and Training – Portsmouth Fire Department
- 12/21/2020: Old Mill Lane Site Tour and Training – Middletown Fire Department
- 12/22/2020: Old Mill Lane Site Tour and Training – Middletown Fire Department

2021—Old Mill Lane

- 01/04/2021: Division-site visit
- 01/15/2021: Division and OER January Gas Reliability Meeting
- 01/19/2021: Aquidneck Solution Overview RI Legislators Briefing
- 01/20/2021: SRP Technical Working Group 2021, January - AI Update: Findings and Next Steps
- 01/21/2021: Site visit with Portsmouth Resident (B)
- 01/22/2021: Aquidneck Advisory Group meeting IV - National Grid Update and Next Steps for a Long-Term Energy Solution

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Appendix E:

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March 29, 2021

Mr. Brian Kirkwood
National Grid
Senior Supervisor, LNG Operations
1595 Mendon Road
Cumberland, RI 02864

Re: Noise Study for Old Mill Road LNG site

Dear Mr. Kirkwood,

HDR Engineering, Inc. (HDR) is pleased to submit this summary of noise monitoring and noise mitigation recommendations for the National Grid Liquid Natural Gas (LNG) processing facility at 112 Old Mill Road, Portsmouth, RI (Facility).

Introduction

HDR conducted a noise study at National Grid's LNG facility in Portsmouth, Rhode Island. The scope of this study included a long-term unattended outdoor noise measurement, several near field noise measurements of individual equipment around the site, and recommendations for noise mitigation.

Sound is made up of minute fluctuations in air pressure (called sound pressure levels) and most sound is comprised of different combinations of energy throughout the tonal spectrum (low, medium, and high frequencies). The humans hearing organs do not perceive all frequencies of sound equally. Humans do not hear low frequencies well, yet we hear some higher frequencies quite well. To account for this, the A-weighting scale mathematically puts more "weight" on frequencies that humans hear, and less "weight" on frequencies that humans do not hear well. Therefore, the A-weighting scale de-emphasizes low frequency noise (energy in the lower frequencies).

However, that energy does exist, and the C-weighting scale does not de-emphasize it. An A-weighted and C-weighted measurement of the same noise source will produce two different results, and when the difference between C and A-weighted measurement results approaches or exceeds 20 dB it is an indication that the noise source emits high levels of low frequency noise.

Other acoustical concepts used in this report include the following.

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- Decibel (dB) = a unit of sound pressure
- dBA = A-weighted decibels
- dBC = C-weighted decibels
- Lmax = maximum instantaneous sound pressure level
- Lmin = minimum instantaneous sound pressure level
- Leq = the energy-equivalent noise level, mean average noise level over a period of time, i.e. one hour
- L50 = a statistical metric that represents the noise level exceeded N% of the hour, in this case 50% of the hour; also, a median average noise level over a period of time, i.e. one hour

The Portsmouth noise ordinance limits maximum allowable noise levels at residential receiving lands to 65 dBA during daytime (7:00 am to 10:00 pm) and 55 dBA during nighttime (10:00 pm to 7:00 am). HDR was not provided right of entry to measure existing noise levels at residences across the street. Therefore, the long-term noise measurement occurred on Facility property and does not represent noise levels at receiving land uses. Following are HDR's results and noise mitigation recommendations. The State of Rhode Island regulates environmental noise, but no quantitative[1] noise limits were identified, and it is thus not discussed further.

Results

Long-term Noise Monitoring

HDR performed an unattended long-term noise measurement at the Facility, in the northeast corner near the property line. A goal of this measurement was *to measure Facility-related noise during the quietest hours of the night, when background noise levels are lowest*. These conditions provide the most accurate measurement of Facility-related noise at the property line.

The noise measurement system consisted of a Larson Davis model LD831C sound level meter/real-time analyzer stored in a weather-resistant Pelican case, with an external microphone, preamplifier, and windscreen set up on a tripod. The meter was configured to store Lmin, Lmax, Leq, and statistical metrics including the L50. Measurement results were stored in the LD831C every second, and also summarized every hour on the hour.

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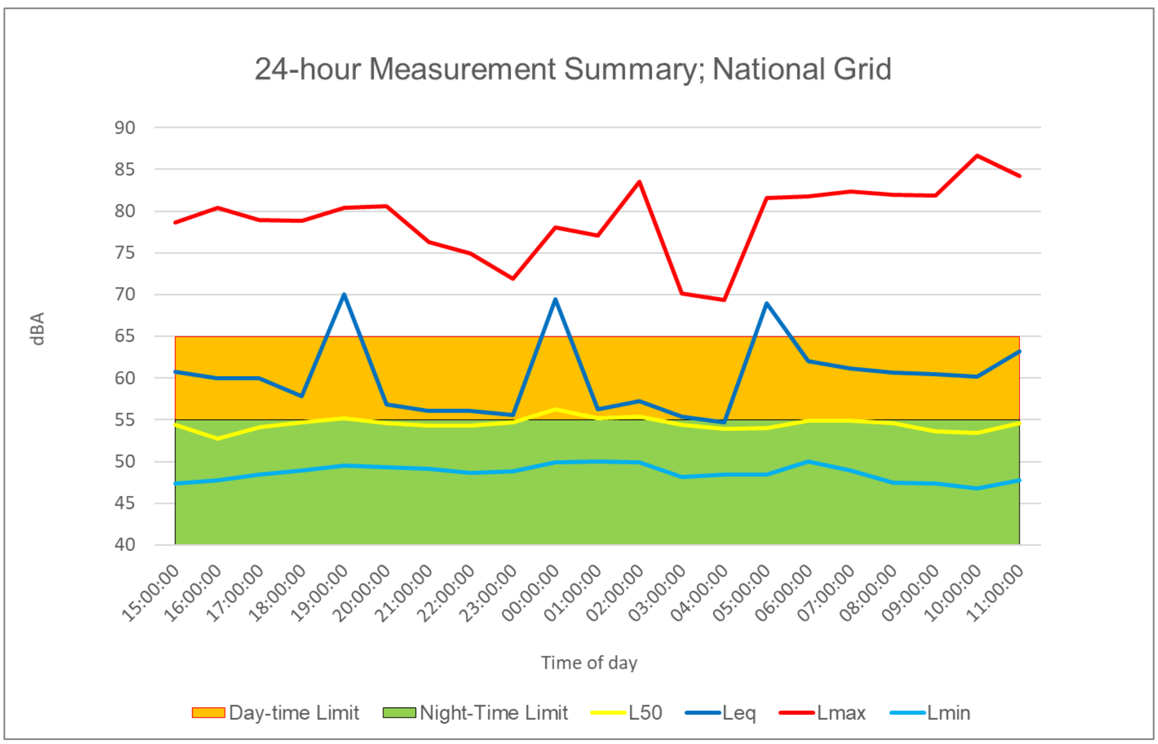
[1] The State of Rhode Island noise rules limits low frequency noise (20-100Hz) qualitatively, but doesn't provide explicit noise limits

Figure 1 summarizes hourly measurement results and facilitates a comparison with the daytime and nighttime residential noise limits in the Portsmouth, Rhode Island noise ordinance. Noise measurements shown in Figure 1 include the Lmax, Lmin, Leq and L50. The Lmax can be compared directly with the daytime and nighttime noise limits. The Lmin is presented to help readers understand the overall range in measured noise levels (shown in green and gold bands).

The Leq and L50 are two different expressions of average noise levels. When there is little to no variation in noise levels, the Leq and L50 are usually with 3 dB of each other. The farther apart they are, the more variation there is in measured noise levels. In Figure 1, daytime ends and nighttime begins at 22:00. Daytime resumes again at 07:00.

Figure 1.
Summary of Long-Term Measurement Results



Source: HDR

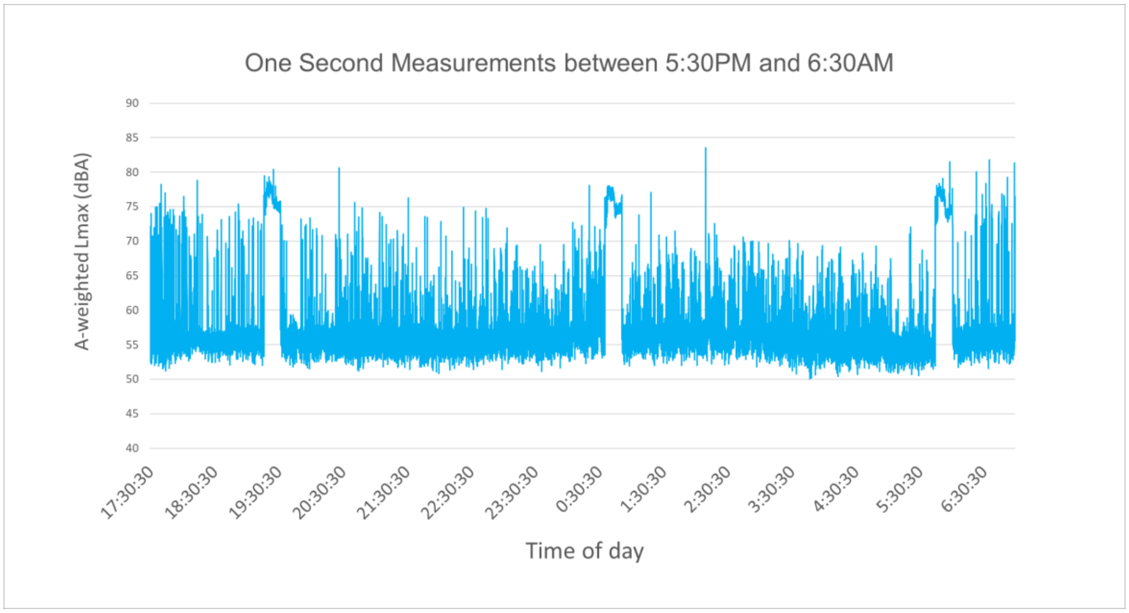
Focusing on the red line, the Lmax value, Figure 1 shows that the quietest daytime hour occurs around 10:00 pm (22:00), and the loudest daytime hour occurs around 10:00 am. Figure 1 also shows that the loudest nighttime hour occurred around 2:00 am, and the quietest nighttime hour occurs around 3:00 am. Additionally, Figure 1 shows that the 1-hour Lmax values exceed the noise ordinance in all measured daytime and nighttime hours. This is most likely due to noise from traffic on Old Mill Road. Figure 1 also shows that the mean noise level or Leq (dark blue) fluctuates considerably, with three substantial peaks that are discussed below.

The measured Lmax levels are above the maximum allowable limit, but this does not indicate that noise from the Facility exceeds limits in the noise ordinance. A compliance measurement would have to be performed approximately 100 feet across the street at a point approximately 20 feet away from the nearest residence (not on-site near the fence) and would require a detailed audio review to remove vehicle pass-by events. So, these results are indicative of noise levels where they were measured but not an indication of non-compliance with noise limits in the local noise ordinance.

The L50 (yellow line) is the median average noise level, and by definition half of the measurements were higher or lower than this level. The L50 is fairly constant throughout the measurement. The difference between the L50 and Leq from each hour is greater than 3 dBA for most hours. This indicates variability in the ambient noise levels, and HDR interprets that as variations in traffic pass-by events on Old Mill Road. The L50 and Leq exhibit a difference of less than 3 dBA during the hours between 8:00 pm and 11:00 pm, and 1:00 am and 5:00 am, and that tells us that ambient noise levels were steady and did not fluctuate a lot during these time periods.

Figure 2 shows a graph of Lmax levels stored every second for the entire long-term measurement.

Figure 2.
One Second Lmax Values

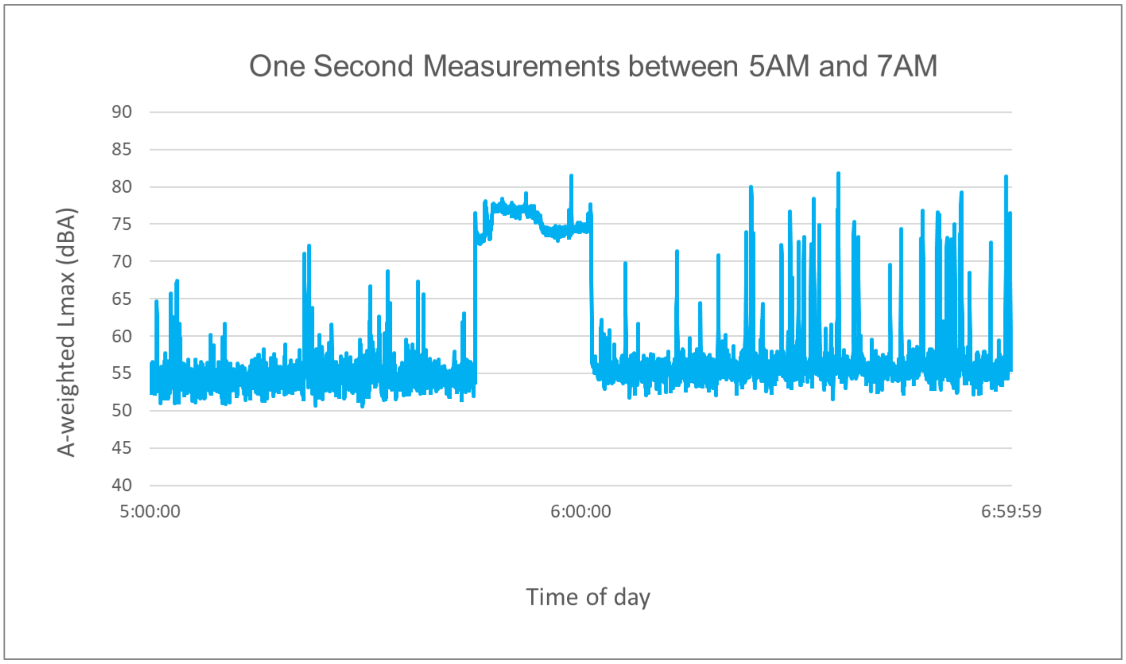


Source: HDR

The three Leq peaks shown in Figure 1 also appear in the graph of one-second Lmax values in Figure 2. These occur in the 7:00 pm hour, the midnight hour, and the 5:00 am hour. Their duration is approximately 10 minutes, and they could conceivably be caused by equipment cycling on and off. The fluctuations within each of the three peaks could be due to vehicle pass-by events happening at the same time although they exhibit similar patterns in each of the three instances.

The next figure shows a closer look at the Lmax measurements during one of the periods when elevated noise levels persisted for approximately 10 minutes. Figure 3 shows a closer look at measurement results during the Lmax spike that occurred between 5:00 am and 7:00 am.

Figure 3.
One-Second Lmax between 5:00 am and 7:00 am



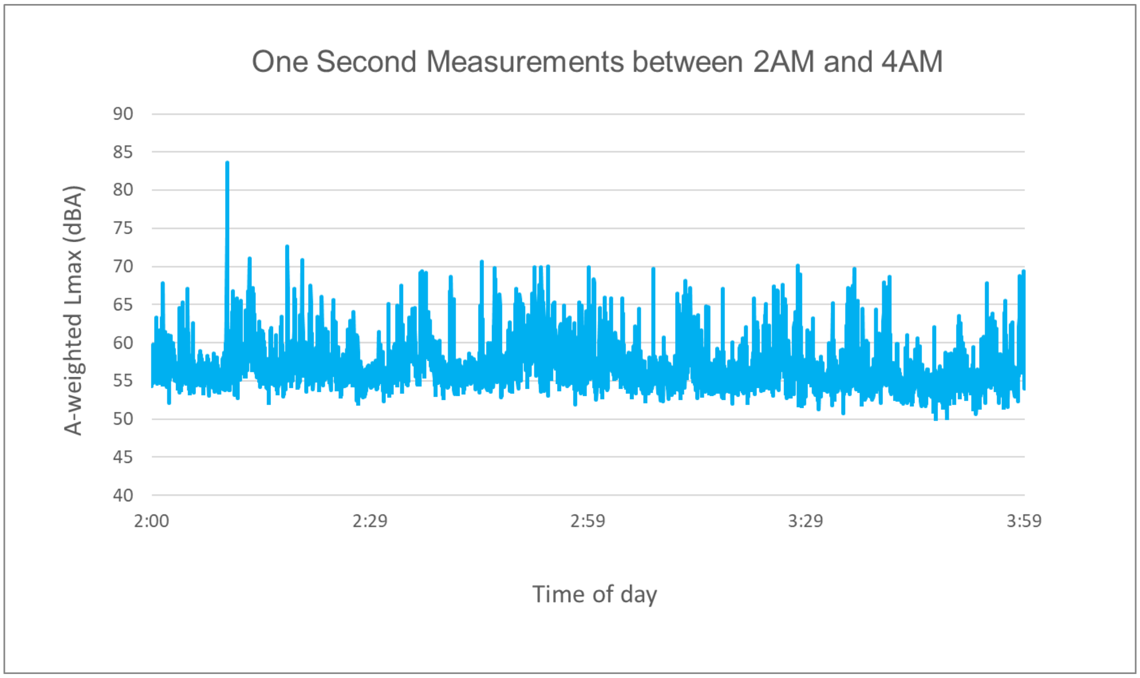
Source: HDR

Figure 3 shows a noise increase with a 16-minute duration roughly between 5:45 am and 6:05 am; this duration is much longer than a vehicle pass-by. It is conceivable that this is an equipment noise event. These measurement results are representative of the location in which they were measured, and do not indicate compliance or non-compliance at any location off-site. HDR suggests that National Grid review operating data in an attempt to determine if this and the other two episodes coincides with any Facility equipment cycling on and off.

The graph also shows a more constant background level that varies between approximately 52-57 dBA and is generally centered around 55 dBA. This appears to be the background noise level. Numerous short-term spikes are also visible in the graph, and HDR assumes they are vehicle pass-by events on Old Mill Road.

By comparison, Figure 4 shows a closer look at the Lmax measurements between 2:00 am and 4:00 am, which includes the 3:00 am hour, the quietest hour of the night.

Figure 4.
One-Second Lmax between 2:00 am and 4:00 am

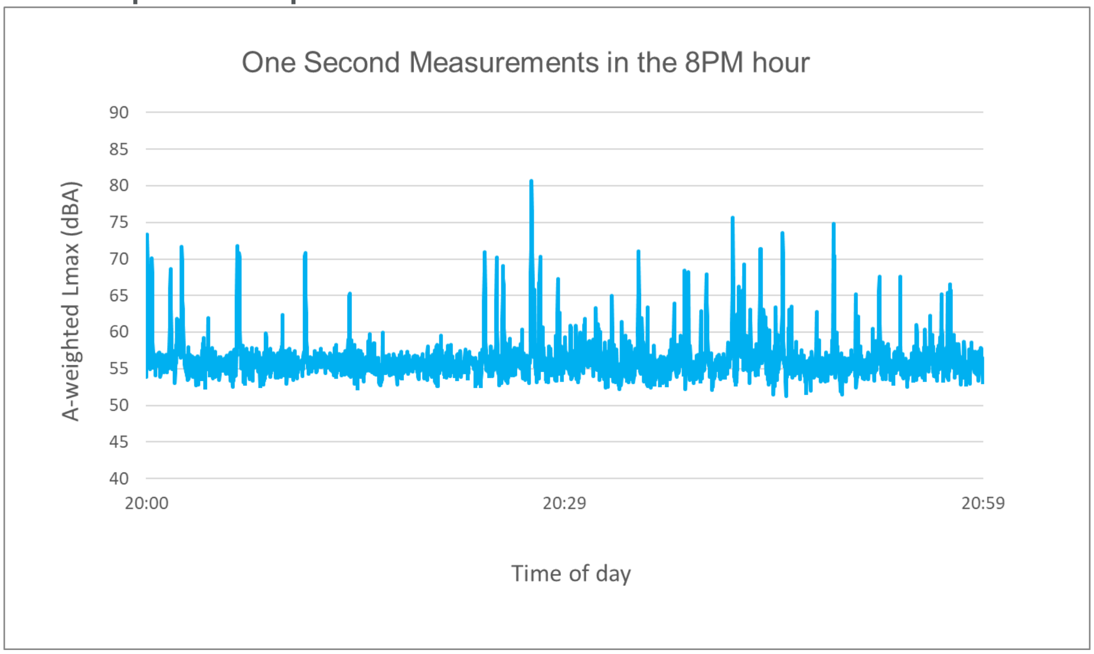


Source: HDR

One-second Lmax levels measured in the 2:00 to 4:00 AM hour show numerous short-duration increases or spikes, many peaking at 70 dBA. That much uniformity is unlikely to be due to vehicle traffic, and the short duration seems unlikely to have been caused by equipment cycling on and off. It could be due to insects, animals, wildlife. The repeated spikes that peak at 70 dBA could potentially be related to the Facility, but unless National Grid can explain otherwise the temporal distribution and uniform spike-like noise levels of those data seems more likely noise from a creature than equipment. The graph also shows constant background level that varies between approximately 55-62 dBA and is generally centered around 57 dBA.

The next graph, Figure 5 takes a closer look at the 8:00 pm hour, one of the quietest daytime hours based on HDR measurement results.

Figure 5.
Lmax Graph for 8:00 pm Hour



Source: HDR

One-second Lmax levels measured in the 8:00 pm hour also show numerous short-duration increases or spikes, many reach 70-80 dBA, and this variation suggests they are attributed to vehicle pass-by events and maybe the on-set of nighttime insect or animal noise. The graph also shows a more constant background level that varies between approximately 52-57 dBA and is generally centered around 55 dBA.

Near field Noise Measurements

HDR also performed near-field measurements of noise from specific equipment on-site. The near-field measurements were performed at a distance of approximately 3 feet to reduce the influence of noise from non-target noise sources. Table 1 presents measurements results expressed as the Lmax, both the A and C-weighted Leqs, and the difference between A- and C-weighted Leqs, sorted by A-weighted Lmax values.

HDR performed noise measurements around noise-emitting equipment in the four cardinal directions. In cases where HDR noted shielding or noise buildup from reverberation, additional measurements were at different locations for more accurate characterizations, as indicated in the ‘Measurement Number’ column.

Table 1.
Tabulated Summary of Near Field Measurement Results

Equipment Measured	Measurement Number	Lmax (dBA)	Leq		
			dBA	dBC	dBC minus dBA
Ambient Vaporizer	4	97	95	108	13
Ambient Vaporizer	5	96	90	97	7
Ambient Vaporizer	2	94	92	100	8
Glycol Vaporizer	1	94	91	97	9
Ambient Vaporizer	3	92	90	98	8
Storage tank (facing west 55" away)	1	90	89	89	-1
Glycol Vaporizer	2	90	86	95	10
Storage tank, facing north (55" away)	3	89	87	86	-1
Glycol Vaporizer	3	88	85	94	9
Ambient Vaporizer	1	88	87	97	10
Generator (facing west)	2	87	86	91	5
Storage tank (facing south	2	84	83	82	-1
Generator (facing south)	1	83	82	89	8
Glycol Vaporizer	4	79	76	86	10
Glycol Vaporizer	5	78	69	82	12
Glycol Vaporizer, far field	6	77	75	83	8
Pump Trailer (facing West)	2	76	58	64	6
Pump trailer (facing north)	1	74	69	70	1
Pump Trailer (facing south)	3	71	65	68	3
Pump Trailer (facing east)	4	66	63	64	1
Storage tank, facing west	4	65	63	69	6

Source: HDR

Measurement results in Table 1 indicate that the loudest pieces of equipment are the ambient vaporizer, glycol vaporizer and storage tank[2]. The ambient vaporizer also has major noise emission points at each end, and they also need to be addressed in the mitigation discussion. The glycol vaporizer is taller than the ambient vaporizer, and also has an exhaust stack that emits noise. While there were several storage tanks around the site, only one storage tank was being operated when the HDR acoustician was in the field,

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[2] The storage tank measured was the one located furthest plan south on the site

thus only one storage tank was measured. Measurement results indicate that storage tanks are also a major noise source.

Noise Mitigation

Mitigation Assumptions

HDR used the following information to develop noise mitigation recommendations

- **Evaporators:** Dimensions of the evaporates are as follows; 50 feet long, 12 feet tall, 8 feet wide
- **Noise Mitigation Area/ square footage**: The area needed to cover the evaporators is approximately:
  - 50 feet long x 15 feet high.
  - The ends also need to be covered and an area of 15 feet tall x 20 feet wide on each end (wrap-around 'wings' on either side of the ambient vaporizer[3]).

Noise Mitigation Recommendations

This section discusses HDR's noise mitigation recommendations. The first step in the noise mitigation process is to establish a design goal, the target amount of noise reduction. HDR used the following general rules of thumb to identify the noise reduction design goal. During a hearing test in an audiology booth, a person with average hearing abilities can just barely discern an increase or decrease in noise levels of 3 db. A 5 dB increase or decrease is likely to be clearly discernable, and a 10 dB increase or decrease is likely to be very clearly noticeable and perceived as a doubling or halving of noise levels. The outdoor noise environment is not an ideal listening environment, like an audiology booth. But a 10-dB reduction would be clearly noticeable outdoors. Therefore, HDR recommends that the noise mitigation goal be a minimum of 10 dB of noise reduction at the residential land uses across Old Mill Road from the site.

Noise can be controlled at 3 different locations: at the noise source, between the source and the receiver (in the pathway), and at the receiver. Noise control at the receiver is not feasible, as these options are typically implemented on the receiver's land and require heavy coordination with landowners. Noise control at the source requires purchasing quieter equipment.

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[3] These approaches are described in greater detail below

Noise control in the propagation pathway may be the most economically achievable approach. Therefore, HDR recommends the following noise mitigation options.

i) **Quilted Mass Loaded Vinyl draped over scaffolding**

This approach assumes that a scaffolding or a functionally similar metal framing is built to cover the ambient and glycol vaporizers and the pump unit. The framing would have to reach a minimum height of 15 feet above ground and also needs to be secured to the ground somehow. One option is to anchor the framing into concrete jersey barriers. HDR was unable to obtain a cost for having concrete jersey barriers delivered to the site. Other anchoring options may be available.

Once the framing is installed, commercially available industrial acoustical quilts would be draped over and secured to that framing. The acoustical quilts consist of a layer of mass-loaded vinyl with a minimum density of 1.0 or 2.0 pounds/square foot (psf) with fiberglass insulation on both sides, enclosed in a quilted weather-resistant material. The framing should also wrap around the ends of the vaporizers and pump tank, primarily to block noise propagation from the ends of the ambient vaporizer (leave the tops unenclosed for ventilation).

Kinetics Noise Control is a vendor for the 1 lb./sqft quilted mass-loaded vinyl product Sound Absorber/Noise Barrier Composite | KINETICS® KBC (kineticsnoise.com)) The unit cost for their quilted product is approximately $14/sqft. exclusive of framing and installation.

There would have to be a hole for the exhaust stack to protrude out of and above the glycol vaporizer, and the contractor/owner/operator of the glycol vaporizer would have to purchase and install a silencer for that stack from a noise control specialty firm like Kinetics (www.kineticsnoise.com).

Based on HDR's measurements, storage tanks are another noise source that may need controlling. However, HDR recommends that National Grid implement the initial mitigation measures and evaluate overall noise levels again, to determine the need for additional noise reduction.

ii) **Noise Walls**

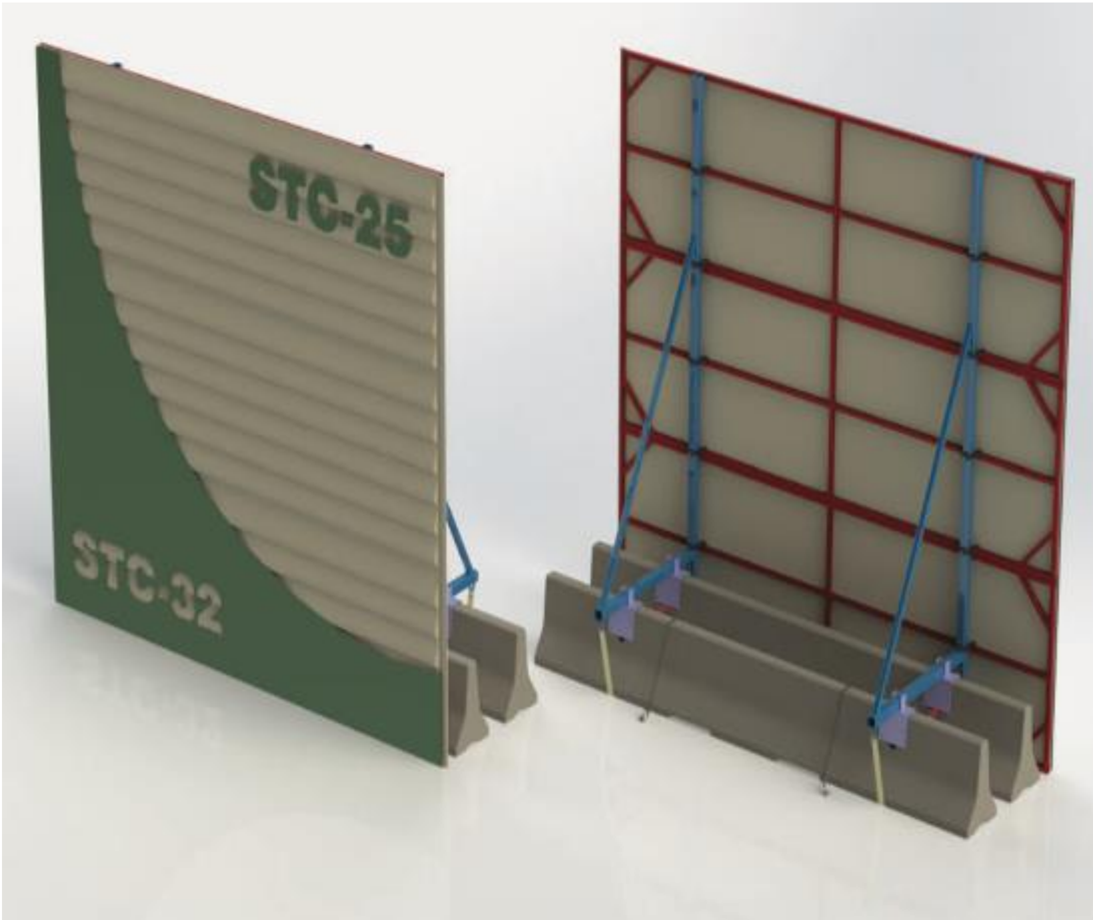
An alternative to the partial enclosure discussed above is use of a noise wall installed near the ambient vaporizer, with minimum height of 15 feet, and wide enough to block noise from both ends of the ambient vaporizer. This noise wall would also block sound propagation from the glycol vaporizer and pump tanks. Below are several noise wall options HDR explored, ranging from simple contractor-built constructions, to commercially available products.

- This wall could be constructed by local contractors using treated 2x6x12 ft. dimensional lumber (like highway noise walls) with all of the gaps between the boards sealed. Costs for this option include engineering, labor, and materials. Purchase price of material alone are estimated to be around $5,500 - $6,500 for the treated 2x6x12 ft. dimensional lumber. Engineering, footing, and labor costs would be additional.

- Another option is to use the quilted mass-loaded vinyl as the barrier and use commercially available framing to suspend it. The unit costs for the acoustical quilt alone is the $14/sqft value discussed above. For the concept discussed in this report, a rough estimate of the purchase price is $20,000 excluding engineering, framing, and assembly.

- Another option is temporary sound wall mounted on a Jersey barrier (the K-rail temporary sound wall) as shown in Figure 6. HDR coordinated with the vendor **(**Environmental Noise Control | Behrens and Associates (environmental-noise-control.com) and obtained the following rough cost estimate. For a 16-foot-high system, the unit cost is approximately $450-$510/linear foot. For the concepted discussed in this memo, a rough estimate of the purchase price is approximately $40,000 to $50,000. These costs do not include the purchase, delivery, or installation of concrete jersey barriers.

Figure 6.
K-Rail Mounted Barrier



Source: [K-Rail Mounted Temporary Sound Wall | Environmental Noise Control (environmental-noise-control.com)]

Another option are the free-standing SK8 noise barriers, as shown in Figure 7 below. These are produced by the same vendor as the K-rail mounted systems, and average about $1,875 per linear foot for a 20-foot tall system. For the concept discussed in this report, a rough estimate of purchase price is $170,000.

Figure 7.
SK-8 Barrier System

Source: [Freestanding "SK-8" Sound Barriers | Environmental Noise Control (environmental-noise-control.com)]

It is likely that the exhaust stack will require noise control, silencers are suitable approaches for this application. HDR does not have the engineering details needed to specify a particular silencer, however the contractor/owner/operator of that equipment may have the operating parameters of the stack and could work directly with a firm like Kinetics (www.kinetics.com) to select and purchase an appropriate silencer. It should also provide at least 10 dB of noise reduction.

These mitigation recommendations assume that controlling the loudest noise sources results in a noticeable noise reduction off-site. Post-installation measurements would be necessary to confirm the performance and determine if additional noise control is needed for tank trucks located farther from Old Mill Road than the loudest noise sources discussed in this report.

We appreciate the opportunity to have conducted this noise evaluation for National Grid and look forward to helping you with other noise challenges you may face. Please feel free to reach out to Tim Casey, HDR's Acoustics Program Manager at (763) 591-5450 to discuss questions on any of the above content.

Sincerely,
HDR Engineering, Inc.

Timothy G Casey

Sanvisna Kogelen
Acoustical Specialist

Tim Casey, INCE
Acoustics Program Manager

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Appendix F:

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Memo

Date:	Friday, February 04, 2022
Project:	National Grid Old Mill Lane
To:	Nicholas Dube, Brian Kirkwood, Faye Brown
From:	Benjamin Copenhaver, Sanvisna Kogelen
Subject:	Vaporizer burner noise measurements

HDR measured noise at the National Grid Old Mill Lane LNG processing facility in Portsmouth, Rhode Island from January 11-12, 2022. The measurements included near-field measurements of the glycol vaporizer while it was operating, and an overnight measurement at a residential parcel across the street from the facility. This memo deals with the analysis and results of the overnight measurement.

Local Ordinances

The noise ordinance for the City of Portsmouth limits maximum sound levels received by residential properties to 65 dBA from 7:00 a.m. to 10:00 p.m., and 55 dBA from 10:00 p.m. to 7:00 a.m. If a source of sound has a pure tone component, these limits are reduced by 5 dBA.

Measurement Methods

The overnight measurements took place from 3:10 pm on Tuesday, January 11, 2022 until approximately 9:50 am on Wednesday, January 12, 2022, for a total duration of 18 hours and 40 minutes. Figure 1 shows the location of the measurement in relation to the facility on an aerial view.

Figure 1. Measurement Location Map

Figure 2 shows the measurement equipment set up at the overnight measurement location.

Figure 2. Overnight Measurement Equipment Setup

HDR used Type 1 digital sound level meters to perform the measurements, and calibrated the meters using a Type 1 calibrator. The microphone included a windscreen and was positioned away from reflecting surfaces. The sound level meter collected sound level metrics in A and C weightings and 1/3 octave bands. The collected metrics included L_{eq}, L_{min}, L_{max}, and statistical L_{10}, L_{50}, and L_{90} values. The L_{eq} represents a constant sound level of equal sound energy to the time-varying signal across a given period. L_{min} and L_{max} respectively denote the minimum and maximum SPL recorded during a given period. The statistical L_x levels denote the sound level that was exceeded for x percent of a given period. For example, L_{50} represents the level that was exceeded for 50 percent of a given period, and is equivalent to the median sound pressure level. All sound levels presented in this memo are sound pressure levels with a reference level of 20 micropascals.

In addition to the acoustical metrics listed above, the equipment captured a continuous audio recording for the purpose of identifying individual noise sources.

Field calibration revealed a drift in calibration of -1.0 dB over the course of the measurement, likely due to the cold temperatures during the measurement. To correct for this drift, 1 dB has been added to all results presented in this report.

Data Reduction

Weather conditions and extraneous noise sources can affect the quality of outdoor sound measurements. Wind speeds in excess of 12 mph can induce self-generated noise at the microphone, and precipitation can artificially increase recorded levels by impacting on or near the windscreen.

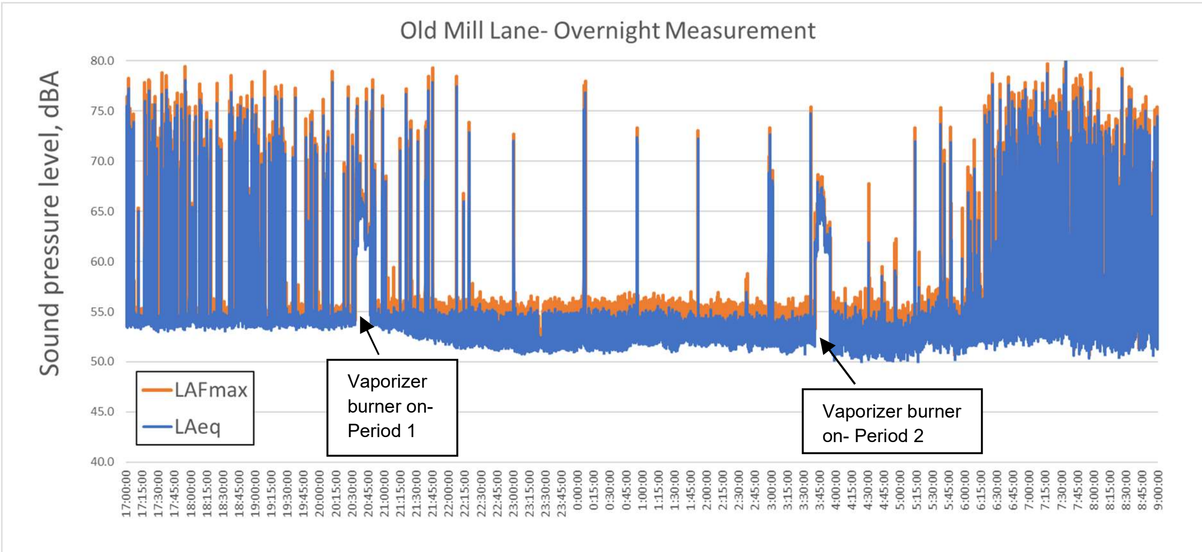
Publicly available weather data was obtained from the Theodore Francis Green State Airport to identify hours with these conditions. HDR reduced the measurement data set to exclude hours with precipitation and/or high winds. No precipitation was observed, but high winds were reported before 5:00 pm on January 11 and after 9:00 am on January 12. Those periods were excluded from the measurement results.

Audio review was used to identify the sources of peaks in the measurement data. During the periods reviewed, the peaks were found to be typically due to either passing vehicles on Old Mill Lane or gusts of wind. If confirmed to be due to a non-Facility source, these peaks were excluded from the data.

Measurement Results

Figure 3 shows the measured sound levels over the entire measurement period. The 1-second L_{eq} and 1-second L_{max} are both graphed.

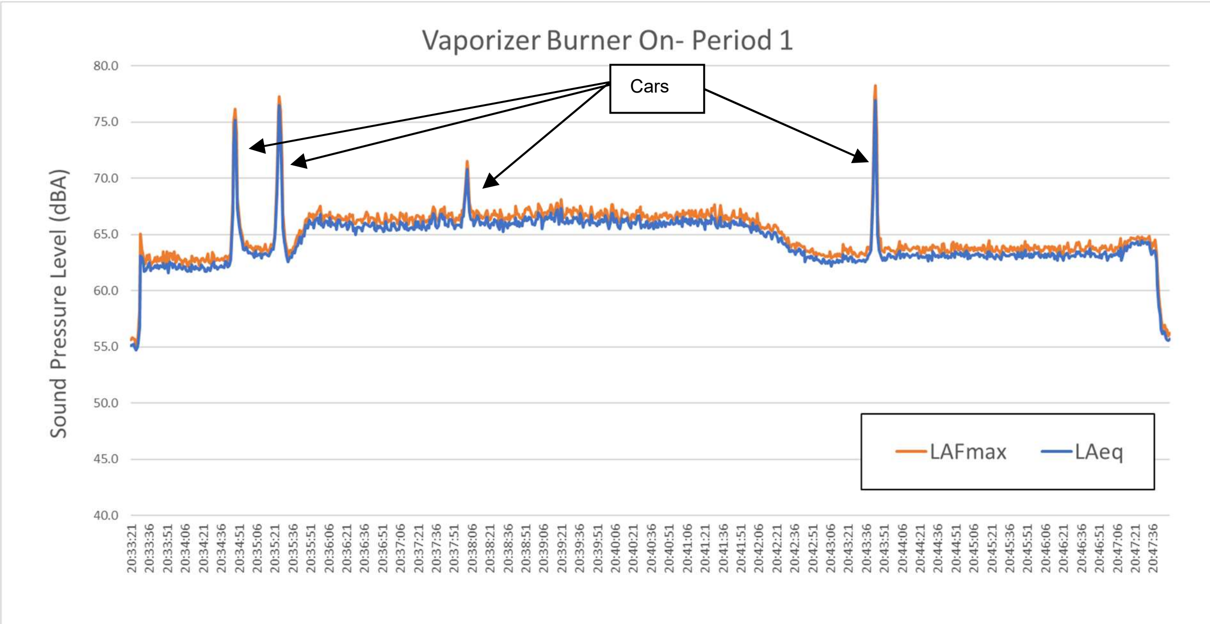
Figure 3. Measured Sound Levels- Entire Measurement (5:00 pm – 9:00 am)



The baseline noise is fairly consistent throughout the measurement. This baseline noise is due to pipe noise from the facility adjacent to the OML LNG facility on the east. On two occasions, the vaporizer burner was observed to kick on. The first lasted from approximately 8:33-8:47 pm on January 11, and the second lasted from approximately 3:41-3:55 am on January 12. These periods are indicated in the overall measurement figure above, and presented in more detail in Figure 4 through 6 below. Also included is a sample one-hour period when the vaporizer burner was not operating.

Figure 4 shows a zoomed-in view of the measured sound pressure levels during the first period when the vaporizer burner kicked on.

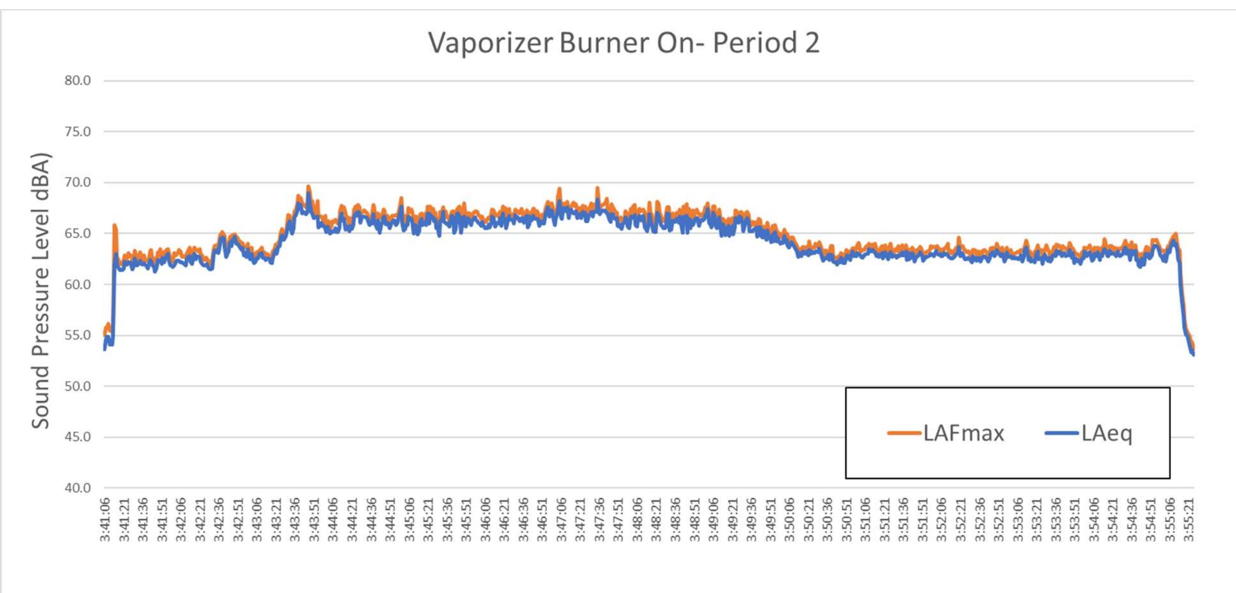
Figure 4. Measured Sound Levels- Vaporizer Burner on (Period 1)



There is a baseline elevation to above 65dBA for almost the entire duration of the event. In addition to this, there are several spikes in the measured data, which are caused by vehicle pass-bys on Old Mill Lane.

Figure 5 shows a zoomed-in view of the 2nd period when the vaporizer burner kicked on.

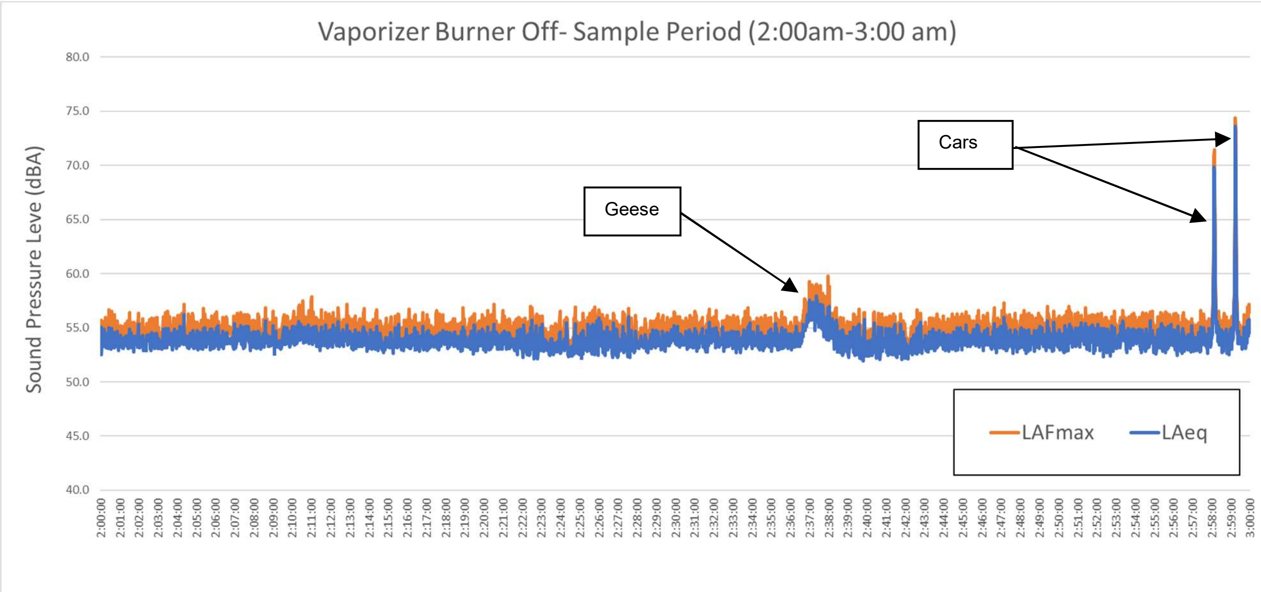
Figure 5. Measured Sound Levels- Vaporizer Burner on (Period 2)



A baseline elevation occurs in the measured sound pressure level, to above 65dBA for most of the event.

Figure 6 shows the measured sound pressure levels for a sample period where there was no vaporizer burner operation.

Figure 6. Measured Sound Levels- Sample Period



The sound pressure levels fluctuate around a 55dBA baseline. Spikes are seen in 2 occasions, which are caused by geese and vehicle pass-bys respectively.

Results from these periods are shown in the table below, alongside results from a sample one-hour period where the vaporizer was not operating. The overall L_{max} for each period is shown, as well as the average one-second Lmax during that period. The L_{eq} (energy-equivalent average sound pressure level) is also included to show that the Lmax does not exceed typical levels by very much, i.e., the sound levels from the facility are fairly consistent.

Table 1. Summary of Results

	Vaporizer Burner On-Period 1	Vaporizer Burner On-Period 2	Vaporizer Burner Off-Sample Period
Start	8:33:29 PM	3:41:14 AM	2:00:00 AM
End	8:47:39 PM	3:55:21 AM	3:00:00 AM
L_{max} (dBA)	68.1	69.7	58.9
Average 1-second L_{max} (dBA)	65.1	65	55.8
L_{eq} (dBA)	64.7	64.7	54.8

The nighttime Lmax limit of 55 dBA is typically exceeded by about 10 dB, and up to about 15 dB, when the vaporizer burner is on. The limit is also slightly exceeded when the burner is off, likely due to noise from above-ground piping on the adjacent lot.

Pure Tones

Data collected during each vaporizer burner on period was analyzed for the presence of pure tones. A pure tone is deemed to be present when the level in any given 1/3 octave band is a certain amount higher than the levels in the two adjacent 1/3 octave bands. This amount is 15 dB for the 25 Hz to 125 Hz bands, 8 dB for the 160 Hz to 400 Hz bands, and 5 dB for the 500 Hz band and higher.

Pure tones were not found to be present during either of the periods when the vaporizer burner was operating.

Conclusions

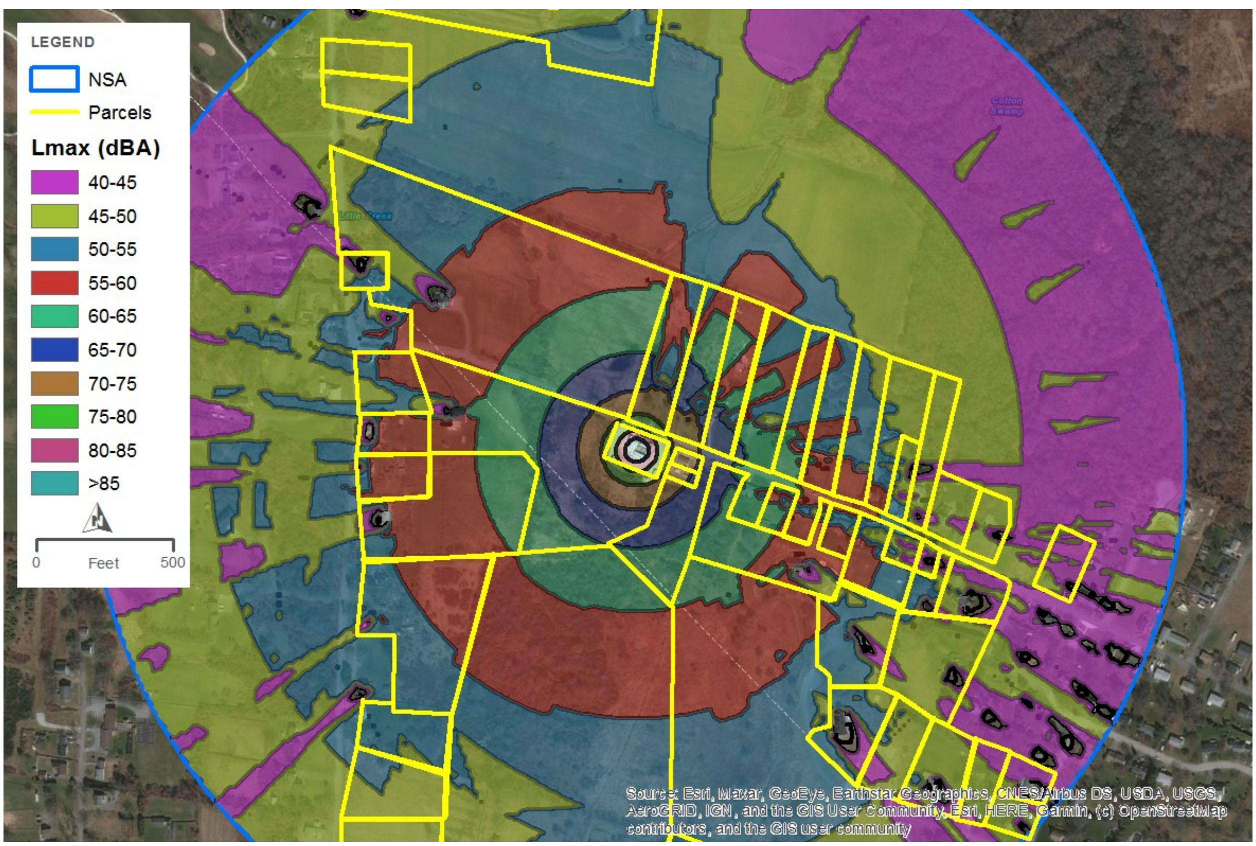
Noise measurements were performed at a residential parcel adjacent to the National Grid Old Mill Lane LNG processing facility in Portsmouth, Rhode Island from January 11-12, 2022. During the measurement period, two periods were identified where the vaporizer burner was operating. After using audio review to exclude non-facility related noise sources such as passing cars, the maximum sound pressure level observed during the two operational periods was 69.7 dBA, which is in excess of the 55 dBA limit in the Portsmouth noise ordinance. However, this limit was slightly exceeded even when the vaporizer burner was not operating, likely due to noise from above-ground piping at the adjacent natural gas facility. No pure tones were identified in the noise data when the vaporizer burner was operating.

APPENDIX G

The purpose of Appendix G is to provide additional details about the property purchase plan that was referenced in its Petition for Second Waiver Extension and in Section 8.5 of the Aquidneck Island Gas Reliability Project Siting Report (the "Purchase Plan"). More specifically, Appendix G includes (i) a list of the 13 residential properties that are projected to experience noise levels in excess of 60 dBA from the existing seasonal operation of LNG equipment, and (ii) the mechanics for participation in the Purchase Plan.

As noted in the Petition for Second Waiver Extension, the Company's consultant HDR, Inc. provided the map below that shows the noise contours for the projected ranges resulting from the operation of the LNG facility using the current layout near the Old Mill Lane.[1] Using these projections, the Company has identified 13 residential properties where the noise level, as measured at the property line, is projected to exceed 60-65 dBA. Under the applicable noise ordinance, the permitted daytime noise levels are 65 dBA from 7 AM to 10 PM. The Company proposes to use the 60-65 dBA to provide a margin of error.

Figure 3. Modeled Lmax Noise Contours (Model 1)



[1] Map is from HDR Inc.'s Draft Memo dated October 8, 2021. For full copy of the memorandum see Attachment RR-1c, Pages 8-9 which was submitted to the EFSB on January 14, 2022.

The parcels where noise levels from the operation of the proposed facility are projected to exceed 60-65 dBA are as follows:

Parcel ID	Address
67-72	24 Old Mill Lane
67-121	112 Old Mill Lane
67-122	124 Old Mill Lane
67-123	136 Old Mill Lane
67-124	148 Old Mill Lane
67-125	162 Old Mill Lane
67-132	172 Old Mill Lane
68-76	173 Old Mill Lane
68-77	163 Old Mill Lane
68-78	153 Old Mill Lane
68-71-7	207 Cornelius Drive
128-19B	21 Old Mill Lane
1280-80	1094 Wapping Road

The Company proposes to allow all impacted residential properties to participate in the Purchase Plan. The reason for the expanded list is that in the event the AIGRP is approved, it will not be completed and online until the winter of 2024-2025 which means the noise impacts will continue for the next two winters. The Company proposes that the Purchase Plan will be made available to the properties listed above upon receipt of a license for the AIGRP.

The proposed mechanics of the voluntary Purchase Plan are as follows.

- Purchase Plan Election

Within thirty days of receiving approval from the Board, the Company will notify each property owner identified above of the Purchase Plan by certified mailing and/or in-person visit. The notification for the voluntary program will include the contact information for the Purchase Plan Coordinator and an explanation of the window of time in which the property owner can elect to participate in the purchase program. In the event the Aquidneck Island Gas Reliability Project ("AIGRP") is approved, the window will be open until six months after the first full winter seasonal operation of AIGRP. If AIGRP is not approved, the window will close with the expiration of the Second Extension of the Waiver, March 31, 2024.

- First Appraisal

If a property owner timely elects to participate in the Purchase Plan, the Company will order a full appraisal of the home by a MAI certified appraiser, as of the date of the property owner's election to participate in the program, which includes an inspection of the exterior and interior of the property, with clear directions that that the appraisal should not factor the existing and proposed LNG operations. The Company will share the appraisal with the property owner along with an offer to purchase the subject property, subject to ordinary conditions to closing such as title review, at the appraised value.

- Second Appraisal

If the property owner does not agree with the fair market value estimated in the first appraisal, the property owner has the option of requesting a second appraisal by a MAI certified appraiser, as of the date of the property owner's election to participate in the program, at their own expense, to be completed and delivered to the Company within ninety (90) days of delivery of the first appraisal to the property owner. If the second appraisal is higher than the first, the Company may then elect to adjust its purchase offer upward to any value up to and including the estimated value stated in the second appraisal in an effort to reach agreement with the property owner.

- Third Appraisal

If, after ninety (90) days of delivery of the second appraisal the parties cannot agree on a purchase price, the Company shall pay for a third appraisal, using a MAI certified appraiser selected by the first two appraisers, as of the date of the property owner's election to participate in the program, and the Company will make a final offer to the property owner, subject to ordinary closing conditions, equal to the estimated value set forth in the third appraisal. If this final offer is not accepted with thirty (30) days of delivery to the owner, the Company may stop the process and submit the appraisals to the EFSB within the fifteen (15) days of terminating the process.

Once the parties reach an agreement on a purchase price for the property using the procedures summarized above, the Company will order a title search and the parties will proceed to closing within sixty (60) days. The closing will be contingent on the property owner being able to convey marketable title that is free from all recorded liens. The proceeds from the purchase can and shall be used at closing to pay any recorded liens on the property and any pro rated charges for water, sewer, municipal taxes and similar charges. In the event the property owner is unable to convey marketable title, the Company may stop the process and submit the appraisals and title documents to the EFSB within the fifteen (15) days of terminating the process.