

June 30, 2023

VIA ELECTRONIC MAIL AND HAND DELIVERY

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: Informational Filing of Rhode Island Energy's
Gas Long-Range Resource and Requirements Plan
Forecast Period 2023/24 to 2027/28
Docket No. 22-06-NG**

Dear Ms. Massaro:

I have enclosed 10 copies of Rhode Island Energy's¹ Gas Long-Range Resource and Requirements Plan ("Long-Range Plan" or "LRP") for the forecast period 2023/24 to 2027/28. 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, 2022 in Docket 22-06-NG; 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 22-06-NG as an informational filing for the benefit of the PUC.

¹ The Narragansett Electric Company d/b/a Rhode Island Energy ("Rhode Island Energy" or the "Company").

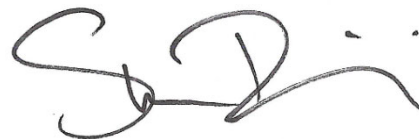
Luly E. Massaro, Clerk
Gas Long-Range Plan for the Forecast Period 2023/24 to 2027/28
June 30, 2023
Page 2 of 2

The 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. The Long-Range 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, the 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; (iv) a demonstration of the adequacy of the portfolio to meet customer demands under a range of weather; and (v) a discussion of Rhode Island's Act on Climate and gas decarbonization efforts.

The Long-Range Plan includes confidential gas cost pricing information and contract terms, which are provided in Exhibits 18 and 19. Therefore, the Company has provided a redacted and confidential version of the Long-Range Plan and has requested confidential treatment of Exhibits 18 and 19 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.

Thank you for your attention to this matter. If you have any questions, please contact me at 401-709-3359.

Very truly yours,

A handwritten signature in black ink, appearing to read 'S. Boyajian', with a stylized flourish at the end.

Steven J. Boyajian

Enclosures

cc: Leo Wold, Esq.
Al Mancini, Division
John Bell, Division

**STATE OF RHODE ISLAND
RHODE ISLAND PUBLIC UTILITIES COMMISSION**

)	
Gas Long-Range Resource)	
and Requirements Plan)	Docket No. 22-06-NG
for the Forecast Period)	
2023/24 to 2027/28)	
)	

**RHODE ISLAND ENERGY’S MOTON FOR PROTECTIVE
TREATMENT OF CONFIDENTIAL INFORMATION**

Rhode Island Energy¹ 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, 2023, the Company submitted its Gas Long-Range Resource and Requirements Plan for the Forecast Period 2023/24 to 2027/28 (“LRP”) in the above-captioned docket. The LRP includes confidential gas cost pricing information and contract terms, which are provided in Exhibits 18 and 19. In accordance with Rule 1.3(H)(3), Rhode Island Energy has provided a redacted public version and confidential version of the LRP. Therefore, the Company 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 and 19.

¹ The Narragansett Electric Company d/b/a Rhode Island Energy (Rhode Island Energy or the Company).

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 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 and 19– are confidential and privileged information of the type that the Company would not ordinarily make public. As such, the information should be protected from public disclosure. Public disclosure of such information could impair the Company’s ability to obtain

advantageous pricing or other terms in the future, thereby causing substantial competitive harm and ultimately harm to the Company's customers. Accordingly, the Company is providing the information on a voluntary basis to assist the PUC with its review of the LRP in this proceeding, but respectfully requests that the PUC provide confidential treatment to the information.

IV. CONCLUSION

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

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC
COMPANY d/b/a RHODE ISLAND ENERGY**

By its attorney,



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Dated: June 30, 2023

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.

Joanne M. Scanlon

June 30, 2023

Date

Docket No. 22-06--NG – The Narragansett Electric Co. d/b/a Rhode Island Energy – Gas Long-Range Resource and Requirements Plan Service List as of 6/30/2023

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The Narragansett Electric Company
d/b/a Rhode Island Energy

**Gas Long-Range Resource
and Requirements Plan
for the Forecast Period
2023/24 to 2027/28**

June 30, 2023

Docket No. 22-06-NG

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

Submitted by:



Rhode Island Energy™

a PPL company

I.	Introduction	1
II.	Overview of Planning Results	2
III.	Forecast Methodology	4
III.A.	Introduction	4
III.B.	Retail Demand Forecast	5
	<i>III.B.1. Demand Forecast for Traditional Classes</i>	<i>5</i>
	<i>III.B.2. Final econometric models for the Company’s demand forecast</i>	<i>6</i>
	<i>III.B.3. The Impact of Energy Efficiency Measures</i>	<i>7</i>
III.C.	Translation of Retail Forecast into Customer Requirements	7
	<i>III.C.1. Wholesale Volume by Division</i>	<i>8</i>
	<i>III.C.2. Wholesale Volume by End-Use</i>	<i>9</i>
	<i>III.C.3. Comparison of Historical Retail and Wholesale Volumes to Determine Unaccounted For Gas</i>	<i>10</i>
III.D.	Normalized Forecast of Customer Requirements	10
	<i>III.D.1. Defining Normal Year for Ratemaking Purposes</i>	<i>10</i>
	<i>III.D.2. Defining Load Attributed to Customers Using Utility Capacity</i>	<i>12</i>
III.E.	Design Planning Standards	12
	<i>III.E.2. Design Year and Design Day Planning Standards</i>	<i>12</i>
III.F.	Forecast of Base Case Design Year Customer Requirements	15
III.G.	Design Hour Requirements	15
III.H.	Capacity Exempt Customer Requirements	15
IV.	Design of the Resource Portfolio	17
IV.A.	Gas Resource Portfolio	17
IV.B.	Analytical Process and Assumptions	18
IV.C.	Available Resources	19
	<i>IV.C.1. Transportation Contracts</i>	<i>20</i>
	<i>IV.C.2. Underground Storage Services</i>	<i>20</i>
	<i>IV.C.3. Peaking Resources</i>	<i>20</i>
	<i>IV.C.4. Long-Term Supply Agreements</i>	<i>22</i>
	<i>IV.C.5. Citygate Delivered Supply</i>	<i>22</i>
	<i>IV.C.6. Asset Management Arrangements</i>	<i>23</i>
	<i>IV.C.7. Net Need Analysis</i>	<i>23</i>
	<i>IV.C.7.a. Mid and Long-Term Portfolio Considerations</i>	<i>24</i>

<i>IV.C.8. Changes and Proposed Additions to the Company’s Resource Portfolio</i>	<i>24</i>
<i>IV.C.9. Future Portfolio Renewal Decisions</i>	<i>26</i>
<i>IV.C.10. Long-Term Cumberland Solution.....</i>	<i>27</i>
<i>IV.C.11. Natural Gas Portfolio Management Plan (NGPMP).....</i>	<i>28</i>
IV.D. Portfolio Costs	28
IV.E. Rhode Island Act on Climate and Gas Decarbonization.....	29
IV.F. Customer Choice Program.....	29
<i>IV.F.1. Overview of the Company’s Customer Choice Program</i>	<i>29</i>
<i>IV.F.2. Impact of the Customer Choice Program on Portfolio Planning.....</i>	<i>31</i>
<i>IV.F.3. Future Changes to the Customer Choice Program</i>	<i>32</i>
V. Fulfilment of the Joint Memorandum of the Company and the Division Regarding the Long-Range Plan	32
VI. Exhibits	33

I. Introduction

This filing presents the Long-Range Resource and Requirements Plan (sometimes referred to as the “Long-Range Plan” or the “plan”) for The Narragansett Electric Company d/b/a Rhode Island Energy (the “Company” or “RIE”) for the gas supply forecast period November 1, 2023 through October 31, 2028. 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 270,000 residential and commercial customers in 33 cities and towns in Rhode Island. The Company’s last Long-Range Plan was submitted to the Rhode Island Public Utilities Commission (“PUC” or “Commission”) pursuant to R.I. Gen. Laws § 39-24-2, on June 30, 2022 in Docket No. 22-06-NG, which requires that the Company file the Long-Range Plan on a bi-annual basis. This Long-Range Plan is not required by statute, but is being submitted to the PUC and 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.

¹ On October 30, 2018 in the Company’s 2018 Gas Cost Recovery (“GCR”) proceeding in Docket No. 4872, the PUC ordered 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*.

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 rate classes.² To determine the projected growth over the forecast period, the econometric models used historical economic, demographic, weather, and energy price 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 April 2023 economic forecast from Moody's Analytics, Inc.

The results of the Company's Base Case retail demand forecast (see Exhibit 1) indicates that, over the five-year forecast period Planning Year 2024 through Planning Year 2028, the residential heating class is projected to increase by an average of 221,000 dekatherms per year, the Residential Non-Heating class is projected to decrease by an average of 18,400 dekatherms per year, and the Commercial and Industrial Sales classes are projected to remain relatively flat.

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 273 MDth (approximately 0.7 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 with the design day having been reviewed by the Company pursuant to PUC Order 24562 in Docket No. 22-20-NG. 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 52.15 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 310 MDth, or approximately 0.7 percent, per year (see Section III.F.), and design day sendout to increase by an average of 3,100 Dth, or 0.8 percent, per year. The design hour is also expected to increase over the forecast period (see Exhibits 2 and 7).

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[®]

² A rate class is a grouping of rate codes based upon similar characteristics.

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:

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III. Forecast Methodology

III.A. Introduction

The Company's forecast methodology supports its supply planning goal to ensure that the Company 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 prepares 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.³

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-2023 and, absent unanticipated modifications, it will be the same forecast that will be used in the Company's 2023 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) Forecast Retail Demand Requirements

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 classes of customers (i.e., Residential Heating, Residential Non-Heating, Commercial, and Industrial customers). The forecast of retail demand requirements for traditional classes 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) Develop Reference Year Sendout Using Regression Equations

The daily values of the Company's wholesale sendout in the reference year (April 2022 – March 2023) 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.

³ 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.

Based on the forecast, the Company projects Base Case growth in customer requirements for its Sales and Customer Choice customers of 1,975MDth over the five-year period, or 395 MDth per year (assuming normal weather) (see Section III.D.2.). Overall, this growth in firm deliveries represents a 3.8 percent total increase in sendout requirements over the forecast period, or 0.7 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 Classes

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 2023 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 classes and the Company's internal rate codes used in the Company's analysis.

Class	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 class. 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 April 2023.

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. For 2023, the energy efficiency programs that the Company analyzed for this forecast were those submitted by the Company in Docket No. 22-33-EE in its 2023 Energy Efficiency Program Plan Updated Compliance Filing dated January 23, 2023, 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-2023, which is the same forecast that will be used in the Company’s 2023 Gas Cost Recovery filing. Summary charts and tables comparing this forecast with the Company’s 2022 forecast are presented in Exhibits 1, 3, 4, 5 and 6.

III.B.3. The Impact of Energy Efficiency Measures

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 237 MDth. These figures are based on the three-year average of 2020 through 2022 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 an average incremental reduction of 31 MDth/year is needed from 2023 to 2027 in order to reflect the projected energy efficiency impacts.

For energy efficiency measures that are not implemented through programs administered by the Company, the forecast assumes that a decrease in gas demand attributable to these measures is reflected in the historical data upon which the forecast is based. The Company assumes that these measures will continue to reduce gas demand at a rate consistent with the history over the forecast period since there is no reliable way for the Company to predict incremental growth in energy efficiency implementation outside of the Company's programs.

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 each of its four divisions (formerly Providence Gas, Westerly Gas, Bristol and Warren Gas, and Valley Gas). 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 4.1.0 of the "R" statistical software package.⁴

⁴ "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).

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 using data for the reference-year period April 1, 2022 through March 31, 2023. The Company's regression equation uses sendout as its dependent variable and temperature as its independent variable.⁵

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 Rhode Island 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: these values are usually referred as breakpoints".⁶

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 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.

⁵ Sendout includes both Sales and supplier service (Customer Choice) customer requirements and the Company's Capacity Exempt customers.

⁶ Source: "Segmented: an R package to fit regression models with broken-line relationships," R News, Volume 8/1, May 2008, at page 20.

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))
```

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 class 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") percentage⁷ by which the retail data will be inflated to wholesale levels. For the most recent (September 2021 – August 2022) period, the Company's monthly retail volumes match the wholesale volumes to within 4.4 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.

⁷ The UFG figure provided annually in the Company's Long-Range Plan for its retail to wholesale natural gas volumetric comparison is not indicative of system or line losses since it includes a variety of gas accounting functions such as metering errors or delays, with small contributions by theft of service and leaks.

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
<u>Dec</u>	<u>892</u>	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 2022/2023 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.

	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Heating Season	25,881	26,233	26,472	26,697	26,827	26,936
Non-Heating Season	10,424	10,515	10,601	10,650	10,691	10,734
Total	36,305	36,748	37,073	37,347	37,517	37,670
Per-Annum Growth		442	326	274	170	153
Per-Annum Growth (%)		1.2%	0.9%	0.7%	0.5%	0.4%

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 / 52.15 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. PUC Order 24562 in Docket No. 22-20-NG recommended that the Company review the Design Day frequency. In this filing, as a result of the Company’s assessment described in subsequent paragraphs, the Company continues to define its design day standard at 68 HDD with a probability of occurrence of once in 52.15 years.

The Company established its design day standard using a three-step process. First, the Company performed a statistical analysis of winter temperatures and the coldest day temperatures 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 temperature values based on 12,533 observations at the T.F. Green weather site for the November through March periods of 1940/41 through 2022/23 consistent with the methodology presented in the 2018 Long-Range Plan. In previous long-range supply plan submissions, the Company had analyzed the coldest day temperatures observed in each of the most recent 40 heating seasons reflected in the T.F. Green weather data. The change to evaluating a larger data set of winter temperature values was necessitated because the distribution of the coldest day temperatures observed in the previous methodology has been trending away from a normal distribution. Using its current methodology, the Company found that these 12,533 data points fell within a normal distribution with an average coldest day temperature of 56.00 HDD and a standard deviation of 5.79 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 66 to 73 HDD, with a midpoint of 69.5 HDD. Thus, the Company's design day standard of 68 HDD is within the range of values based on cost and benefit. Again, the Company's analysis indicates that the frequency of occurrence of the Company's design day standard is once in 52.15 years.

III.E.2.b. Design Year Standard

In this filing, the Company continues to define its design year standard as 6,250 HDD, with a probability of occurrence of once in 37.47 years. This is consistent with recent filings.

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 a supply disruption to Residential customers is more likely to involve risks to 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.

	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>	<u>2026/27</u>	<u>2027/28</u>
Heating Season	29,916	30,313	30,592	30,853	31,004	31,132
Non-Heating Season	11,223	11,322	11,414	11,468	11,512	11,558
Total	41,139	41,634	42,006	42,321	42,516	42,690
Per-Annum Growth		495	372	315	195	174
Per-Annum Growth (%)		1.2%	0.9%	0.7%	0.5%	0.4%

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

III.G. 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 allocating the growth in the forecast to each zip-code. 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. 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.⁸

III.H. 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

⁸ The Company is served by both Algonquin Gas Transmission, LLC (“AGT”) and Tennessee Gas Pipeline (Tennessee). The Company’s AGT contracts provide for calculated hourly flow limits of either 1/24th or 6% of the daily MDQ under each contract; Tennessee contracts provide for 1/24th hourly flows. See Exhibit 8 for the Company’s daily and hourly contract quantities.

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).

Capacity Exempt and FT-1 Storage/Supplementals Load Summary (Dth)						
Base Case Forecast						
Normal Year						
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
HS	2,713,107	2,717,511	2,717,281	2,715,552	2,712,947	2,711,020
<u>NHS</u>	2,558,689	2,559,045	2,557,945	2,556,041	2,554,474	2,552,451
Total	5,271,796	5,276,556	5,275,226	5,271,593	5,267,421	5,263,471
PA Growth		4,760	-1,330	-3,632	-4,173	-3,950
Pct Growth		0.1%	0.0%	-0.1%	-0.1%	-0.1%
Design Year						
	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
HS	2,967,742	2,977,137	2,976,828	2,974,993	2,972,137	2,969,974
<u>NHS</u>	2,599,078	2,599,324	2,598,203	2,596,266	2,594,668	2,592,608
Total	5,566,821	5,576,461	5,575,031	5,571,258	5,566,805	5,562,582
PA Growth		9,641	-1,430	-3,773	-4,453	-4,223
Pct Growth		0.2%	0.0%	-0.1%	-0.1%	-0.1%
Peak Day	34,992	35,494	35,484	35,466	35,430	35,406

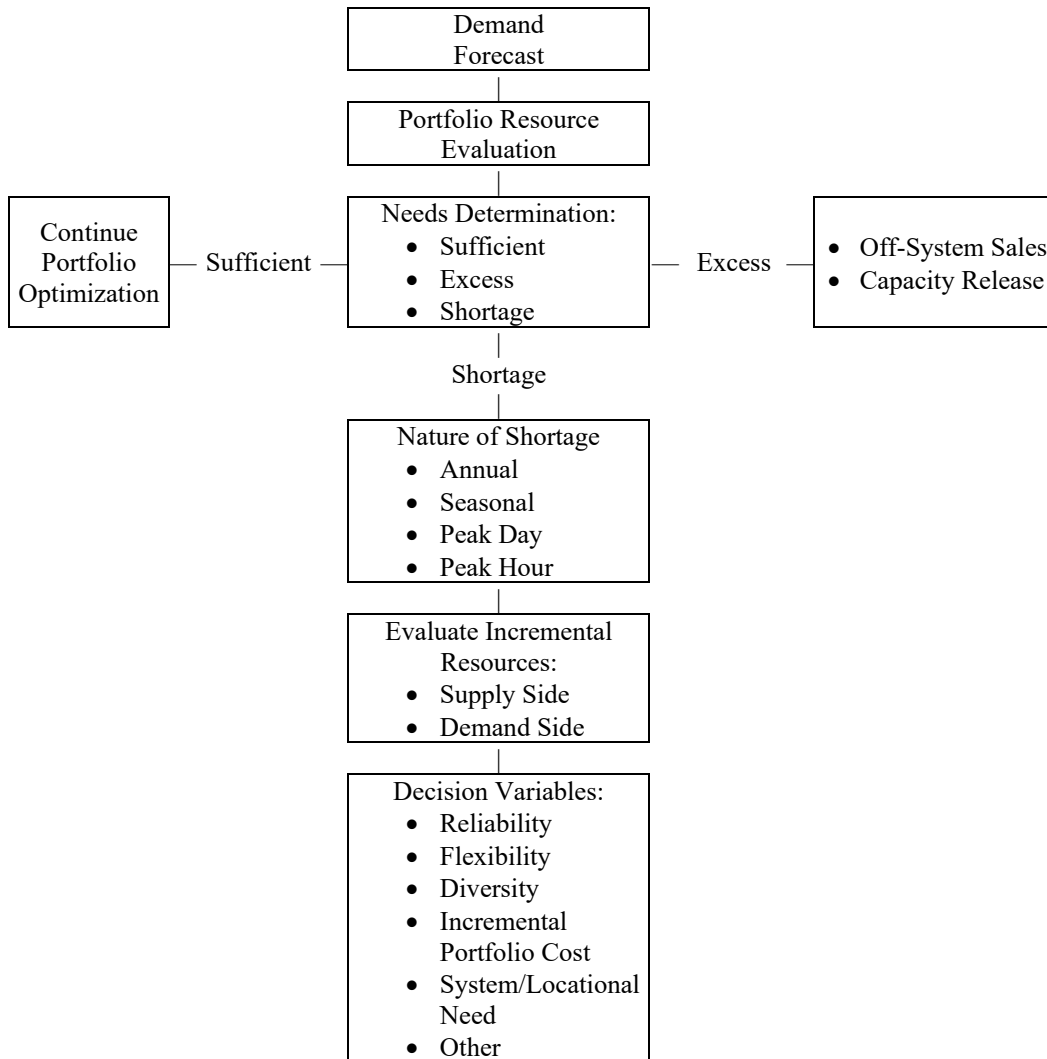
Capacity Exempt and FT-1 Non-Pipeline Customer Requirements (Dth)

The load duration curves for FT-1 Customers, Capacity-Exempt Customers and Non-Firm Customers are presented in Exhibits 9 through 11.

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.



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.

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.

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 imbalances. 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 5, 2023, 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 2023.

Throughout all these scenarios, the Company has assumed that there are no significant changes to the capacity releases in 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 will not be available after the respective date. 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 2023.

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 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, 2023.
- Exhibit 12 is a schematic of the Company's transportation and underground storage contracts effective as of November 1, 2023.
- Exhibit 13 is a table listing and description of each transportation and storage contract in the Company's resource portfolio as of November 1, 2023.
- 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 and Canadian 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 one permanent on-system LNG storage and vaporization facility, and is a storage, vaporization and liquefaction customer of National Grid LNG, LLC's facility at

Providence, RI. Access to these facilities enhance reliability and provide a source of supply for the distribution system. Because these resources can be brought on line quickly, they are a critical resource utilized 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 inventories 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
GazMetro	2,700	125,000	Apr 1, 2023 – Nov. 30, 2023

For Gaz Metro deliveries, the Company receives a bundled product whereby GazMetro contracts directly for trucking transportation and the Company takes title to the LNG at the delivery point.

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

In addition to the Company’s LNG permanent storage interests 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 certain LNG services at Cumberland for the 2023/24 heating season. The Company discusses its long-term plans for the Cumberland facility in Section IV.C.10.

The Company also continues to mobilize portable LNG vaporization and storage 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. For the 2023/24 heating season the Company anticipates that it will continue to operate the site under temporary waiver; however, it filed an application for a license for ongoing

seasonal use of the site with the Energy Facility Siting Board (EFSB) on April 1, 2022. The Company’s agreement for equipment rental continues through March 2024.

To support operations at its portable LNG sites at Cumberland and Portsmouth, the Company plans to contract for the following in the coming months; (1) liquid refill for the 2023/24 peak season and (2) trucking arrangements for the 2023/24 peak season.

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

The Company continues to 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 79% of the hourly customer demand on Aquidneck Island at 45 HDD conditions and approximately 55% of the hourly customer demand at 68 HDD conditions.

IV.C.4. Long-Term Supply Agreements

Please see the table below for the Company’s long-term supply agreement that is currently part of the Company’s portfolio.

Contract	Description	Maximum Daily Quantity (Dth)	Annual Contract Quantity (Dth)	Term
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 2023/24 heating season provided the Company is able to source supplies on the east end of AGT and Tennessee to flow on its firm transportation contracts. 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 issued Request for Proposals (RFPs) and awarded the following AMAs: (1) Canadian assets, including the paths feeding Tennessee via PNGTS and Iroquois, and Tennessee capacity, (2) its IGTS capacity; and (3) a portion of its Tennessee Dracut capacity. 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. In addition, the Company expects to issue an RFP this summer for another portion of the TGP capacity from Dracut. During the 2022/23 heating season, the Company awarded AMAs pursuant to a competitive RFP process for a portion of its Columbia pipeline capacity and anticipates a similar award for the 2023/24 heating season. The Company will continue to assess the portfolio to determine those assets that are well positioned to be managed by a third party.

IV.C.7. Net Need Analysis

Exhibit 15 contains a comparison of current resources and forecast requirements. This analysis considers only those contracts currently under contract in the portfolio. The Company has issued an RFP and awarded a contract for certain supplies to be transported on the short-haul transportation contracts on both AGT and Tennessee originating from Beverly and Dracut, respectively. In addition, an RFP has been issued seeking winter liquid supplies which are utilized in part, to supply the two portable LNG operations at Cumberland and Portsmouth. Exhibit 16 contains a comparison of current and proposed resources and forecast requirements. This analysis considers only those contracts currently under contract in the portfolio and assumes that the Company will secure supplies for the two portable LNG operations at Cumberland and Portsmouth and an additional supply at Dracut for the upcoming winter. Under the existing scenarios there is no Winter LNG refill included in the analysis. For the proposed exhibits, there is no incremental Winter Liquid included beyond the winter of 23/24. Each exhibit contains summaries for the design day, the design heating season, the design non-heating season, and the design year. These tables demonstrate that the Company's proposed portfolio is sufficient to meet forecast customer requirements for the 2023/24 gas year. In subsequent years, there is a need for incremental resources driven primarily by: (1) the expiration of the Company's long-term supply contract for city gate delivered supplies; and (2) the uncertainty of availability of supplies (both vapor and liquid) currently sourced from the Constellation facility in Everett, MA.⁹

The results of the Company's load duration curve analysis, in which design year sales and transportation customer requirements are plotted against the supply portfolio, are provided in Exhibit 17. This analysis supports the conclusion above; in the 2023/24 load duration curve no incremental resources are necessary.

⁹ If the Company is able to secure supplies into its Beverly and Dracut capacity and secure similar levels of winter liquid as in years past, there is no design day supply/demand imbalance through at least the 2032/33 gas year.

With respect to the design hour, the Company's Synergi analysis was completed using the Company's 2022 models with the design peak hour customer requirements adjusted to meet the 2023 forecast for the three firm customer requirement categories; Sales and FT-2, FT-1 and Capacity Exempt. Exhibit 2 shows the forecasted hourly imbalance at each take station for the five-year forecast period. This analysis indicates the need for incremental resources to meet the peak hour beginning in the 2026/27 gas year.¹⁰

IV.C.7.a. Mid and Long-Term Portfolio Considerations

Given the forecasted supply/demand design day and design hour imbalances, coupled with current New England gas market dynamics, the Company has initiated a cross-functional team to evaluate options for near- and longer- term needs. The team is considering supply side options, both upstream and on-system, as well as potential demand side options. The Company will provide updates as this effort progresses.

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

There have been several changes, as well as several proposed changes, to the Company's gas supply portfolio since its last Long-Range Plan filing in June 2022.

(1) National Grid LNG (NGLNG)

The Company has entered into a long-term 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, at NGLNG's existing storage facilities located in Providence, Rhode Island. Given the recent in-service date for this service, the Company has included the availability of liquefaction services for the entire planning period. To date, the Company has relied primarily on imported LNG for its refill requirements; the NGLNG facilities will allow the Company to access liquid supplies from the Marcellus Shale region and utilize its existing Algonquin capacity to transport volumes to Providence where it will use its storage and vaporization agreement with NGLNG for LNG storage. Upon the in-service date of the liquefaction facilities, the Company's long-term agreement (i.e., 20 years) with NGLNG for storage and vaporization service became effective.

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

The Company has entered into a Precedent Agreement for up to 1,780 Dth per day of firm liquefaction service 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 latter half of the 2023 off-peak season. 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 Company is able to liquefy during the months of April through

¹⁰ This analysis assumes all existing contracts remain in the portfolio, supplies are available to flow on transportation contracts from Beverly and Dracut; and winter liquid supplies are available at similar levels as procured in the past.

October and utilize onsite storage equal to five times the Maximum Liquefaction Quantity (MDLQ) and two truck loading spots per day. Service availability during the winter months will be contingent on the facility being able to meet startup conditions during cold temperatures, as well as the availability of Tennessee capacity to deliver supply to the liquefier during the heating season. The LNG will be trucked from the facility to the Company's LNG facilities in Rhode Island, allowing the Company to reduce the incremental liquid volumes required to be purchased to refill the LNG facilities.

(3) Incremental Winter Liquid Volumes (LNG)

To support the portable LNG storage operations at Cumberland and Portsmouth as well as to maintain LNG inventory at the Exeter and NGLNG/Providence LNG facilities, the Company issued an RFP for winter LNG refill requesting a seasonal volume of 120,000 Dth. For purposes of this LRP, the pricing of this supply was estimated based on the cost of supply from last winter. Of the 120,000 Dth that was put out in the RFP, 28,800 Dth was identified as needed for portables.

(4) Constellation LNG LLC

At this time, it remains unclear if Constellation LNG LLC will continue to operate its LNG import terminal at Everett, MA beyond 2024.¹¹ Closure of the facility would impact the New England region's ability to supply vapor and liquid to firm gas customers. For SENDOUT[®] purposes, the Company has assumed that the facility will no longer be operational after the 2023/24 winter and any volumes previously provided by Constellation are not included in the analysis.

(5) Millennium Repurposing-to-Ramapo (R2R) Project

The Company has entered into a Precedent Agreement for 9,000 Dth/day of firm transportation capacity as part of the Millennium R2R Project for an initial term of 10.5 years with service expected to commence on November 1, 2025, upon completion of necessary facilities and acquiring appropriate federal and state permits and other approvals. The Company has an existing contract with Millennium for 9,000 Dth/day of transportation capacity to the interconnection with Algonquin at Ramapo, NY, which represents 50.00 percent of the Company's existing AGT AIM Path volume. The new Millennium R2R contract will result in a fully supplied AIM Path from Millennium via Algonquin to the RIE city gates. The Millennium R2R Project will provide the Company with greater access to reliable gas supplies in the Marcellus/Utica producing region, access to lower cost and less volatile gas commodity during the peak winter period, and supply diversity increasing the overall resource portfolio flexibility and optionality. For SENDOUT purposes, this contract has been added starting November 1, 2025 with a supply of Millennium East pool and with a negotiated fixed rate and variable cost per the currently available FT-1 rates.

¹¹ The Company is engaged in on-going discussions and negotiations with Constellation LNG LLC regarding service from the Everett Marine Terminal.

(6) TGP Contract from Dracut

The Company is in the process of finalizing a 5,000 Dth/day contract with TGP, which will have a receipt point at Dracut and a delivery point at Pawtucket.¹² This capacity will not require any construction or new facilities on behalf of TGP and will have a rate equal to TGP's existing rate for Zone 6 to 6 firm transportation service. This new 5,000 Dth/day TGP contract, coupled with the step-up¹³ on one of the Company's existing TGP contracts and the incremental capacity of 5,000 Dth/day¹⁴ on AGT totals 15,000 Dth/day, and maintains the Company's level of total pipeline capacity deliverability.

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 capacity¹⁵ 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. Provided however that pursuant to FERC policy, it is only long-term firm shippers paying the maximum recourse rate that will automatically have a right of first refusal to continue service at the end of a contract's primary term. For shippers paying a negotiated rate, the right of first refusal is not inherent and must be negotiated on a case-by-case basis.

¹² Since this contract has not been finalized, it was not included in the Company's SENDOUT runs for this LRP.

¹³ The TGP contract step-up provision of 5,000 Dth/day was previously negotiated with TGP.

¹⁴ This AGT contract was discussed in the 2022 LRP.

¹⁵ "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.

In 2005, the Company signed a precedent agreement with Tennessee for firm transportation on the pipeline's ConneXion project to deliver supplies from the Gulf Coast to various city-gates in New England in the amount of 11,600 Dth/day. The corresponding contract numbers are 64025 and 64026. The project commenced service on November 1, 2007 with a primary term of twenty (20) years and did not include any extension rights upon the end of the primary term. As a result, RIE does not currently have any right to continue firm service using this valuable capacity after October 31, 2027. Along with other ConneXion customers, the Company engaged Tennessee in negotiations to amend the existing service agreements beyond October 31, 2027 at the maximum recourse rate on file with the FERC. Due to the competitive market demand for additional capacity in the New England market area, the forward value of adding the right of first refusal extension and the extension to the term of the capacity path associated with these contracts, Tennessee was unwilling to offer the Company continuation of this valuable service at the recourse rate and would only offer to all ConneXion customers a right to continue service beyond the current contract expiry at a market-based rate. Since these contracts are foundational elements of the Company's capacity portfolio with no alternatives available in the market to replace the ConneXion capacity, and to avoid the possibility that this capacity may be re-marketed to customers other than RIE, the Company and TGP have agreed to extend the primary term to October 31, 2034. In addition, the Company negotiated an option to extend the contract beyond 2034, if needed. Rates for continuation of service on the ConneXion contracts beginning November 1, 2027 in SENDOUT[®] are therefore reflective of the terms for the extension.

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.

The permanent solution for Cumberland includes the following two elements: (1) the LNG tank; and (2) the existing take station.

- 1) The Company hired a consultant to review possible permanent storage options for this site and to help determine storage and capacity types considering the facility's operational and functional requirements. The Company expects to have a final report in the third quarter of 2023.
- 2) As part of the permanent solution, the Company has made the decision to rebuild the Scott Road take station. 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 targeted in-service date of August 2024.

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.

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 19. Cost projections were developed using the New York Mercantile Exchange (NYMEX) Henry Hub forward curve from June 5, 2023 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 annual GCR filings. Total annual fixed costs for the 2023/24 gas year are projected to be approximately \$109 million for the Company's transportation, storage, and supply agreements. Of the \$109 million, \$18 million is attributable to estimated supplier fixed costs. Total annual variable costs for the same period are projected to be approximately \$144 million assuming design weather. Combined fixed and variable costs are projected to be \$233 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 at the end of August 2023. 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 2023/24 gas year are projected to be approximately \$102 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 \$88 million assuming normal weather. Combined fixed and variable costs are projected to be \$170 million. On a unitized basis, as shown on Page 4 of Exhibit 19, the weighted average commodity cost is estimated to be \$3.076 per dekatherm. For reference, the straight average NYMEX Henry Hub forward curve for the 2023/24 gas year is \$3.316 per dekatherm.

The cost projections in Exhibits 18 and 19 reflect an estimated cost of supplier fixed costs for the Company's incremental Winter Liquid and proposed Dracut supply deals. An RFP for these supplies will be issued subsequent to the filing of this Long-Range Plan. As stated above, the incremental Winter Liquid was assumed at the same price that the Company paid last year. The incremental Dracut supply deal was assumed to be at the same price that the Company locked in with the latest RFP deal.

IV.E. Rhode Island Act on Climate and Gas Decarbonization

RIE is committed to being a strong partner in advancing Rhode Island's Act on Climate ("Act") net-zero mandate by 2050. The Company also supports, and is actively engaged in, the effort underway to develop a framework for implementing the Act's requirements with respect to the gas distribution business through the PUC-initiated Docket 22-01-NG.

In parallel with these efforts, the Company also has an obligation to ensure natural gas customers can safely, reliably, and cost-effectively heat their homes and businesses during the winter months, especially when severe weather events occur, as happened this past February. The Company's LRP is designed to meet these objectives.

The Company recognizes the Act and future strategies employed to decarbonize the various energy consumption segments and fuels present implications for all energy market participants. As such, the Company will utilize the outcomes from Docket No. 22-01-NG, Rhode Island's Executive Climate Change Coordinating Council's work, as well as additional RIE analysis associated with the Act to inform future Long-Range Plans.

The Company's Long-Range Plans are submitted annually and will be updated to reflect any changes in the data and information relied upon to produce the forecasted demand and gas supply portfolio analysis.

IV.F. Customer Choice Program

IV.F.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 in Docket No. 4816, 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 does not have planning responsibility¹⁶, 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, in Docket No. 4963 regarding the Company's 2019/20 GCR filing, the Commission approved the Division's recommendation that the Company 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 Company's 2020 LRP filing, Docket No. 5043, the proposed plans were discussed and in Docket No. 5067, regarding the Company Customer Choice Program, 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

¹⁶ This load includes Capacity Exempt Customers as well as the storage and peaking load of the capacity eligible FT-1 Customers.

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 planned releases for the upcoming gas year in Exhibit 22.¹⁷

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.F.2 Impact of the Customer Choice Program on Portfolio Planning

In the Company's 2019 Long-Range Plan filing, the Company provided the results of its initial analysis of the impact of the Customer Choice Program on portfolio planning, looking at the total hourly supply/demand balance at each gate station on both Algonquin and Tennessee¹⁸. 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 a 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, the Company has contracted for additional resources. The results of the analysis using updated forecast information are presented in Exhibit 2.

In accordance with the Division's recommendations, in Docket No. 5066 regarding the Company's 2020/21 GCR filing, 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 2022/23 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

¹⁷ The TGP "step-up" capacity of 5,000 Dth/day and the new TGP contract for 5,000 Dth/day will both be added to the peaking resources starting in November 2023.

¹⁸ The analysis was performed using the June 2018 forecast for the 2019/20 through 2023/24 gas years.

System Pressure Factor. The Company will assess the need to reconcile variable costs for these assets annually in its GCR and DAC filings.

IV.F.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.¹⁹ A listing of this information is provided in the table below along with the referenced exhibit providing such information in this filing.

¹⁹ 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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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

VI. Exhibits

The Exhibits to this Long-Range Plan follow. At the request of the Company and with Division approval Exhibits 20 and 21 are omitted.

2023 Rhode Island Energy Volume Forecast (Dth)
Planning Year (Nov-Oct)

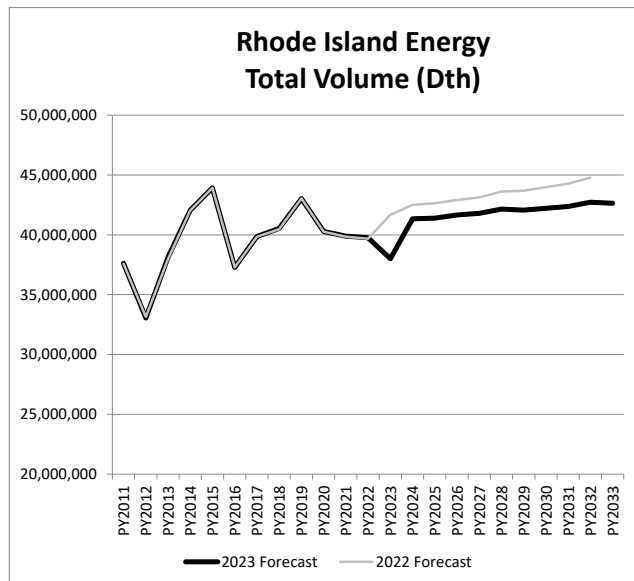
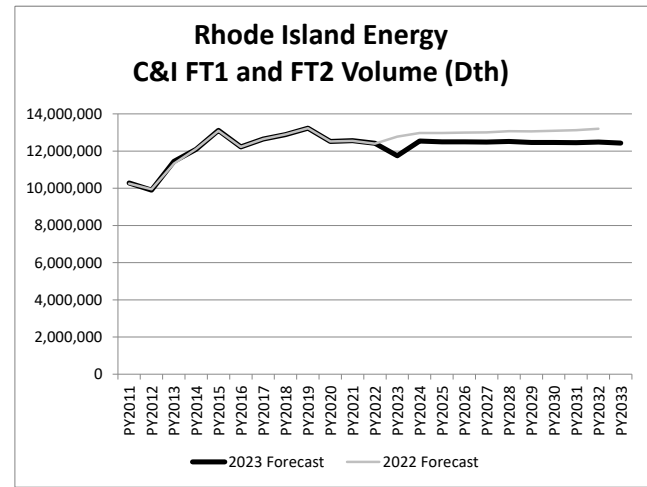
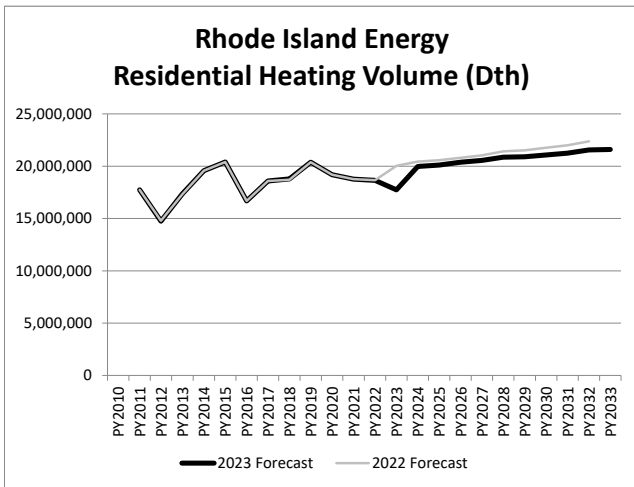
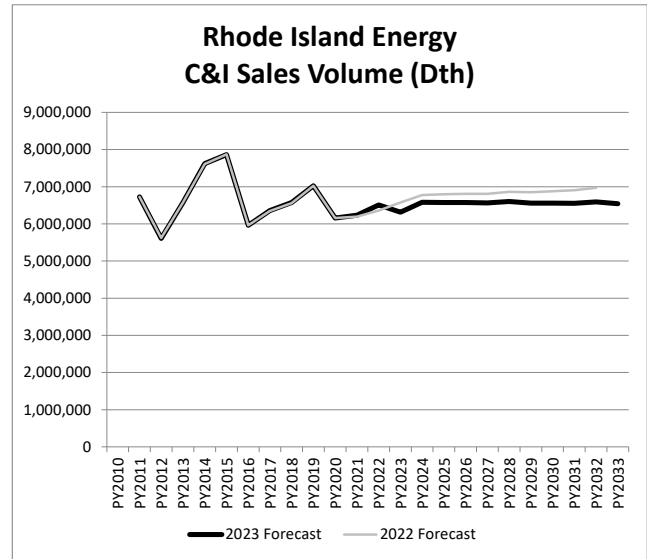
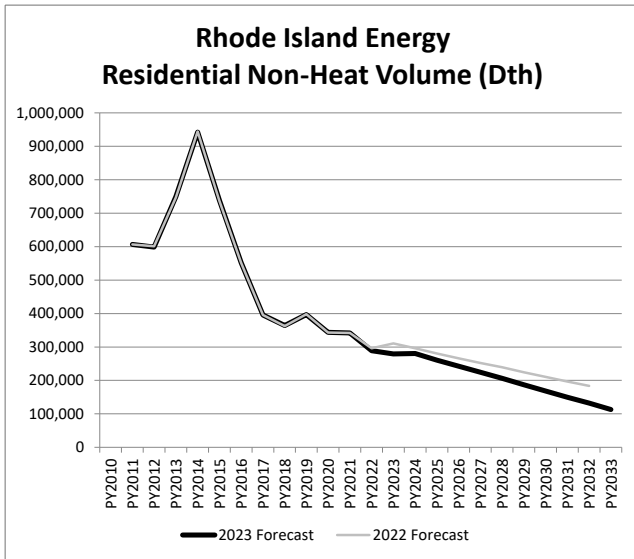
Chart III-B-1
Page 1 of 2

	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,644	17,736,076	6,725,724	7,718,626	2,569,167	35,356,237	2,267,651	37,623,888
PY2012	598,482	14,745,548	5,608,516	7,573,133	2,327,234	30,852,912	2,195,946	33,048,858
PY2013	749,144	17,344,966	6,576,270	8,280,146	3,165,323	36,115,849	2,014,294	38,130,143
PY2014	942,337	19,572,854	7,623,864	8,561,316	3,531,628	40,231,999	1,820,583	42,052,583
PY2015	738,835	20,396,120	7,862,442	9,416,445	3,701,367	42,115,208	1,803,363	43,918,571
PY2016	551,618	16,671,101	5,958,838	8,656,921	3,570,398	35,408,877	1,864,539	37,273,415
PY2017	395,696	18,591,409	6,358,170	8,698,886	3,948,840	37,992,999	1,860,731	39,853,730
PY2018	364,115	18,781,128	6,573,004	8,869,529	4,011,937	38,599,712	1,940,004	40,539,716
PY2019	396,702	20,370,774	7,023,721	8,767,988	4,462,240	41,021,425	2,010,099	43,031,524
PY2020	343,477	19,182,042	6,158,394	8,215,847	4,305,163	38,204,922	2,068,291	40,273,213
PY2021	341,940	18,761,099	6,234,913	8,280,611	4,277,479	37,896,040	1,993,339	39,889,380
PY2022	288,899	18,648,898	6,508,127	8,278,765	4,142,792	37,867,481	1,895,065	39,762,546
PY2023	279,477	17,738,576	6,316,275	7,878,735	3,864,994	36,078,058	1,932,119	38,010,176
PY2024	280,141	19,973,696	6,580,278	8,187,069	4,350,092	39,371,275	1,964,411	41,335,686
PY2025	260,800	20,104,738	6,574,668	8,169,963	4,330,041	39,440,210	1,959,461	41,399,671
PY2026	242,548	20,387,921	6,572,496	8,167,297	4,328,008	39,698,271	1,958,815	41,657,086
PY2027	224,083	20,557,285	6,563,888	8,162,256	4,322,829	39,830,342	1,957,466	41,787,808
PY2028	206,367	20,857,314	6,601,732	8,174,776	4,342,054	40,182,244	1,961,273	42,143,518
PY2029	186,911	20,895,344	6,559,307	8,149,034	4,318,129	40,108,725	1,954,492	42,063,217
PY2030	168,381	21,070,923	6,557,383	8,145,143	4,316,789	40,258,619	1,953,668	42,212,288
PY2031	149,900	21,246,860	6,553,941	8,141,864	4,314,797	40,407,363	1,952,873	42,360,236
PY2032	132,022	21,561,333	6,589,124	8,150,828	4,333,009	40,766,317	1,955,858	42,722,175
PY2033	112,977	21,597,604	6,543,528	8,127,277	4,307,885	40,689,272	1,949,456	42,638,728
PY28/PY23	-5.9%	3.3%	0.9%	0.7%	2.4%	2.2%	0.3%	2.1%

2022 Rhode Island Energy Volume Forecast (Dth)
Planning Year (Nov-Oct)

	RNH	RH	CI_Sales	FT1	FT2	Subtotal	Other	Total
PY2011	606,350	17,738,290	6,726,982	7,680,544	2,569,158	35,321,323	2,267,651	37,588,974
PY2012	601,399	14,783,757	5,621,831	7,610,425	2,333,884	30,951,297	2,195,914	33,147,211
PY2013	746,890	17,315,789	6,571,992	8,278,483	3,049,869	35,963,022	2,014,143	37,977,165
PY2014	944,175	19,573,872	7,610,946	8,563,673	3,548,382	40,241,047	1,795,342	42,036,389
PY2015	736,952	20,389,772	7,870,336	9,416,524	3,680,836	42,094,420	1,828,765	43,923,185
PY2016	551,336	16,675,372	5,959,482	8,656,944	3,569,930	35,413,063	1,865,144	37,278,207
PY2017	395,749	18,594,253	6,348,283	8,698,746	3,950,370	37,987,401	1,860,594	39,847,995
PY2018	362,687	18,694,105	6,556,966	8,875,527	4,024,743	38,514,028	1,942,194	40,456,222
PY2019	397,686	20,371,781	7,022,556	8,768,245	4,462,606	41,022,875	2,011,798	43,034,673
PY2020	343,088	19,176,946	6,157,256	8,212,992	4,303,418	38,193,700	2,068,653	40,262,352
PY2021	341,808	18,757,551	6,195,869	8,278,086	4,267,481	37,840,794	1,994,377	39,835,170
PY2022	296,073	18,672,736	6,355,910	8,222,207	4,179,500	37,726,427	1,942,020	39,668,447
PY2023	310,797	20,025,849	6,572,205	8,385,242	4,394,047	39,688,142	1,997,522	41,685,664
PY2024	295,980	20,444,274	6,776,015	8,506,662	4,464,857	40,487,788	2,016,215	42,504,003
PY2025	280,310	20,564,640	6,798,457	8,515,508	4,461,983	40,620,898	2,017,669	42,638,566
PY2026	266,198	20,807,911	6,808,711	8,528,716	4,467,870	40,879,406	2,020,862	42,900,268
PY2027	252,250	21,040,524	6,809,029	8,537,191	4,468,498	41,107,492	2,022,697	43,130,189
PY2028	239,356	21,417,131	6,864,548	8,567,158	4,498,441	41,586,633	2,030,814	43,617,448
PY2029	224,245	21,517,576	6,852,017	8,568,672	4,492,608	41,655,117	2,030,940	43,686,057
PY2030	210,247	21,758,893	6,878,647	8,586,651	4,507,929	41,942,367	2,035,754	43,978,121
PY2031	196,422	21,997,053	6,903,882	8,604,393	4,522,553	42,224,303	2,040,484	44,264,787
PY2032	183,591	22,376,858	6,969,029	8,640,009	4,558,932	42,728,419	2,050,259	44,778,678
PY2033	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PY28/PY23	-5.1%	1.4%	0.9%	0.4%	0.5%	0.9%	0.3%	0.9%

Chart III-B-1
Page 2 of 2



(JUNE 2023 Forecast) 2023-24 Model Supply Portfolio Comparison						
Supply	Meter No.	Gate Station	City	Peak Hour Supply Contracts (DTH/hr)	Peak Hour Model Demand (DTH/hr)	Peak Hour Supply Balance (+Surplus vs -Shortfall)
AGT	00064	Barrington	Barrington	0	-169	-169
AGT	00012	Bristol-Warren	Warren	811	-569	242
AGT	00044	Burrillville	Burrillville	0	-27	-27
AGT	00842	Crary St	Providence	0	-3,744	-3,744
AGT	00004	Dey St	E Providence*	5,717	-1,989	3,728
AGT	00083	Diamond Hill	Cumberland	42	-24	18
AGT	00013	Portsmouth	Portsmouth	1,045	-1,270	-225
AGT	00033	Tiverton	Tiverton	56	-65	-9
AGT	00010	Wampanoag Trail	E Providence	1,698	-772	926
AGT	00008	Westerly	Westerly	144	-118	26
AGT	00059	Yankee	Montville	208	-211	-2
TGP	420750	Cranston	Cranston*	3,346	-2,428	918
TGP	420758	Lincoln	Lincoln	1,283	-1,074	209
TGP	420910	Smithfield	Smithfield	450	-1,517	-1,067
TGP	420135	Scott Rd (Pawtucket)	Cumberland	1,343	-2,449	-1,106
PORTABLE LNG		Old Mill Ln	Portsmouth	225	0	225
LNG		Exeter	Exeter	1,000	-1,000	0
LNG (incl. NGLNG)		Providence	Providence	3,958	-3,958	0
PORTABLE LNG		Scott Rd	Cumberland	57	0	57
				21,384	-21,384	0
AGT	G-6 Only (Feed Prov Area)			8,226	-7,243	983
AGT	G-2 (Feed Tiv & AI)			1,101	-1,335	-234
AGT	E			352	-329	23
TGP	Cranston			5,079	-5,018	61
Total AGT				9,721	-8,959	763
Total TGP				6,423	-7,468	-1,045
LNG				5,240	-4,958	282

*Flow data based on 2022 Synergy Models, with the 2023 Load Forecast

*Adjusted Supply contracts reflect third party marketer nominations at Dey St and Cranston

*TGP is using maximum volume with Scott Rd not restricted to the MHQ, and with the Coweset Valve partially open restricting flow to Providence.

(JUNE 2023 Forecast) 2024-25 Model Supply Portfolio Comparison						
Supply	Meter No.	Gate Station	City	Peak Hour Supply Contracts (DTH/hr)	Peak Hour Model Demand (DTH/hr)	Peak Hour Supply Balance (+Surplus vs - Shortfall)
AGT	00064	Barrington	Barrington	0	-157	-157
AGT	00012	Bristol-Warren	Warren	769	-574	195
AGT	00044	Burrillville	Burrillville	0	-28	-28
AGT	00842	Crary St	Providence	0	-3,835	-3,835
AGT	00004	Dey St	E Providence*	5,150	-2,041	3,109
AGT	00083	Diamond Hill	Cumberland	42	-23	19
AGT	00013	Portsmouth	Portsmouth	1,045	-1,282	-237
AGT	00033	Tiverton	Tiverton	56	-63	-7
AGT	00010	Wampanoag Trail	E Providence	1,698	-1,041	657
AGT	00008	Westerly	Westerly	144	-122	22
AGT	00059	Yankee	Montville	208	-219	-11
TGP	420750	Cranston	Cranston*	3,366	-2,166	1,200
TGP	420758	Lincoln	Lincoln	1,283	-1,071	212
TGP	420910	Smithfield	Smithfield	450	-1,562	-1,112
TGP	420135	Scott Rd (Pawtucket)	Cumberland	1,343	-2,427	-1,084
PORTABLE LNG		Old Mill Ln	Portsmouth	650	0	650
LNG		Exeter	Exeter	1,000	-1,000	0
LNG (incl. NGLNG)		Providence	Providence	3,958	-3,958	0
PORTABLE LNG		Scott Rd	Cumberland	406	0	406
				21,569	-21,569	0
AGT	G-6 Only (Feed Prov Area)			7,617	-7,647	-30
AGT	G-2 (Feed Tiv & AI)			1,101	-1,345	-244
AGT	E			352	-341	11
TGP	Cranston			5,099	-4,799	301
Total AGT				9,112	-9,385	-273
Total TGP				6,443	-7,226	-783
LNG				6,014	-4,958	1,056

*Flow data based on 2022 Synergy Models, with the 2023 Load Forecast

*Adjusted Supply contracts reflect third party marketer nominations at Dey St and Cranston

*TGP is using maximum volume with Scott Rd not restricted to the MHQ, and with the Coweset Valve partially open restricting flow to Providence.

(JUNE 2023 Forecast) 2025-26 Model Supply Portfolio Comparison						
Supply	Meter No.	Gate Station	City	Peak Hour Supply Contracts (DTH/hr)	Peak Hour Model Demand (DTH/hr)	Peak Hour Supply Balance (+Surplus vs -Shortfall)
AGT	00064	Barrington	Barrington	0	-160	-160
AGT	00012	Bristol-Warren	Warren	769	-578	191
AGT	00044	Burrillville	Burrillville	0	-29	-29
AGT	00842	Crary St	Providence	0	-3,863	-3,863
AGT	00004	Dey St	E Providence*	5,126	-2,058	3,068
AGT	00083	Diamond Hill	Cumberland	42	-23	19
AGT	00013	Portsmouth	Portsmouth	1,045	-1,293	-248
AGT	00033	Tiverton	Tiverton	56	-64	-8
AGT	00010	Wampanoag Trail	E Providence	1,698	-1,082	616
AGT	00008	Westerly	Westerly	144	-122	22
AGT	00059	Yankee	Montville	208	-221	-13
TGP	420750	Cranston	Cranston*	3,290	-2,187	1,103
TGP	420758	Lincoln	Lincoln	1,283	-1,081	203
TGP	420910	Smithfield	Smithfield	450	-1,574	-1,124
TGP	420135	Scott Rd (Pawtucket)	Cumberland	1,343	-2,447	-1,103
PORTABLE LNG		Old Mill Ln	Portsmouth	650	0	650
LNG		Exeter	Exeter	1,000	-1,000	0
LNG (incl. NGLNG)		Providence	Providence	3,958	-3,958	0
PORTABLE LNG		Scott Rd	Cumberland	679	0	679
				21,742	-21,742	0
AGT	G-6 Only (Feed Prov Area)			7,593	-7,742	-149
AGT	G-2 (Feed Tiv & AI)			1,101	-1,357	-256
AGT	E			352	-344	9
TGP	Cranston			5,023	-4,843	181
Total AGT				9,088	-9,494	-406
Total TGP				6,367	-7,289	-923
LNG				6,287	-4,958	1,329

*Flow data based on 2022 Synergy Models, with the 2023 Load Forecast

*Adjusted Supply contracts reflect third party marketer nominations at Dey St and Cranston

*TGP is using maximum volume with Scott Rd not restricted to the MHQ, and with the Coweset Valve partially open restricting flow to Providence.

(JUNE 2023 Forecast) 2026-27 Model Supply Portfolio Comparison						
Supply	Meter No.	Gate Station	City	Peak Hour Supply Contracts (DTH/hr)	Peak Hour Model Demand (DTH/hr)	Peak Hour Supply Balance (+Surplus vs -Shortfall)
AGT	00064	Barrington	Barrington	0	-162	-162
AGT	00012	Bristol-Warren	Warren	769	-581	188
AGT	00044	Burrillville	Burrillville	0	-29	-29
AGT	00842	Crary St	Providence	0	-3,880	-3,880
AGT	00004	Dey St	E Providence*	5,130	-2,066	3,064
AGT	00083	Diamond Hill	Cumberland	42	-24	18
AGT	00013	Portsmouth	Portsmouth	1,045	-1,299	-254
AGT	00033	Tiverton	Tiverton	56	-64	-8
AGT	00010	Wampanoag Trail	E Providence	1,698	-1,106	592
AGT	00008	Westerly	Westerly	144	-123	21
AGT	00059	Yankee	Montville	208	-223	-14
TGP	420750	Cranston	Cranston*	3,295	-2,200	1,095
TGP	420758	Lincoln	Lincoln	1,283	-1,086	197
TGP	420910	Smithfield	Smithfield	450	-1,582	-1,132
TGP	420135	Scott Rd (Pawtucket)	Cumberland	1,343	-2,458	-1,115
PORTABLE LNG		Old Mill Ln	Portsmouth	650	0	650
LNG		Exeter	Exeter	1,000	-1,000	0
LNG (incl. NGLNG)		Providence	Providence	3,958	-3,958	0
PORTABLE LNG		Scott Rd	Cumberland	750	0	750
				21,822	-21,840	-18
AGT	G-6 Only (Feed Prov Area)			7,597	-7,795	-198
AGT	G-2 (Feed Tiv & AI)			1,101	-1,363	-262
AGT	E			352	-345	7
TGP	Cranston			5,028	-4,868	161
Total AGT				9,092	-9,555	-463
Total TGP				6,372	-7,326	-954
LNG				6,358	-4,958	1,400

*Flow data based on 2022 Synergy Models, with the 2023 Load Forecast

*Adjusted Supply contracts reflect third party marketer nominations at Dey St and Cranston

*TGP is using maximum volume with Scott Rd not restricted to the MHQ, and with the Coweset Valve partially open restricting flow to Providence.

*Maximum Portable LNG 1,400/hr (650 at OML, 750 at Cumberland)

(JUNE 2023 Forecast) 2027-28 Model Supply Portfolio Comparison						
Supply	Meter No.	Gate Station	City	Peak Hour Supply Contracts (DTH/hr)	Peak Hour Model Demand (DTH/hr)	Peak Hour Supply Balance (+Surplus vs - Shortfall)
AGT	00064	Barrington	Barrington	0	-162	-162
AGT	00012	Bristol-Warren	Warren	769	-585	184
AGT	00044	Burrillville	Burrillville	0	-29	-29
AGT	00842	Crary St	Providence	0	-3,894	-3,894
AGT	00004	Dey St	E Providence*	5,126	-2,075	3,051
AGT	00083	Diamond Hill	Cumberland	42	-24	18
AGT	00013	Portsmouth	Portsmouth	1,045	-1,305	-260
AGT	00033	Tiverton	Tiverton	56	-65	-9
AGT	00010	Wampanoag Trail	E Providence	1,698	-1,126	572
AGT	00008	Westerly	Westerly	144	-123	21
AGT	00059	Yankee	Montville	208	-224	-16
TGP	420750	Cranston	Cranston*	3,292	-2,211	1,081
TGP	420758	Lincoln	Lincoln	1,283	-1,091	192
TGP	420910	Smithfield	Smithfield	450	-1,588	-1,138
TGP	420135	Scott Rd (Pawtucket)	Cumberland	1,343	-2,468	-1,125
PORTABLE LNG		Old Mill Ln	Portsmouth	650	0	650
LNG		Exeter	Exeter	1,000	-1,000	0
LNG (incl. NGLNG)		Providence	Providence	3,958	-3,958	0
PORTABLE LNG		Scott Rd	Cumberland	750	0	750
				21,815	-21,927	-112
AGT	G-6 Only (Feed Prov Area)			7,593	-7,842	-249
AGT	G-2 (Feed Tiv & AI)			1,101	-1,369	-268
AGT	E			352	-347	6
TGP	Cranston			5,025	-4,890	135
Total AGT				9,088	-9,611	-522
Total TGP				6,369	-7,358	-990
LNG				6,358	-4,958	1,400

*Flow data based on 2022 Synergy Models, with the 2023 Load Forecast

*Adjusted Supply contracts reflect third party marketer nominations at Dey St and Cranston

*TGP is using maximum volume with Scott Rd not restricted to the MHQ, and with the Coweset Valve partially open restricting flow to Providence.

2023 Rhode Island Energy Economic Data
(Prices in 2023 \$/Dth)

Chart III-B-3
Page 1 of 3

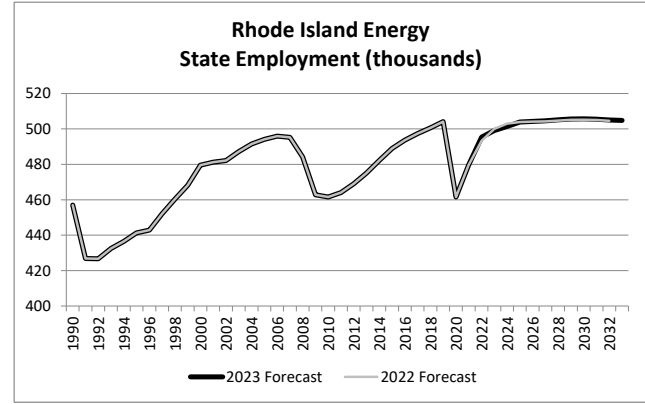
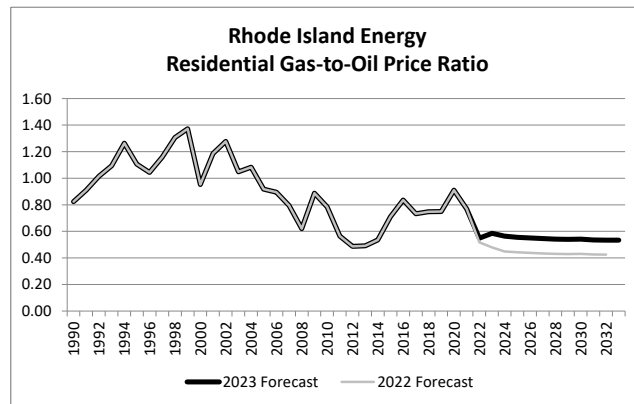
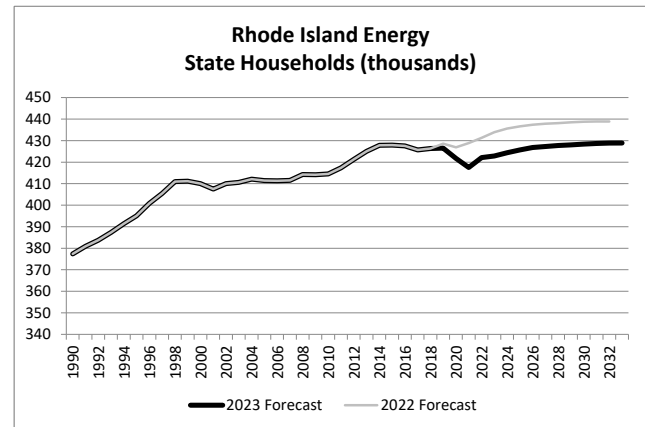
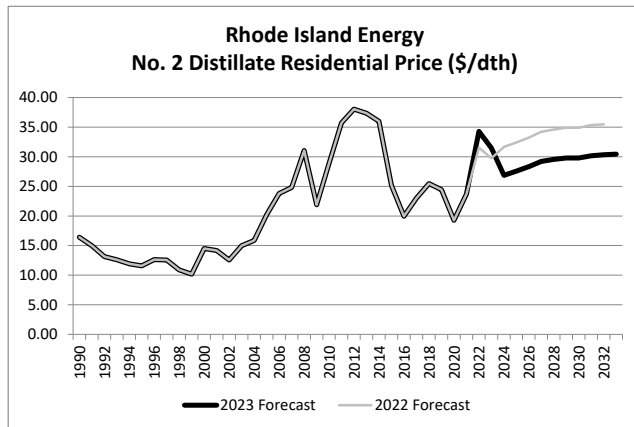
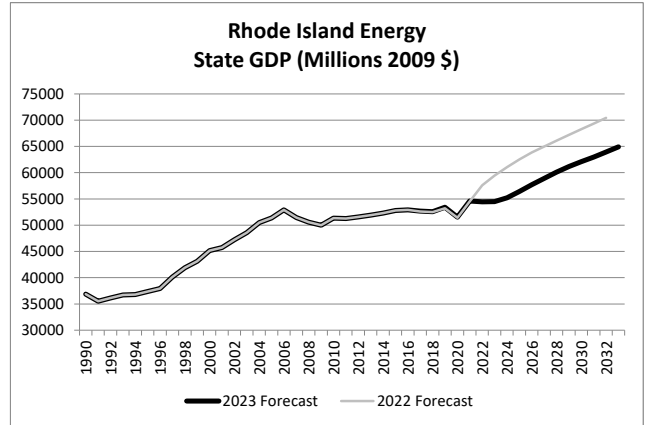
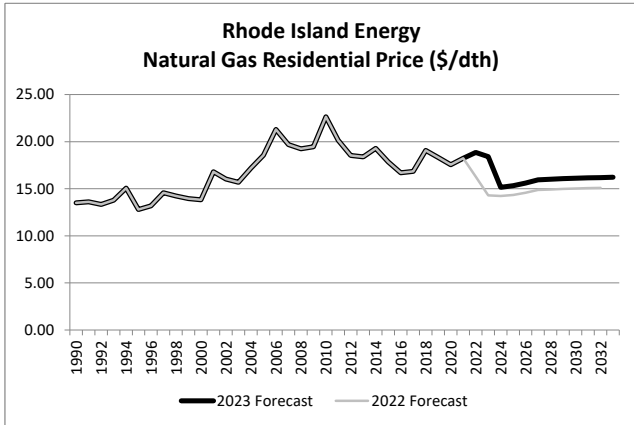
	NGPRCR	OILPRCR	GORR	GDP	HH	EMPL
	Natural Gas Residential	No 2 Distillate Residential Price by All Sellers	Residential Gas-to-Oil Price Ratio	GDP (2009 Millions of \$)	Households (thousands)	Non-Farm Employment (thousands)
Year	Price					
1990	13.50	16.41	0.82	36853	377	457
1991	13.62	14.97	0.91	35521	381	427
1992	13.33	13.13	1.01	36136	384	427
1993	13.77	12.58	1.09	36705	387	432
1994	15.06	11.91	1.26	36774	391	436
1995	12.79	11.58	1.11	37358	395	441
1996	13.18	12.63	1.04	37946	401	443
1997	14.58	12.58	1.16	40140	405	452
1998	14.24	10.89	1.31	41910	411	460
1999	13.96	10.17	1.37	43141	411	468
2000	13.82	14.50	0.95	45177	410	480
2001	16.81	14.16	1.19	45748	407	481
2002	16.03	12.55	1.28	47221	410	482
2003	15.68	14.97	1.05	48567	411	487
2004	17.18	15.86	1.08	50512	412	491
2005	18.56	20.23	0.92	51367	411	494
2006	21.29	23.78	0.90	52899	411	496
2007	19.70	24.80	0.79	51473	412	495
2008	19.25	31.05	0.62	50576	414	484
2009	19.45	21.90	0.89	50004	414	463
2010	22.64	28.84	0.78	51330	415	462
2011	20.14	35.73	0.56	51280	417	464
2012	18.54	38.04	0.49	51582	421	469
2013	18.38	37.37	0.49	51910	425	475
2014	19.29	36.00	0.54	52292	428	482
2015	17.85	25.14	0.71	52818	428	489
2016	16.69	19.96	0.84	52903	428	494
2017	16.84	23.00	0.73	52693	426	497
2018	19.07	25.48	0.75	52551	426	501
2019	18.31	24.44	0.75	53413	426	504
2020	17.56	19.28	0.91	51516	422	462
2021	18.23	23.70	0.77	54599	418	480
2022	18.85	34.30	0.55	54451	422	495
2023	18.41	31.46	0.59	54481	423	499
2024	15.15	26.85	0.56	55228	424	501
2025	15.32	27.56	0.56	56417	426	504
2026	15.61	28.33	0.55	57712	427	504
2027	15.93	29.22	0.55	58915	427	505
2028	16.01	29.56	0.54	60089	428	505
2029	16.07	29.79	0.54	61159	428	506
2030	16.12	29.80	0.54	62101	428	506
2031	16.17	30.17	0.54	62991	429	505
2032	16.19	30.32	0.53	63925	429	505
2033	16.23	30.42	0.53	64919	429	505
PY28/PY23	-2.8%	-1.2%	-1.5%	2.0%	0.2%	0.2%

2022 Rhode Island Energy Economic Data
(Prices in 2022 \$/Dth)

Chart III-B-3
Page 2 of 3

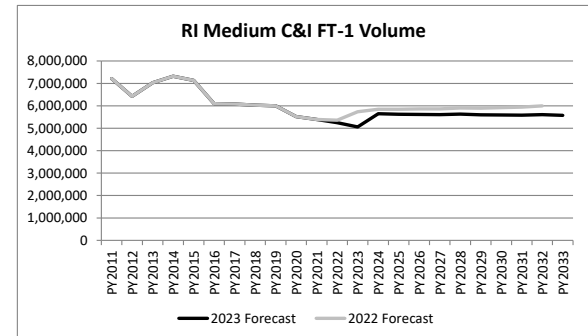
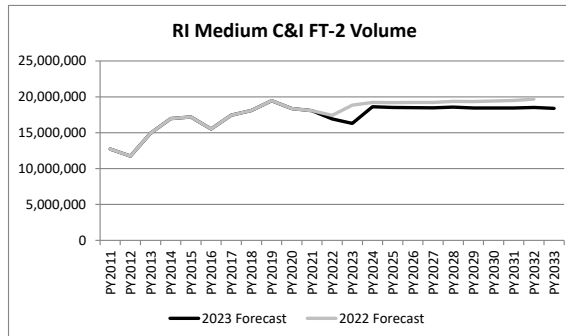
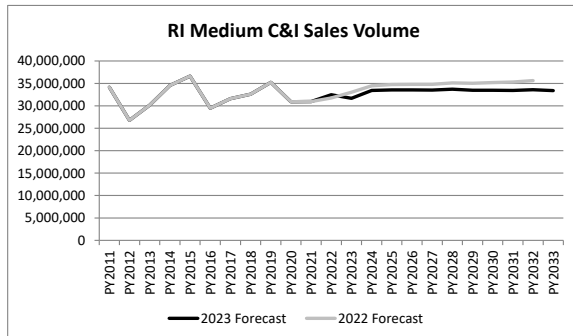
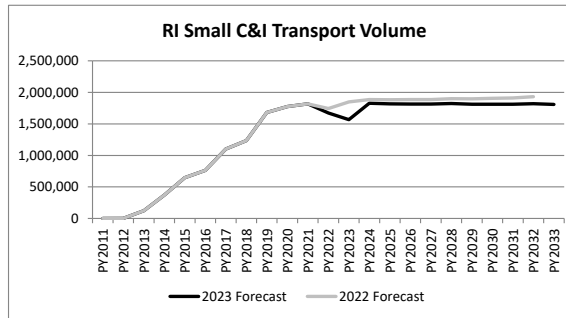
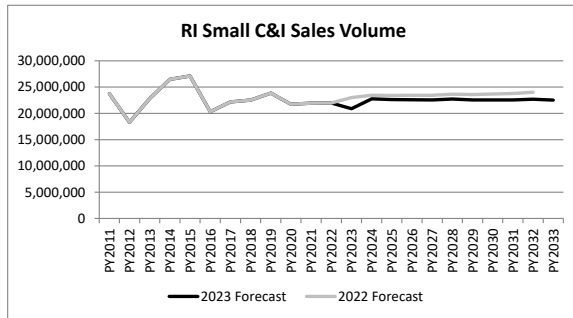
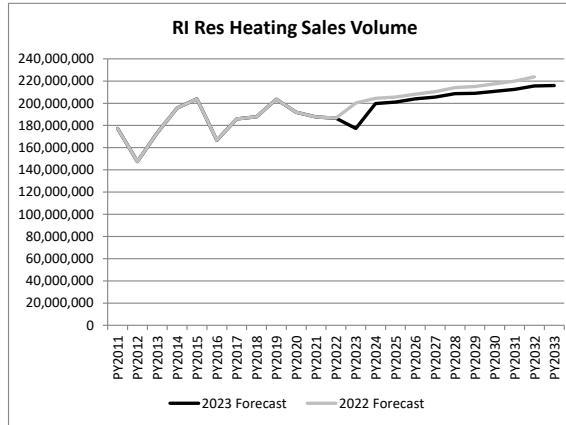
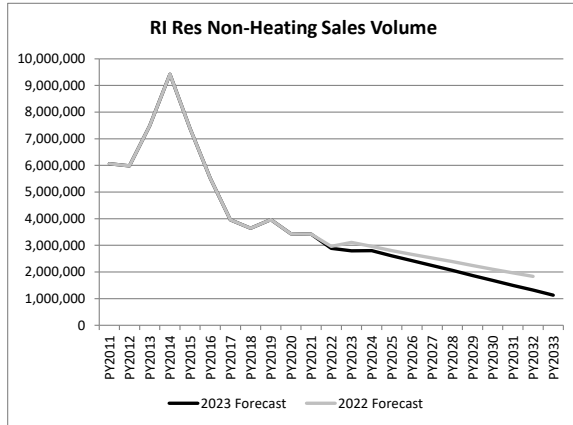
Year	NGPRCR	OILPRCR	GORR	GDP	Households	Non-Farm Employment
	Natural Gas Residential Price	No 2 Distillate Residential Price by All Sellers				
				(2005 Millions of \$)	(thousands)	(thousands)
1990	13.50	16.41	0.82	36853	377	457
1991	13.62	14.97	0.91	35521	381	427
1992	13.33	13.13	1.01	36136	384	427
1993	13.77	12.58	1.09	36705	387	432
1994	15.06	11.91	1.26	36774	391	436
1995	12.79	11.58	1.11	37358	395	441
1996	13.18	12.63	1.04	37946	401	443
1997	14.58	12.58	1.16	40140	405	452
1998	14.24	10.89	1.31	41910	411	460
1999	13.96	10.17	1.37	43141	411	468
2000	13.82	14.50	0.95	45177	410	480
2001	16.81	14.16	1.19	45748	407	481
2002	16.03	12.55	1.28	47221	410	482
2003	15.68	14.97	1.05	48567	411	487
2004	17.18	15.86	1.08	50512	412	491
2005	18.56	20.23	0.92	51367	411	494
2006	21.29	23.78	0.90	52899	411	496
2007	19.70	24.80	0.79	51473	412	495
2008	19.25	31.05	0.62	50576	414	484
2009	19.45	21.90	0.89	50004	414	463
2010	22.64	28.84	0.78	51330	415	462
2011	20.14	35.73	0.56	51280	417	464
2012	18.54	38.04	0.49	51582	421	469
2013	18.38	37.37	0.49	51910	425	475
2014	19.29	36.00	0.54	52292	428	482
2015	17.85	25.14	0.71	52818	428	489
2016	16.69	19.96	0.84	52903	428	494
2017	16.84	23.00	0.73	52610	426	497
2018	19.07	25.48	0.75	52492	426	501
2019	18.31	24.44	0.75	53227	429	504
2020	17.56	19.28	0.91	51415	427	462
2021	18.23	23.70	0.77	54509	429	480
2022	16.29	31.54	0.52	57592.69	431.32	493.27
2023	14.29	29.77	0.48	59430.44	433.94	499.98
2024	14.22	31.65	0.45	61045.22	435.56	502.97
2025	14.34	32.41	0.44	62516.29	436.65	503.95
2026	14.58	33.23	0.44	63862.59	437.39	504.13
2027	14.86	34.23	0.43	64987.73	437.83	504.27
2028	14.92	34.61	0.43	66069.90	438.17	504.65
2029	14.98	34.88	0.43	67194.36	438.47	505.11
2030	15.03	34.90	0.43	68264.87	438.76	505.19
2031	15.08	35.33	0.43	69332.93	438.89	504.99
2032	15.09	35.49	0.43	70439.05	438.88	504.56
2033	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PY28/PY23	0.9%	3.1%	-2.1%	2.1%	0.2%	0.2%

Chart III-B-3
Page 3 of 3

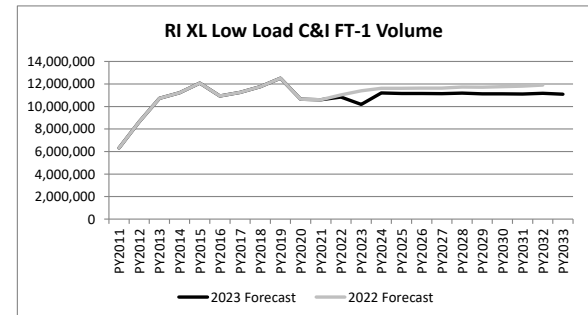
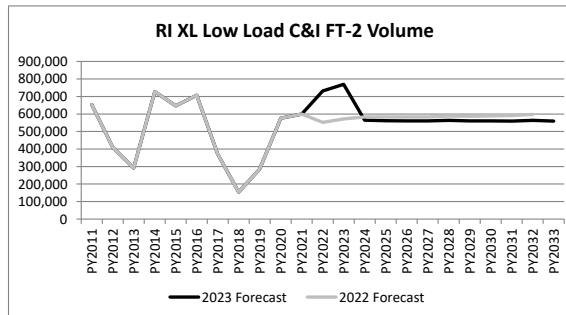
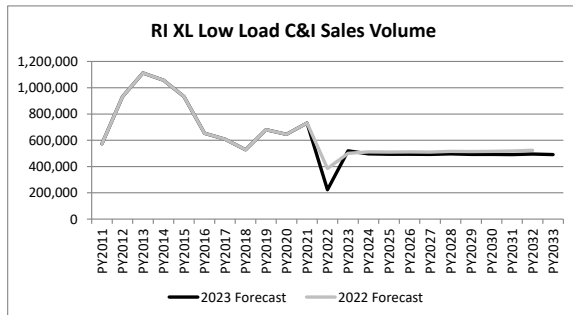
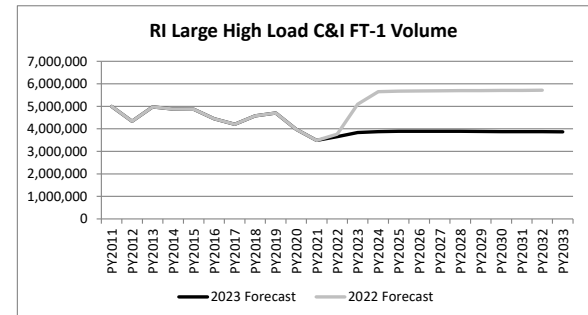
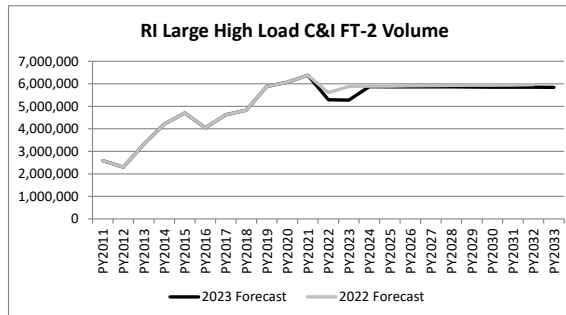
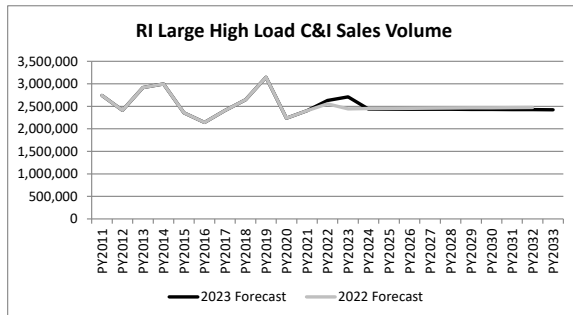
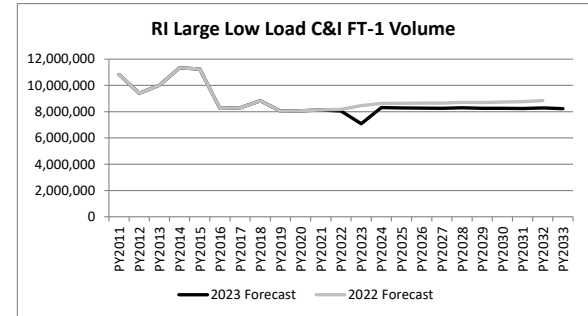
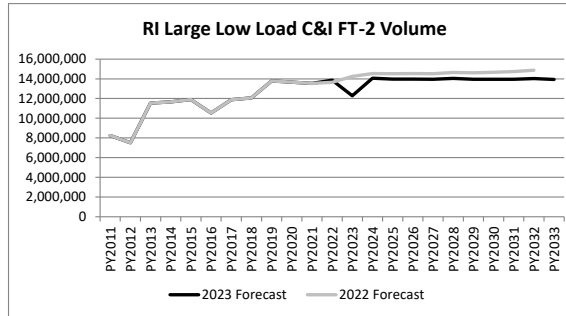
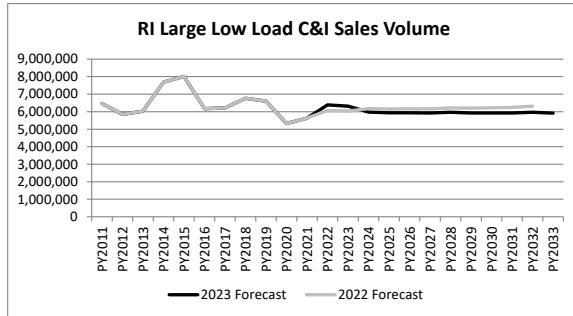


Rhode Island Energy
2023 and 2022 Volume Forecasts by Rate Class
(Therms; Planning Year)

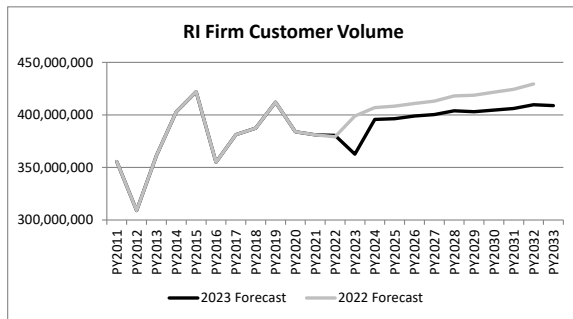
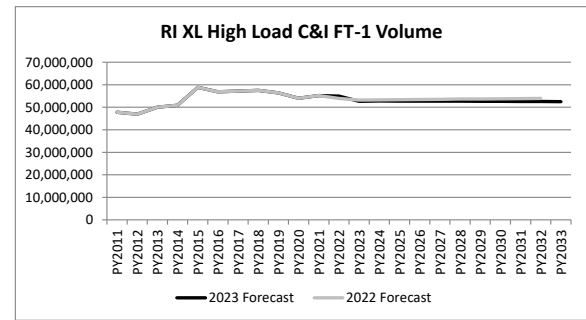
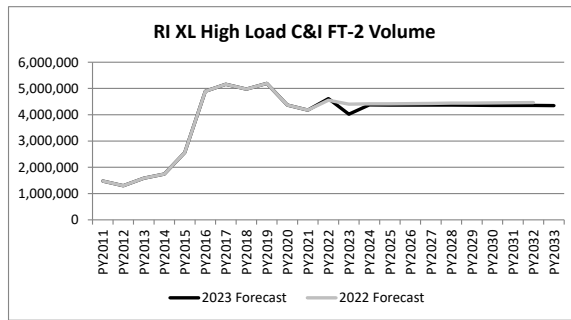
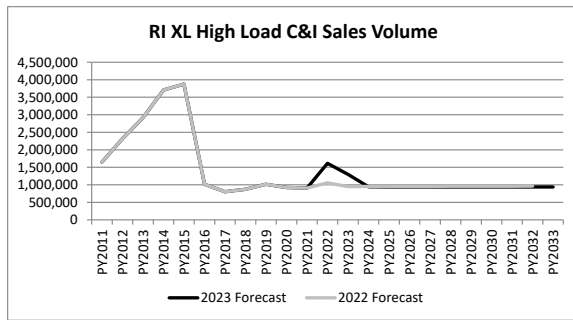
Chart III-B-4
Page 1 of 3



Rhode Island Energy
2023 and 2022 Volume Forecasts by Rate Class
(Therms; Planning Year)



Rhode Island Energy
2023 and 2022 Volume Forecasts by Rate Class
(Therms; Planning Year)



2023 Rhode Island Energy Meter Count Forecast
End of Planning Year (Nov-Oct)

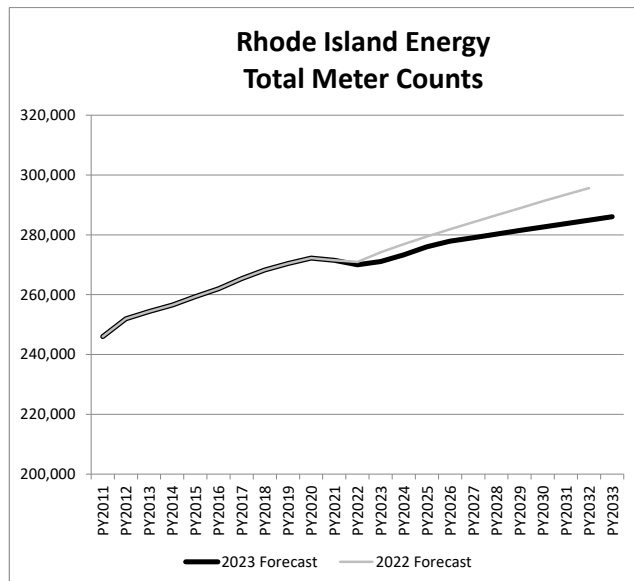
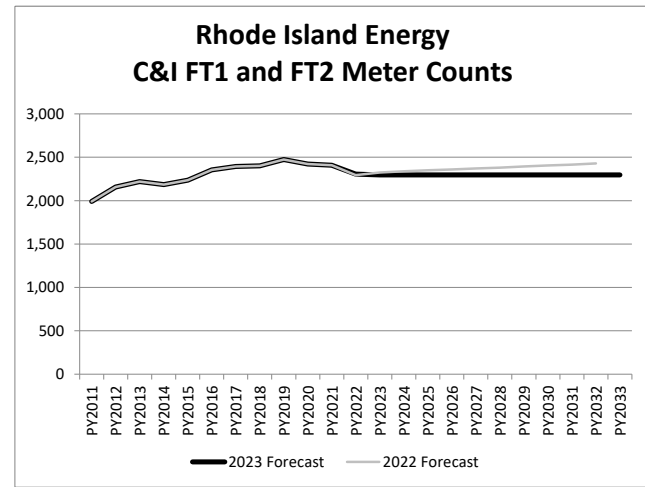
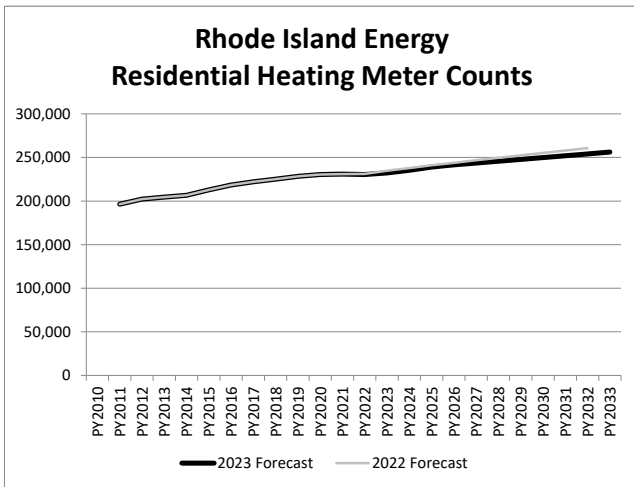
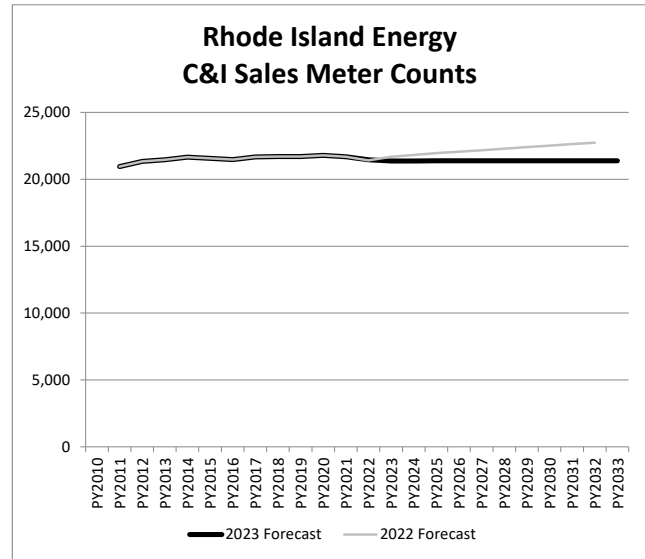
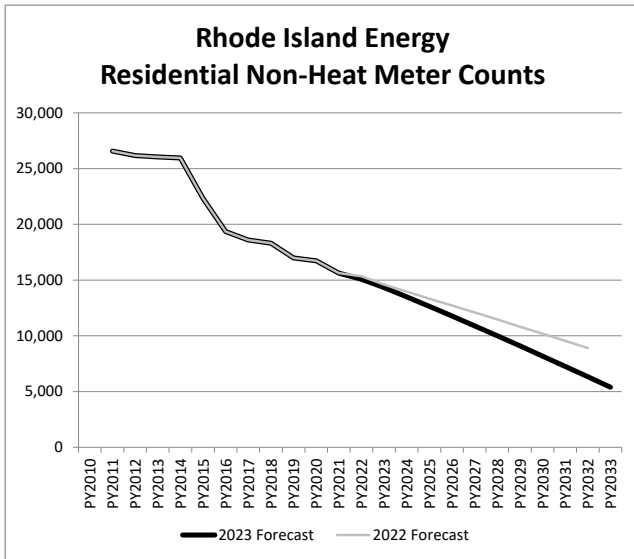
Chart III-B-2
Page 1 of 2

	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	26,165	202,192	21,338	744	1,413	251,852	69	251,921
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	18,298	225,211	21,694	624	1,776	267,603	637	268,240
PY2019	16,977	228,476	21,691	609	1,865	269,618	812	270,430
PY2020	16,729	230,436	21,786	595	1,828	271,374	870	272,244
PY2021	15,623	230,913	21,689	586	1,821	270,632	835	271,467
PY2022	15,066	230,413	21,461	569	1,736	269,245	769	270,014
PY2023	14,327	232,323	21,373	567	1,729	270,319	766	271,085
PY2024	13,492	235,379	21,374	568	1,729	272,542	766	273,308
PY2025	12,647	238,920	21,376	568	1,729	275,240	766	276,006
PY2026	11,780	241,635	21,376	568	1,729	277,088	766	277,854
PY2027	10,896	243,721	21,377	568	1,729	278,291	766	279,057
PY2028	9,998	245,810	21,377	568	1,728	279,481	766	280,247
PY2029	9,094	247,900	21,376	568	1,728	280,666	766	281,432
PY2030	8,182	249,988	21,376	568	1,728	281,842	766	282,608
PY2031	7,264	252,071	21,376	568	1,728	283,007	766	283,773
PY2032	6,334	254,151	21,376	568	1,728	284,157	766	284,923
PY2033	5,392	256,222	21,376	568	1,728	285,286	766	286,052
PY28/PY23	-6.9%	1.1%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%

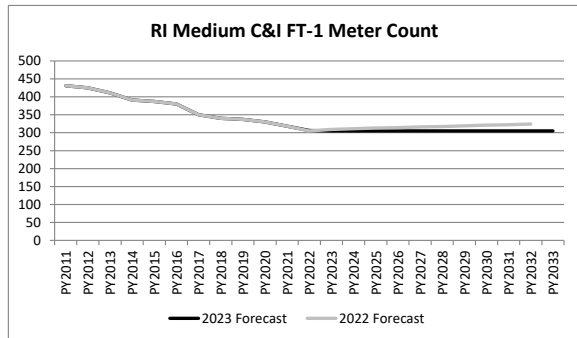
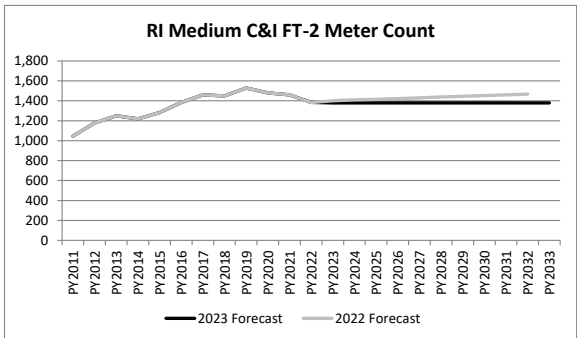
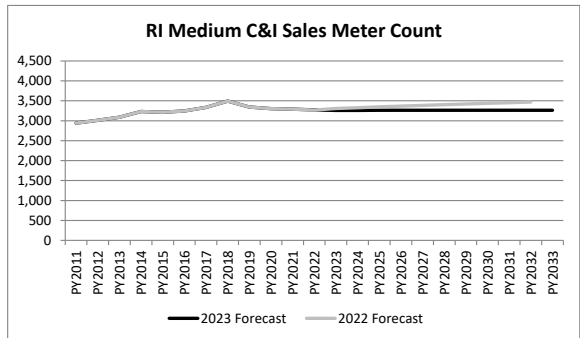
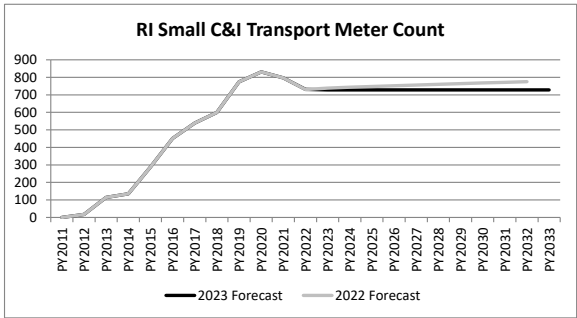
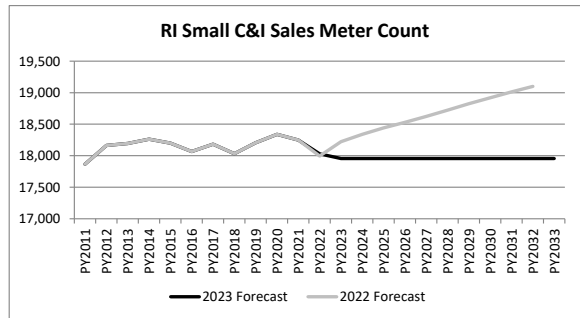
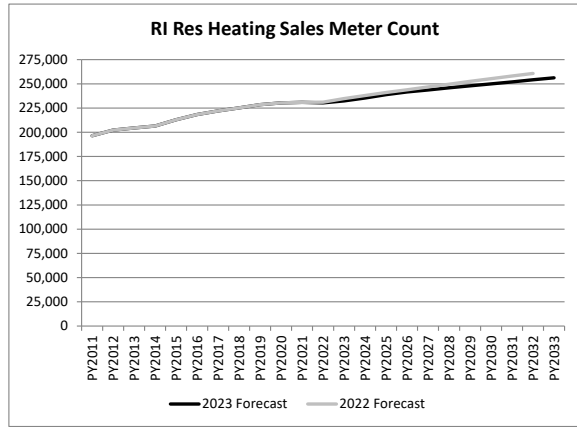
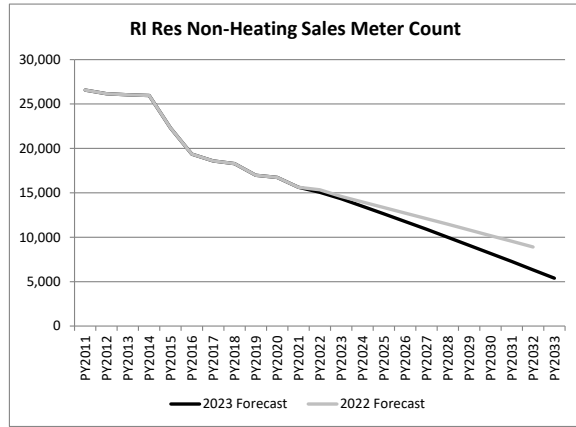
2022 Rhode Island Energy Meter Count Forecast
End of Planning Year (Nov-Oct)

	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	26,165	202,192	21,338	744	1,413	251,852	69	251,921
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	18,298	225,211	21,694	624	1,776	267,603	637	268,240
PY2019	16,977	228,476	21,691	609	1,865	269,618	812	270,430
PY2020	16,729	230,436	21,786	595	1,828	271,374	870	272,244
PY2021	15,623	230,913	21,689	586	1,821	270,632	835	271,467
PY2022	15,340	231,149	21,417	564	1,730	270,200	768	270,968
PY2023	14,600	234,761	21,688	573	1,752	273,374	777	274,151
PY2024	13,966	237,936	21,826	576	1,762	276,066	782	276,848
PY2025	13,339	241,012	21,951	579	1,771	278,652	786	279,438
PY2026	12,725	243,953	22,055	580	1,779	281,092	790	281,882
PY2027	12,100	246,808	22,168	583	1,787	283,446	794	284,240
PY2028	11,468	249,641	22,285	584	1,797	285,775	798	286,573
PY2029	10,825	252,468	22,405	588	1,806	288,092	802	288,894
PY2030	10,185	255,280	22,518	591	1,814	290,388	806	291,194
PY2031	9,545	258,031	22,627	594	1,822	292,619	809	293,428
PY2032	8,904	260,744	22,733	597	1,832	294,810	813	295,623
PY2033	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
PY28/PY23	-4.7%	1.2%	0.5%	0.4%	0.5%	0.9%	0.5%	0.9%

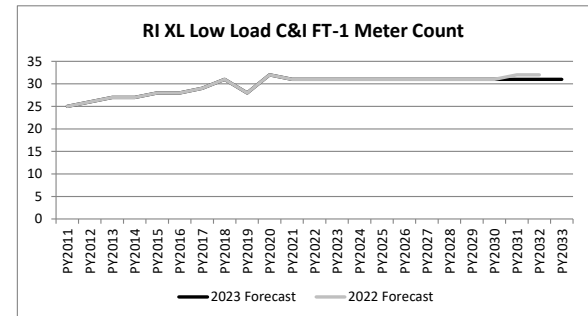
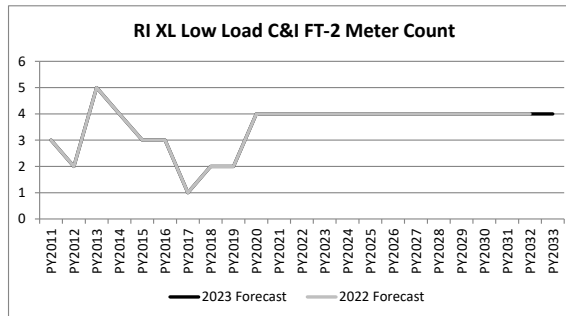
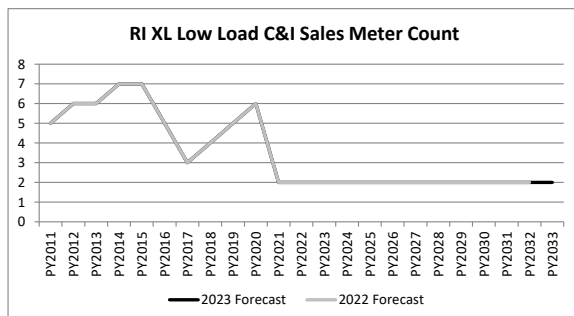
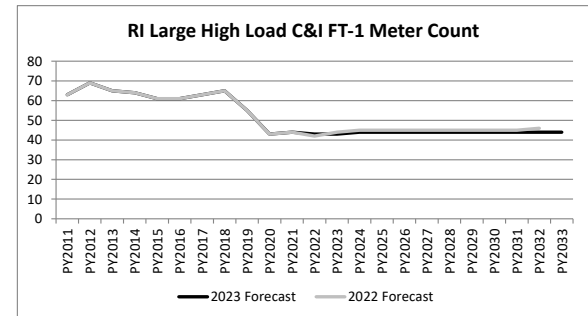
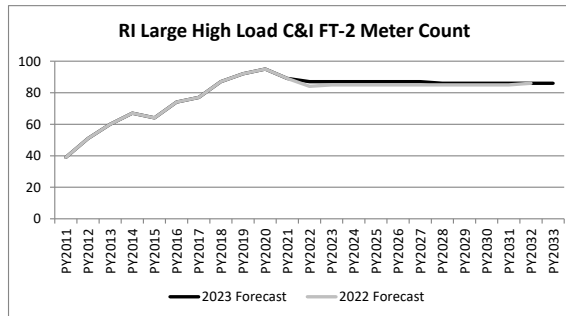
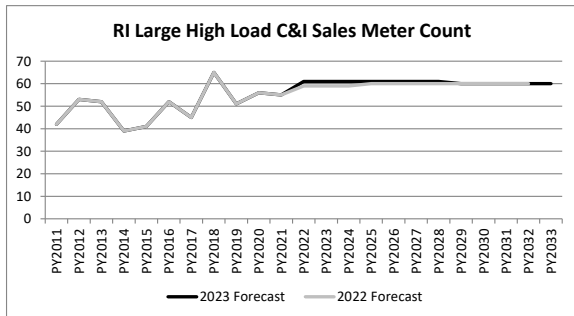
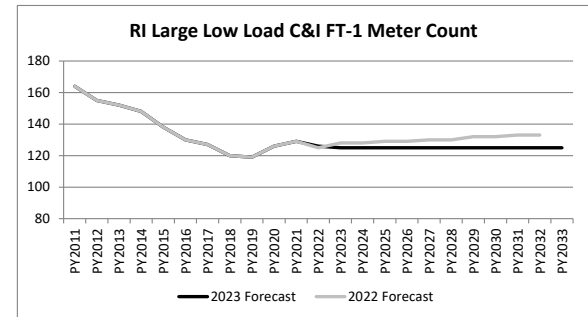
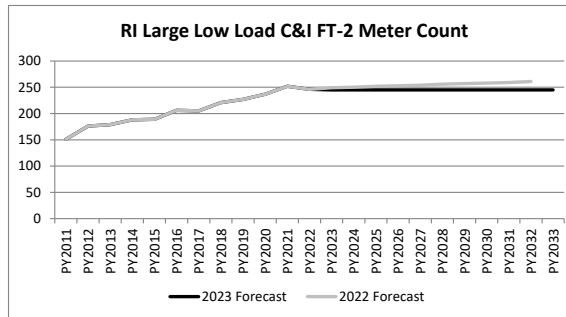
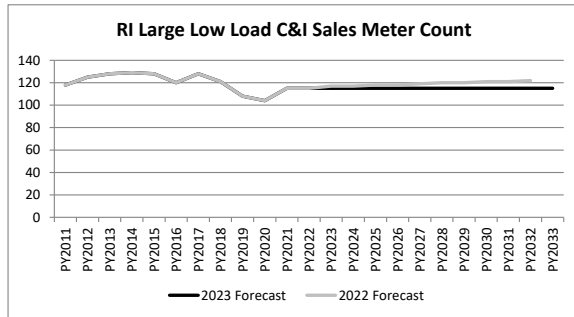
Chart III-B-2
Page 2 of 2



Rhode Island Energy
2023 and 2022 Meter Count Forecasts by Rate Class
(end of Planning Year)



Rhode Island Energy
2023 and 2022 Meter Count Forecasts by Rate Class
(end of Planning Year)



Rhode Island Energy
2023 and 2022 Meter Count Forecasts by Rate Class
(end of Planning Year)

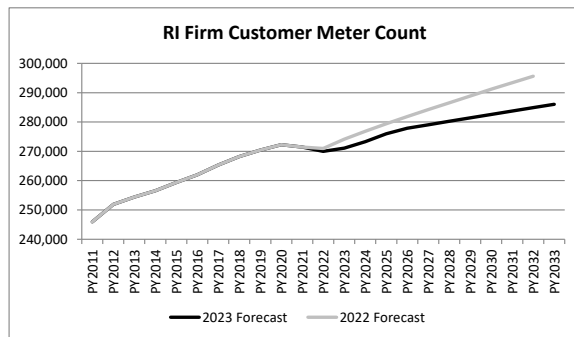
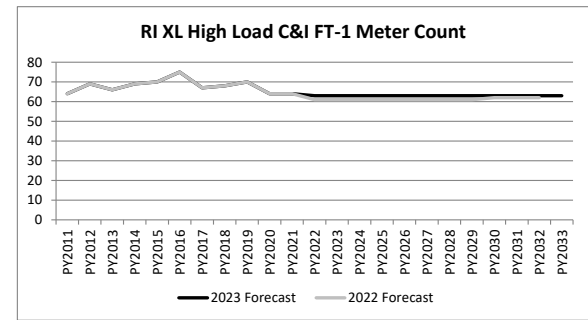
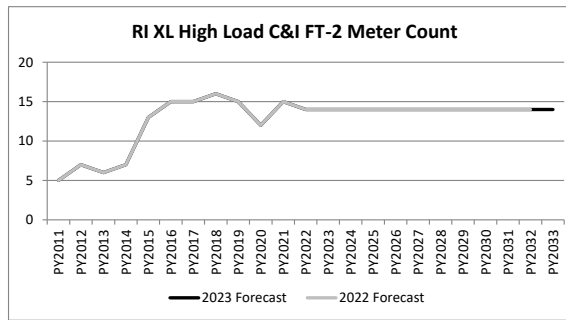
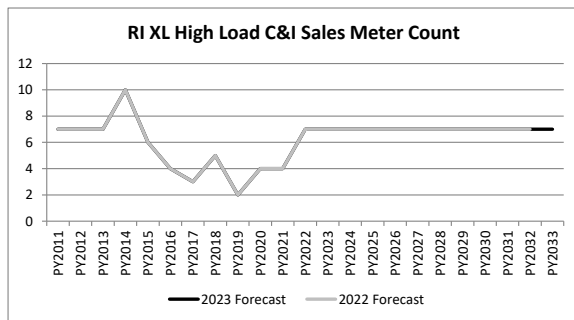


Exhibit 7

Please see the attached Excel document 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 1/24th or 6% Hourly:	9001 1/24th	90106 1/24th	90107 6%	933005 1/24th	93001ESC 6%	93011E 6%	93401S 1/24th	96004SC 1/24th	9B105 1/24th	9S100S 1/24th	9W009E 6%	510801 1/24th	Constellation CG Supply NSB19_			Total
													24-42-20 1/24th	510985 1/24th	511194 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	5,000	171,805
Dey St. (#00004)	11,063	9,223	19,514	---	---	25,137	---	---	4,258	---	6,234	---	13,100	---	5,000	93,529
Westerly (#00008)	---	474	---	248	---	1,221	---	---	79	---	273	500	---	---	---	2,795
Wampanoag Trail [E. Prov] (#00010)	---	4,092	6,615	---	---	48,147	---	---	---	---	---	---	---	---	---	58,854
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:																297,115

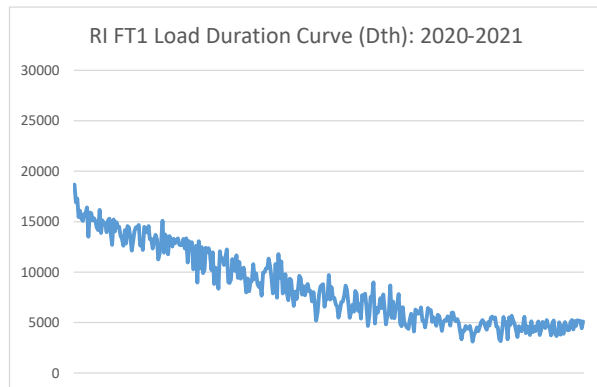
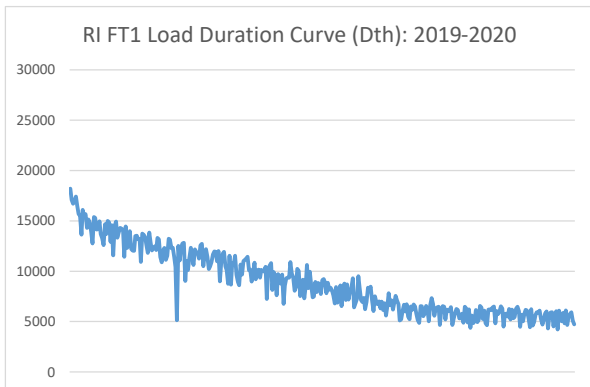
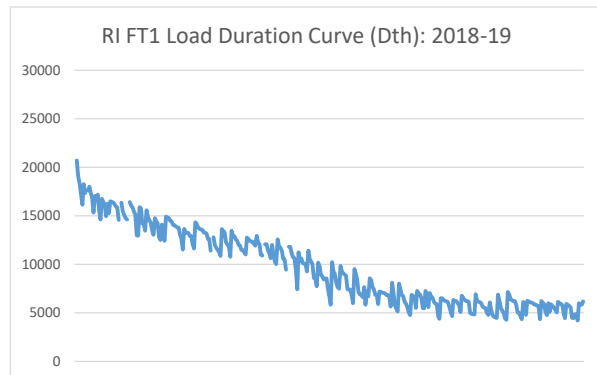
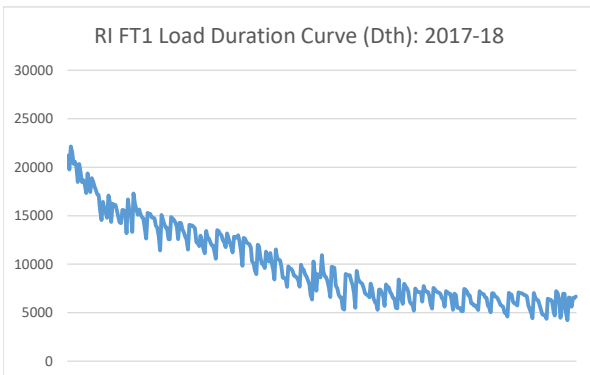
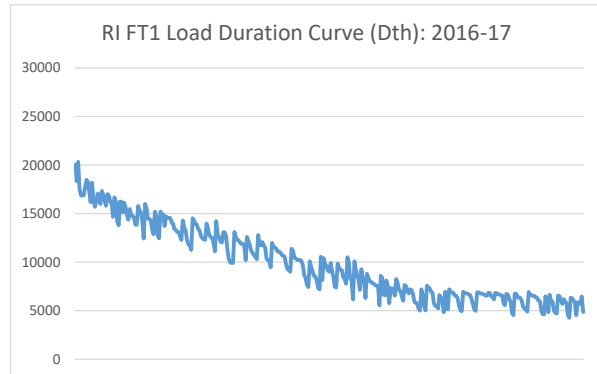
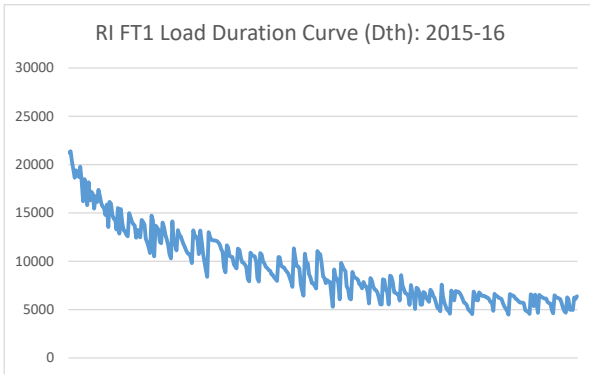
ALGONQUIN HOURLY VOLUMES 1/24th or 6% Hourly:	9001 1/24th	90106 1/24th	90107 6%	933005 1/24th	93001ESC 6%	93011E 6%	93401S 1/24th	96004SC 1/24th	9B105 1/24th	9S100S 1/24th	9W009E 6%	510801 1/24th	Constellation CG Supply NSB19_			Total
													24-42-20 1/24th	510985 1/24th	511194 1/24th	
Contract MDTQ:	461	811	1,568	86	143	3,362	14	71	356	8	409	750	588	4,000	208	8,833
Dey St. (#00004)	461	384	1,171	---	---	1,508	---	---	177	---	374	---	546	---	208	4,830
Westerly (#00008)	---	20	---	10	---	73	---	---	3	---	16	21	---	---	---	144
Wampanoag Trail [E. Prov] (#00010)	---	171	397	---	---	2,889	---	---	---	---	---	---	---	---	---	3,456
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:																14,592

TENNESSEE DAILY VOLUMES All 1/24th:	10807 1/24th	95345 1/24th	39173 1/24th	62930 1/24th	1597 1/24th	64025 1/24th	64026 1/24th	330580 1/24th	349449 1/24th	Total	
Contract MDTQ:	10,836	1,000	1,067	15,000	29,335	5,220	6,380	44,000	20,000	132,838	
Cranston (#420750)	---	---	---	9,000	10,000	---	---	20,000	20,000	59,000	
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:											132,838

TENNESSEE HOURLY VOLUMES All 1/24th:	10807 1/24th	95345 1/24th	39173 1/24th	62930 1/24th	1597 1/24th	64025 1/24th	64026 1/24th	330580 1/24th	349449 1/24th	Total	
Contract MDTQ:	452	42	44	625	1,222	218	266	1,833	833	5,535	
Cranston (#420750)	---	---	---	375	417	---	---	833	833	2,458	
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:											5,535

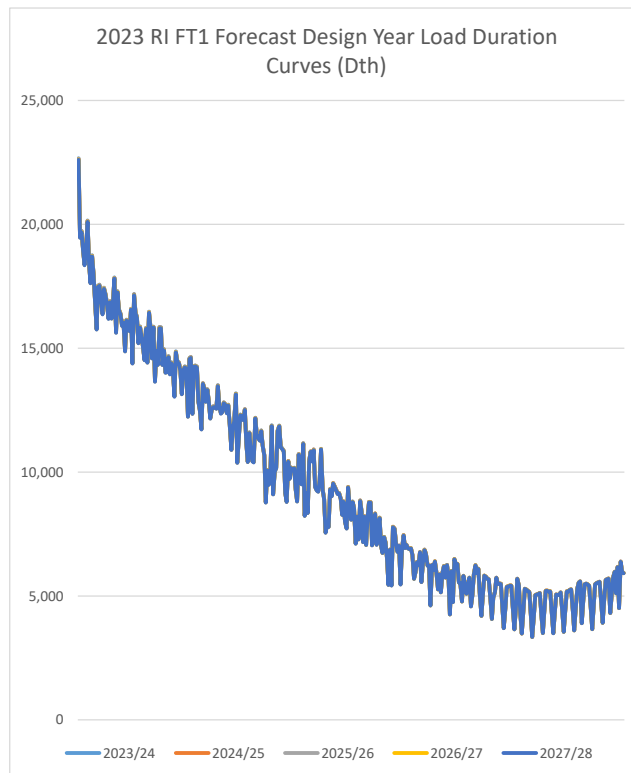
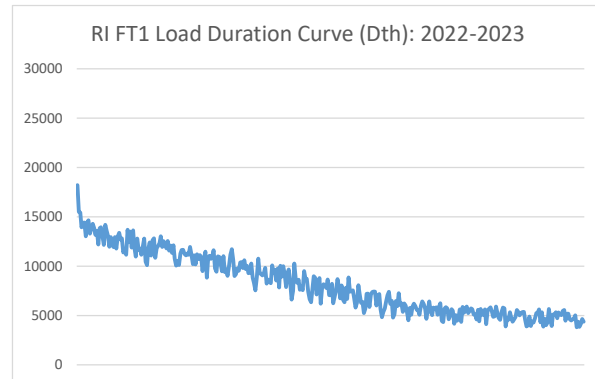
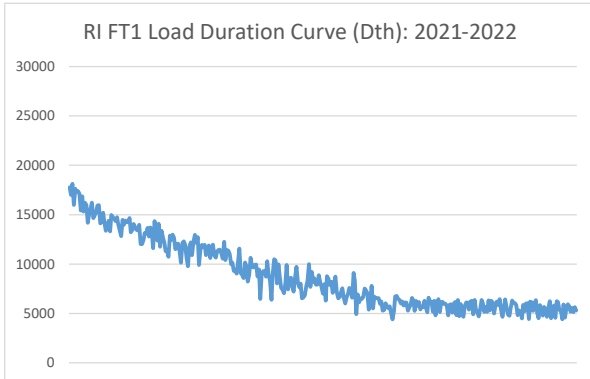
Load Duration Curves for FT1 Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-1
Page 1 of 2



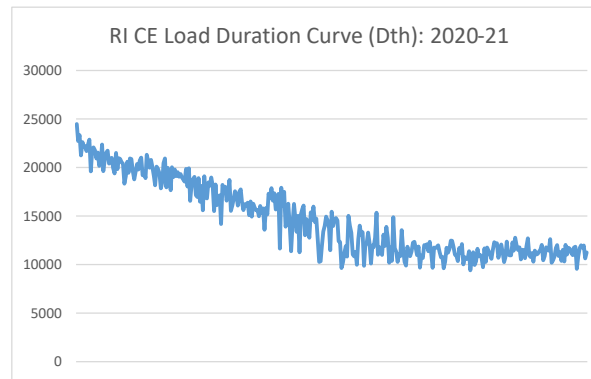
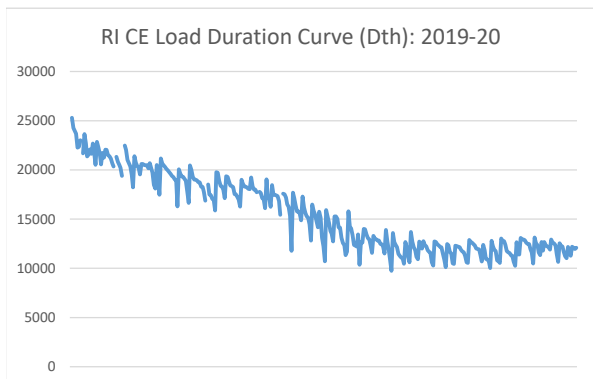
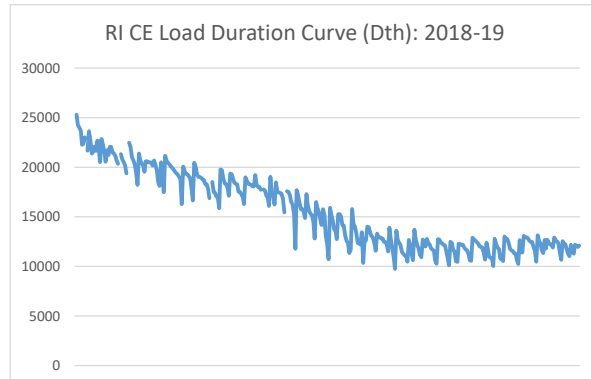
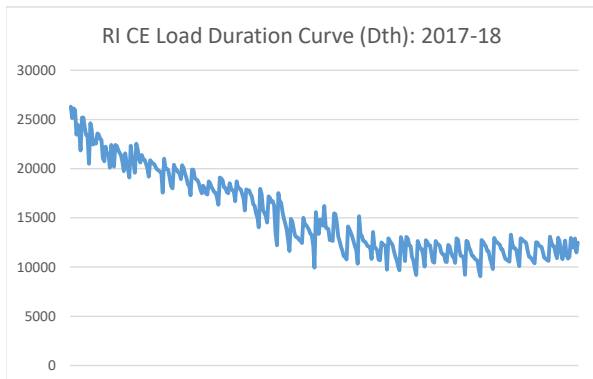
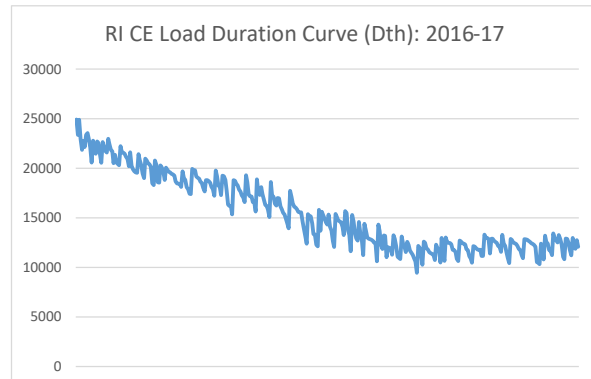
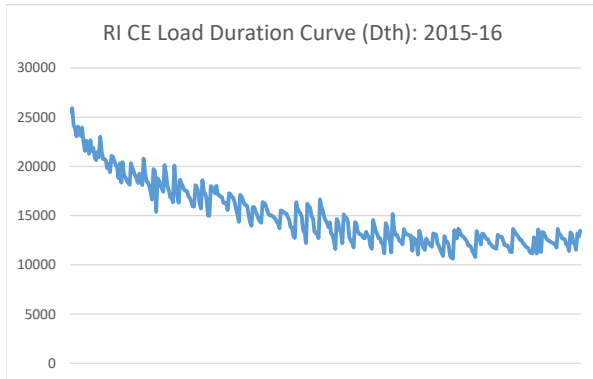
Load Duration Curves for FT1 Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-1
Page 2 of 2



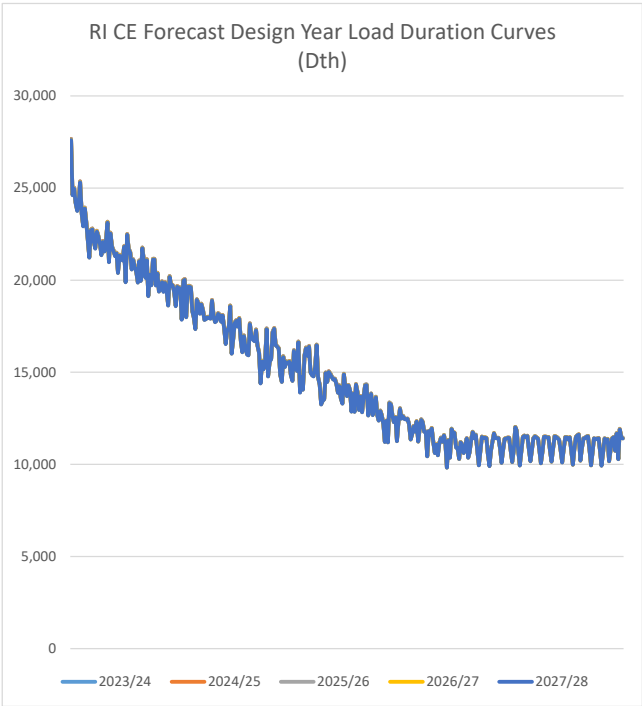
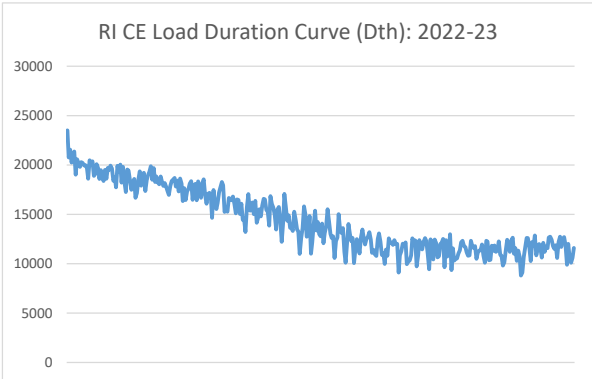
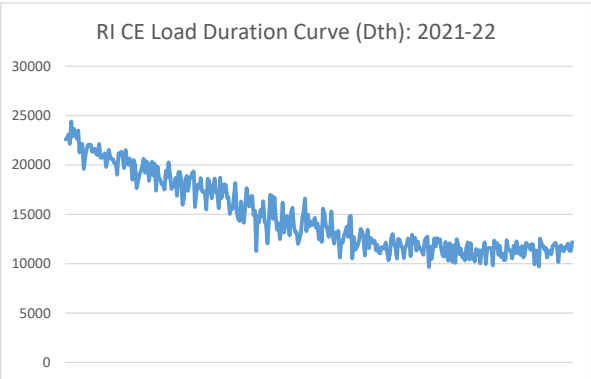
Load Duration Curves for Capacity Exempt Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-2
Page 1 of 2



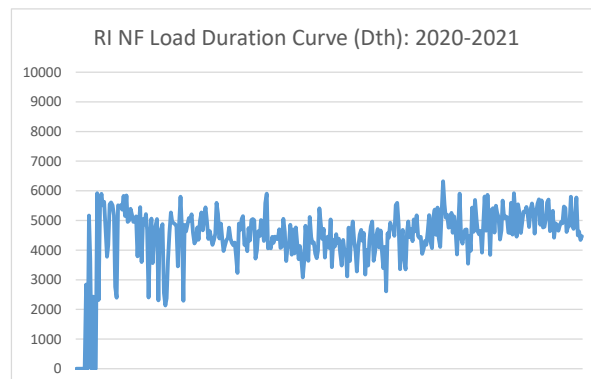
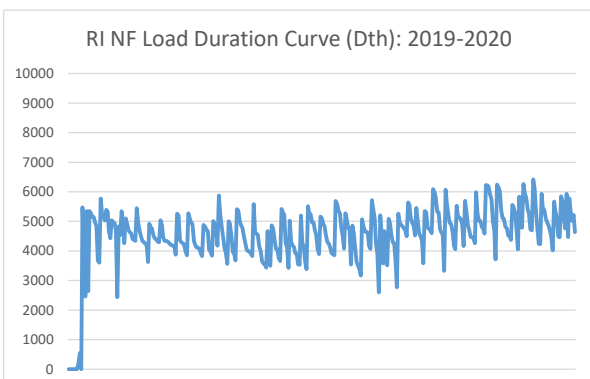
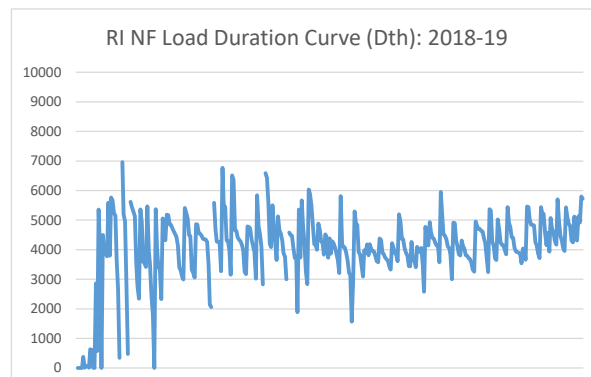
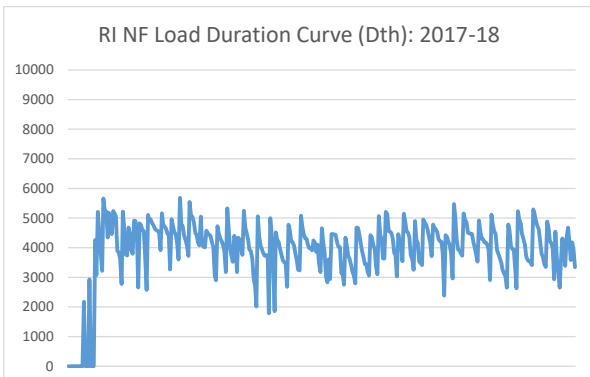
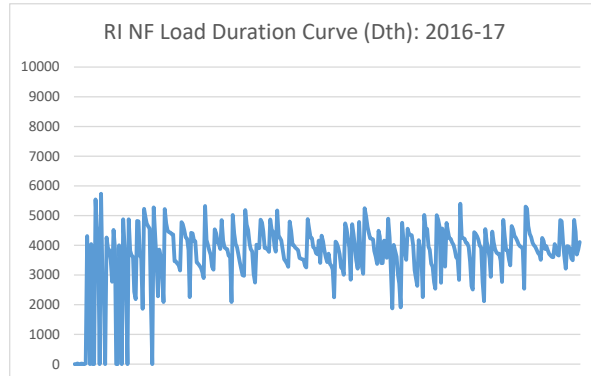
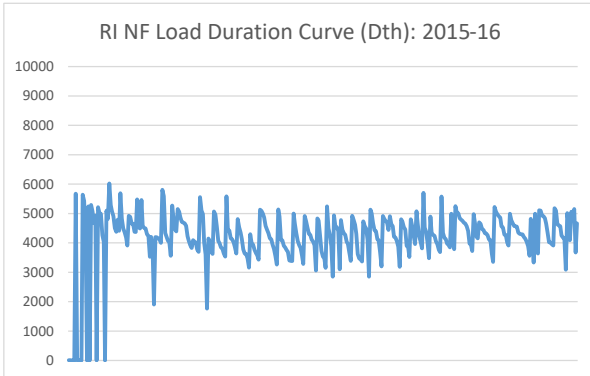
Load Duration Curves for Capacity Exempt Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-2
Page 2 of 2



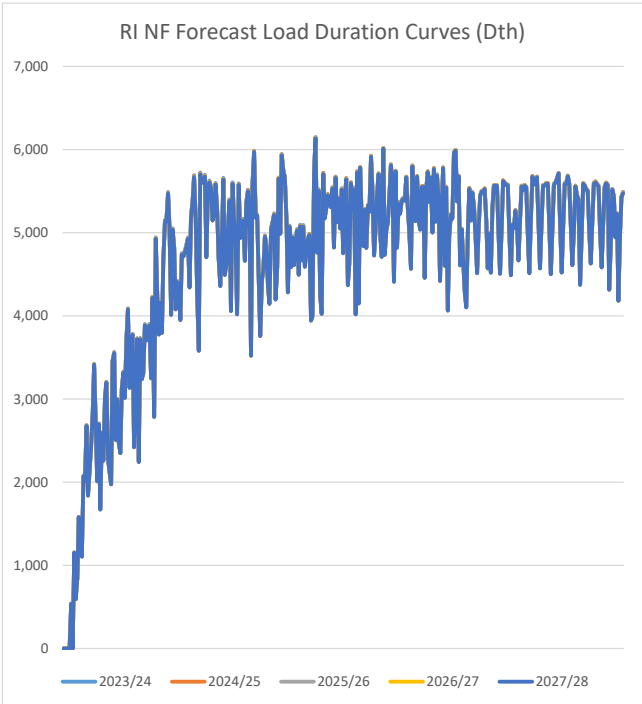
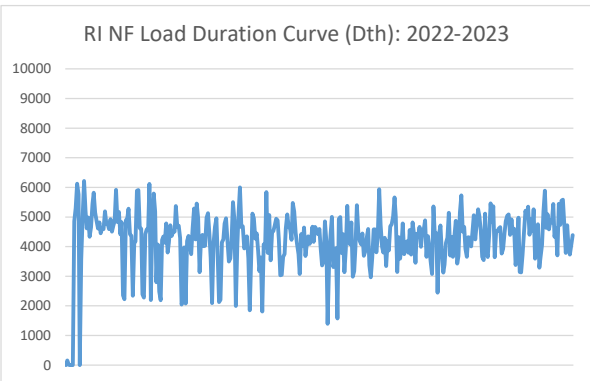
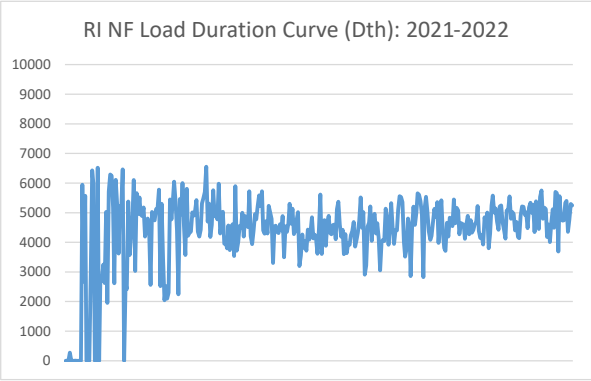
Load Duration Curves for Non-Firm Customers
Historical Actuals and Forecasted Design Weather

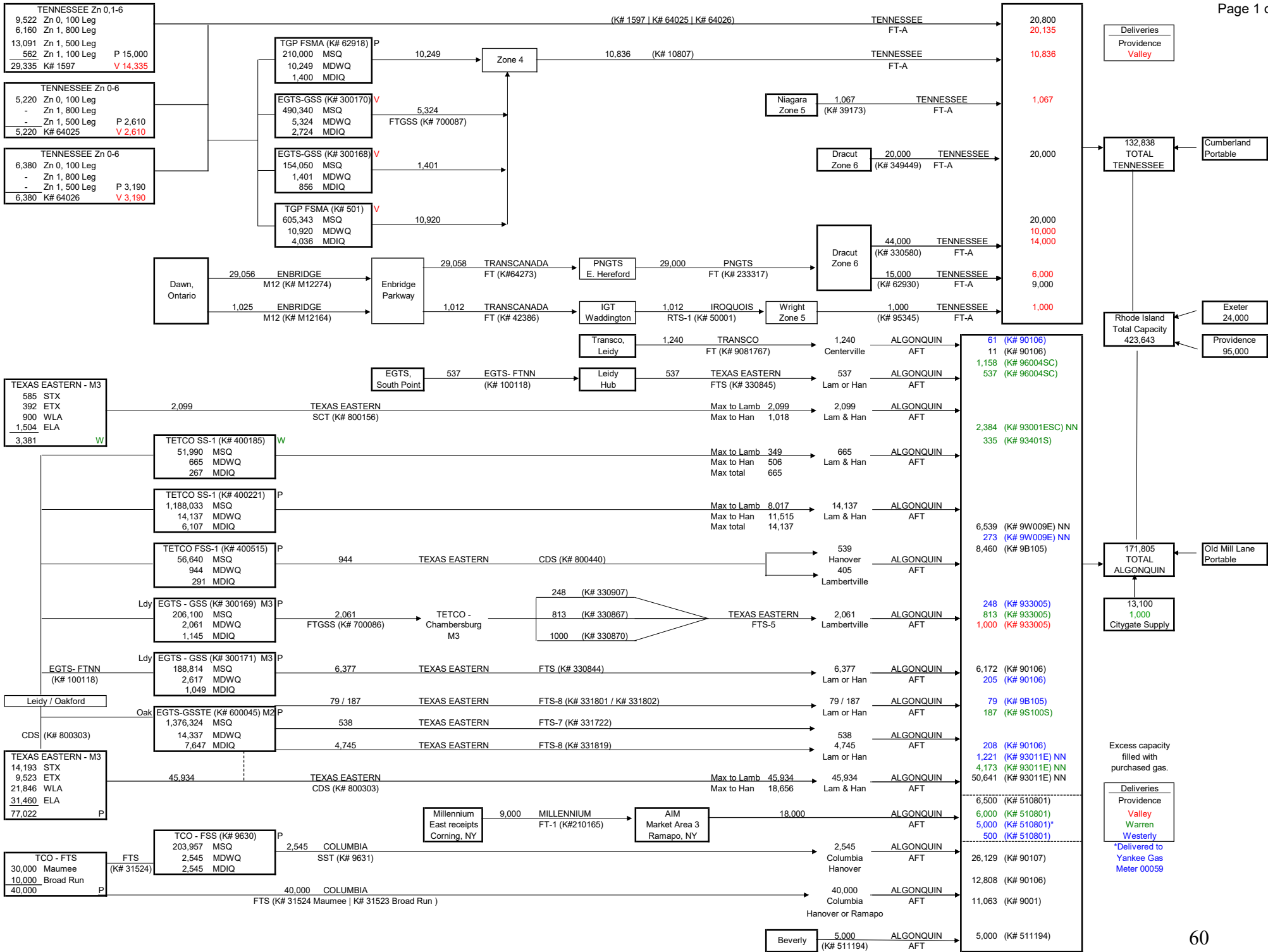
Chart VI-B-3
Page 1 of 2



Load Duration Curves for Non-Firm Customers
Historical Actuals and Forecasted Design Weather

Chart VI-B-3
Page 2 of 2





Deliveries
Providence
Valley

Rhode Island
Total Capacity
423,643

171,805
TOTAL
ALGONQUIN

13,100
Citygate Supply

Deliveries
Providence
Valley
Warren
Westerly

Excess capacity
filled with
purchased gas.

RHODE ISLAND ENERGY- 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	511194	AFT-1H	5,000	1,825,000	10/31/2025	No	Part-284 transportation service (365-day) used to transport gas from Salem Essex, MA (5,000 MMBtu) to Rhode Island Energy - Dey St (5,000 MMBtu).
Narragansett Electric Co.	Algonquin	9001	AFT1FT3	11,063	4,037,995	12/31/2024	Yes	Part-284 transportation service (365-day) used to transport gas from the Columbia interconnect at Hanover, NJ (11,063 MMBtu) to Rhode Island Energy - Dey St (11,063 MMBtu).
Narragansett Electric Co.	Algonquin	90106	AFT-14	19,465	7,104,725	10/31/2024	Yes	Part-284 transportation service (365-day) used to transport gas from the Columbia interconnect at Hanover, NJ (12,808 MMBtu), TETCO interconnect at Lambertville (6,585 MMBtu) and Transco interconnect at Centerville (72 MMBtu) to Rhode Island Energy - Dey St (9,223 MMBtu), Rhode Island Energy - Tiverton (598 MMBtu), Rhode Island Energy - Westerly (474 MMBtu), Rhode Island Energy - E. Providence (4,092 MMBtu), and Rhode Island Energy - Portsmouth (5,078 MMBtu).
Narragansett Electric Co.	Algonquin	90107	AFT-1W	26,129	3,945,479	10/31/2024	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 Rhode Island Energy - Dey St (19,514 MMBtu) and Rhode Island Energy - E. Providence (6,615 MMBtu).
Narragansett Electric Co.	Algonquin	933005	AFT-1P	2,061	752,265	3/31/2025	Yes	Part-284 transportation service (365-day) used to transport gas from the TETCO interconnect at Lambertville, NJ (2,061 MMBtu) to Rhode Island Energy - Cumberland (1,000 MMBtu), Rhode Island Energy - Westerly (248 MMBtu), and Rhode Island Energy - Warren (813 MMBtu).
Narragansett Electric Co.	Algonquin	93001ESC	AFT-ES1	2,384	771,904	10/31/2024	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 Rhode Island Energy - Warren (2,384 MMBtu).
Narragansett Electric Co.	Algonquin	93011E	AFT-E1	56,035	19,446,885	10/31/2024	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 Rhode Island Energy - Dey St (25,137 MMBtu), Rhode Island Energy - Westerly (1,221 MMBtu), Rhode Island Energy - E. Providence (48,147 MMBtu), Rhode Island Energy - Warren (4,173 MMBtu), Rhode Island Energy - Portsmouth (6,504 MMBtu), and Rhode Island Energy - Tiverton (163 MMBtu).
Narragansett Electric Co.	Algonquin	93401S	AFT-1S4	335	122,275	10/31/2024	Yes	Part-284 transportation service (365-day) used to transport gas from the TETCO interconnect at Lambertville, NJ (335 MMBtu) to Rhode Island Energy - Warren (335 MMBtu).
Narragansett Electric Co.	Algonquin	96004SC	AFT-1S3	1,695	618,675	10/31/2024	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 Rhode Island Energy - Warren (1,695 MMBtu).
Narragansett Electric Co.	Algonquin	9B105	AFT-1B	8,539	1,813,145	10/31/2024	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 Rhode Island Energy - Dey St (4,258 MMBtu), Rhode Island Energy - Portsmouth (4,202 MMBtu) and Rhode Island Energy - Westerly (79 MMBtu).
Narragansett Electric Co.	Algonquin	9S100S	AFT-1SX	187	39,737	10/31/2024	Yes	Part-284 service with a seasonally adjusted MDQ of (187 MMBtu), used to transport gas from the TETCO interconnect at Lambertville, NJ to Rhode Island Energy - Warren (187 MMBtu).
Narragansett Electric Co.	Algonquin	9W009E	AFT-EW	6,812	1,446,384	10/31/2024	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 Lambertville, NJ (2,590 MMBtu) to Rhode Island Energy - Dey St (6,234 MMBtu), Rhode Island Energy - Westerly (273 MMBtu), and Rhode Island Energy - Portsmouth (305 MMBtu).

Shipper	Pipeline Company	Contract No.	Rate Schedule	City Gate MDQ	Annual Quantity	Expiration Date	Currently In Evergreen	Notes
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 Rhode Island Energy - Westerly (500 MMBtu), Rhode Island Energy - Warren (6,000 MMBtu), Rhode Island Energy - Portsmouth (6,000 MMBtu), Rhode Island Energy - 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 Rhode Island Energy - Cray 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).
Narragansett Electric Co.	Columbia	9631	SST	2,545	695,966	4/1/2040	No	Part-284 transportation service used to transport gas from RP Storage 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.	Eastern	100118	FTNN	537	196,005	3/31/2027	No	Part-284 transportation service used to transport gas from the TETCO interconnect at Oakford (537 MMBtu) or Eastern South Point (537 MMBtu) to the Leidy Group Meter (537 MMBtu).
Narragansett Electric Co.	Eastern	700086	FTGSS	2,061	311,211	3/31/2027	No	Transportation contract used to transport gas from EGTS-GSS #300169 (2,061MMBtu) to the TETCO interconnect at Chambersburg, PA (2,061 MMBtu).
Narragansett Electric Co.	Eastern	700087	FTGSS	5,324	803,924	3/31/2025	No	Transportation contract used to transport gas from EGTS-GSS #300170 (5,324MMBtu) to Ellisburg, PA (5,324 MMBtu).
Narragansett Electric Co.	Iroquois	50001	RTS-1	1,012	369,380	11/1/2027	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	3/31/2027	No	Transportation service used to transport gas from Ellisburg (6,581 MMBtu) and Northern Storage (4,255 MMBtu) to Rhode Island Energy 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 Rhode Island Energy 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 Rhode Island Energy 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	8/31/2027	No	Transportation service used to transport gas from the interconnect at Dracut (15,000 MMBtu) to Rhode Island Energy city gate - Cranston (9,000) and Rhode Island Energy 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 Rhode Island Energy 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 Rhode Island Energy 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	10/31/2027	No	Transportation service used to transport gas from interconnect at Wright, NY (1,000 MMBtu) to Rhode Island Energy city gates at Lincoln (1,000 MMBtu).
Narragansett Electric Co.	Tennessee	330580	FT-A	44,000	16,060,000	10/31/2038	No	Transportation service used to transport gas from the interconnects at Dracut (44,000 MMBtu) to Rhode Island Energy city gates - Lincoln (24,000) and Cranston (20,000).
Narragansett Electric Co.	Tennessee	349449	FT-A	20,000	7,300,000	10/31/2025	No	Transportation service used to transport gas from the interconnect at Dracut (20,000 MMBtu) to Rhode Island Energy 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	10/31/2024	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	10/31/2024	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	3/31/2025	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	3/31/2025	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	3/31/2025	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	3/31/2025	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	3/31/2025	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 Lambertville or Hanover, NJ.
Narragansett Electric Co.	Texas Eastern	331802	FTS-8	187	68,255	3/31/2025	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 Lambertville or Hanover, NJ.
Narragansett Electric Co.	Texas Eastern	331819	FTS-8	4,745	1,731,925	3/31/2025	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	10/31/2024	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	10/31/2024	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	10/31/2024	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 Enbridge 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 Enbridge 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	3/31/2025	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.	Enbridge	M12164	M12	1,025	374,125	10/31/2025	No	Transportation service used to transport gas from Dawn, Ontario to the interconnect with TransCanada Pipeline at Parkway (1,025 MMBtu).
Narragansett Electric Co.	Enbridge	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	Eastern	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	Eastern	300169	GSS	2,061	206,100	3/31/2027	No	Part-284 storage service that provides storage capacity with an injection rate of 1,145 MMBtu/day.
Narragansett Electric	Eastern	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	Eastern	300171	GSS	2,617	188,814	3/31/2027	No	Part-284 storage service that provides storage capacity with an injection rate of 1,049 MMBtu/day.
Narragansett Electric	Eastern	600045	GSS-TE	14,337	1,376,324	3/31/2027	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	4/30/2025	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	4/30/2025	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	4/30/2025	Yes	Part-284 storage service that provides storage capacity with an injection rate of 291 MMBtu/day.

**Rhode Island Energy
Contract Path Mapping**

<u>Contract Name</u>	<u>Path</u>	<u>Contract Name</u>	<u>Path</u>
AGT 510801	AIM	TCO 9630	Storage
AGT 9001	TCO (Pool)	TCO 9631	Storage Delivery
AGT 90106	Transco	TCO Appalachia	TCO (Pool)
AGT 90106	Storage Delivery	TCO M3	TCO (M3 ish)
AGT 90107	AGT M3	TCPL 42386	Dawn via Waddington
AGT 93001ESC	AGT M3	TCPL 58577	Dawn via PNGTS
AGT 93001ESC	TETCO SCT Long Haul	TET 330844	Storage Delivery
AGT 93011E	TETCO CDS Long Haul	TET 330845	Dominion
AGT 93011E	AGT M3	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	Model Segment
AGT Citygate	Citygate Peaking	TET 400185	Storage
Beverly	Beverly	TET 400221	Model Segment
Dawn East Hereford	Dawn via PNGTS	TET 400221	Storage
Dawn Waddington	Dawn via Waddington	TET 400515	Storage
DETI 100118	Dominion	TET 800156	TETCO SCT Long Haul
DETI 300168	Storage	TET 800303	TETCO CDS Long Haul
DETI 300169	Storage	TET 800440	Storage Delivery
DETI 300170	Storage	Tetco M2 CDS	TETCO CDS Long Haul
DETI 300171	Storage	Tetco M2 SCT	TETCO SCT Long Haul
DETI 600045	Storage	Tetco M3	AGT M3
DETI 700086	Storage Delivery	TGP 10807	Storage Delivery
DETI 700087	Storage Delivery	TGP 1597	TGP Long Haul
Dominion South Point	Dominion	TGP 330580	Dawn via PNGTS
Dracut Proposed	Dracut Proposed	TGP 330580	Dracut
Dracut Supply	Dracut	TGP 349449	Dracut
IGT 50001	Dawn via Waddington	TGP 39173	Niagara
LNG	LNG	TGP 501	Storage
LNG_Exeter	LNG	TGP 62918	Storage
LNG_Prov	LNG	TGP 62930	Dawn via PNGTS
Manchester Lateral	Manchester Lateral	TGP 64025	TGP ConneXion
Millenium East	AIM	TGP 64026	TGP ConneXion
ModelSegment	Model Segment	TGP 95345	Dawn via Waddington
MPL 214129	AIM	TGP Z4 CnX	TGP ConneXion
Niagara	Niagara	TGP Z4 LH	TGP Long Haul
PNGTS 210203	Dawn via PNGTS	TRA 9081767	Transco
Portable LNG	Portable LNG	Transco Leidy	Transco
Ramapo	AIM	Trucking	LNG
Summer Liquid Refill	LNG	UN M12164	Dawn via Waddington
Summer Trucking	LNG	UN M12274	Dawn via PNGTS
TCO 31523	TCO (Pool)	Waddington	Dawn via Waddington
TCO 31524	Storage Delivery	Winter Liquid	LNG
TCO 31524	TCO (Pool)	Yankee Interconnect	Yankee Interconnect

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Day with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	64	65	65	66	66
	Providence	310	313	316	318	319
	Warren	11	12	12	12	12
	Westerly	6	6	6	7	7
Fuel Reimbursement		4	4	4	4	4
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		396	400	403	405	407
<u>RESOURCES</u>						
TGP	Dawn PNGTS	29	29	29	29	29
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	41	41	41	41	41
	Dracut	20	50	50	50	50
	TGP Citygate	0	0	0	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	49	49	49	49	49
	EGTS South Point	1	1	1	1	1
	TCO Appalachia	41	41	41	41	41
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	8	8	0	0	0
	AIM (Millennium)	9	9	18	18	18
	M3	18	18	16	17	17
	AGT Citygate	14	0	0	0	0
	Beverly	5	0	0	0	0
	Storage	28	28	29	28	29
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		119	109	112	114	115
Unserved	Valley	0	1	1	1	2
	Providence	0	0	0	0	0
	Warren	0	2	2	2	2
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	3	3	4	4
TOTAL		396	400	403	405	407

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Heating Season (Nov-Mar) with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,989	4,992	5,035	5,060	5,124
	Providence	24,191	24,208	24,414	24,534	24,845
	Warren	895	896	903	908	919
	Westerly	496	496	500	503	509
Fuel Reimbursement		457	454	444	487	496
Underground Storage Refill		0	0	0	0	0
LNG Refill		35	0	0	0	0
TOTAL		31,063	31,046	31,298	31,491	31,894
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,517	2,482	2,367	2,368	2,598
	Dawn Iroquois	74	74	73	73	78
	Niagara	114	134	113	88	91
	Zone 4	5,893	5,226	5,013	5,125	5,391
	Dracut	935	1,492	1,561	1,597	1,657
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	7,185	5,743	4,349	5,788	5,880
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	5,759	4,568	3,652	4,905	4,934
	Transco Leidy	130	111	96	99	124
	AIM (Ramapo)	375	391	0	0	0
	AIM (Millennium)	1,377	1,368	2,466	2,468	2,485
	M3	1,850	4,604	6,662	3,983	3,571
	AGT Citygate	444	0	0	0	0
	Beverly	100	0	0	0	0
	Storage	2,329	2,555	2,583	2,593	2,637
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		788	753	753	753	753
Unserviced	Valley	0	1	1	1	2
	Providence	0	127	189	230	271
	Warren	0	3	4	4	4
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	131	194	235	277
TOTAL		31,063	31,046	31,298	31,491	31,894

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Non-Heating Season (Apr-Oct) with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,848	1,863	1,872	1,879	1,886
	Providence	8,959	9,032	9,075	9,109	9,146
	Warren	332	334	336	337	338
	Westerly	184	185	186	187	187
Fuel Reimbursement		354	338	346	384	391
Underground Storage Refill		3,525	3,935	3,918	3,929	4,116
LNG Refill		887	887	887	887	887
TOTAL		16,088	16,575	16,619	16,713	16,952
<u>RESOURCES</u>						
TGP	Dawn PNGTS	25	270	0	0	0
	Dawn Iroquois	0	27	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	3,118	3,547	3,827	3,911	3,922
	Dracut	0	0	26	27	28
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	7,217	6,254	4,750	6,168	6,291
	EGTS South Point	85	67	60	107	107
	TCO Appalachia	203	203	203	203	203
	Transco Leidy	12	33	23	26	28
	AIM (Ramapo)	42	87	88	0	0
	AIM (Millennium)	1,939	1,115	2,254	3,419	3,352
	M3	3,059	4,692	5,184	2,713	2,742
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	49	3	3	145
Liquid for Portables and Refill		0	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
TOTAL		16,088	16,575	16,619	16,713	16,952

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Annual with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	6,837	6,855	6,907	6,938	7,010
	Providence	33,150	33,240	33,489	33,643	33,991
	Warren	1,227	1,230	1,239	1,245	1,258
	Westerly	679	681	686	690	697
Fuel Reimbursement		811	793	790	871	887
Underground Storage Refill		3,525	3,935	3,918	3,929	4,116
LNG Refill		923	887	887	887	887
TOTAL		47,151	47,621	47,916	48,204	48,846
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,542	2,752	2,367	2,368	2,598
	Dawn Iroquois	74	100	74	74	79
	Niagara	279	232	179	89	92
	Zone 4	9,011	8,774	8,841	9,036	9,313
	Dracut	935	1,492	1,588	1,624	1,685
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	14,402	11,997	9,098	11,956	12,170
	EGTS South Point	168	149	142	189	189
	TCO Appalachia	5,962	4,771	3,854	5,108	5,137
	Transco Leidy	143	143	119	124	152
	AIM (Ramapo)	417	478	88	0	0
	AIM (Millennium)	3,317	2,483	4,720	5,887	5,837
	M3	4,909	9,296	11,846	6,697	6,313
	AGT Citygate	444	0	0	0	0
	Beverly	100	0	0	0	0
	Storage	2,416	2,603	2,586	2,595	2,782
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		923	887	887	887	887
Unserved	Valley	0	1	1	1	2
	Providence	0	127	189	230	271
	Warren	0	3	4	4	4
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	131	194	235	277
TOTAL		47,151	47,621	47,916	48,204	48,846

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Heating Season (Nov-Mar) with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,485	4,487	4,525	4,547	4,603
	Providence	21,988	21,999	22,186	22,294	22,568
	Warren	792	792	799	803	813
	Westerly	454	454	458	460	466
Fuel Reimbursement		441	425	416	458	465
Underground Storage Refill		0	0	0	0	0
LNG Refill		19	0	0	0	0
TOTAL		28,180	28,157	28,385	28,562	28,915
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,010	1,982	1,817	1,842	2,023
	Dawn Iroquois	49	50	46	47	54
	Niagara	110	132	100	69	71
	Zone 4	5,312	4,612	4,411	4,503	4,776
	Dracut	537	807	842	867	892
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	7,149	5,703	4,282	5,746	5,830
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	5,501	4,478	3,628	4,793	4,786
	Transco Leidy	102	90	78	88	99
	AIM (Ramapo)	234	271	0	0	0
	AIM (Millennium)	1,377	1,368	2,419	2,421	2,438
	M3	1,148	3,966	5,948	3,332	3,057
	AGT Citygate	260	0	0	0	0
	Beverly	100	0	0	0	0
	Storage	2,327	2,399	2,475	2,490	2,504
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		772	753	753	753	753
Unserviced	Valley	0	0	0	0	0
	Providence	0	130	169	191	211
	Warren	0	4	4	4	5
	Westerly	0	0	0	0	0
		0	133	173	195	216
TOTAL		28,180	28,157	28,385	28,562	28,915

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Heating Season (Nov-Mar) with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,701	1,715	1,723	1,730	1,737
	Providence	8,341	8,409	8,448	8,480	8,514
	Warren	300	303	304	305	307
	Westerly	172	174	174	175	176
Fuel Reimbursement		346	327	335	373	379
Underground Storage Refill		3,523	3,806	3,810	3,826	3,983
LNG Refill		887	887	887	887	887
TOTAL		15,271	15,621	15,682	15,778	15,983
<u>RESOURCES</u>						
TGP	Dawn PNGTS	7	208	0	0	0
	Dawn Iroquois	0	26	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	2,940	3,372	3,601	3,680	3,688
	Dracut	0	0	9	10	10
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	7,173	6,093	4,621	5,982	6,169
	EGTS South Point	85	67	60	107	105
	TCO Appalachia	198	203	203	203	203
	Transco Leidy	11	33	21	22	24
	AIM (Ramapo)	14	42	45	0	0
	AIM (Millennium)	1,939	1,115	2,232	3,407	3,320
	M3	2,517	4,153	4,686	2,230	2,182
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	76	3	3	145
Liquid for Portables and Refill		0	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
TOTAL		15,271	15,621	15,682	15,778	15,983

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Heating Season (Nov-Mar) with Existing Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	6,186	6,202	6,249	6,277	6,340
	Providence	30,329	30,408	30,634	30,774	31,082
	Warren	1,092	1,095	1,103	1,108	1,120
	Westerly	626	628	632	635	642
Fuel Reimbursement		787	751	751	831	844
Underground Storage Refill		3,523	3,806	3,810	3,826	3,983
LNG Refill		906	887	887	887	887
TOTAL		43,450	43,778	44,066	44,340	44,897
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,017	2,190	1,817	1,842	2,023
	Dawn Iroquois	49	76	47	48	55
	Niagara	274	230	166	70	72
	Zone 4	8,252	7,984	8,012	8,182	8,464
	Dracut	537	807	850	877	902
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	14,322	11,796	8,903	11,728	11,999
	EGTS South Point	167	149	142	189	188
	TCO Appalachia	5,699	4,681	3,831	4,996	4,989
	Transco Leidy	113	123	98	110	123
	AIM (Ramapo)	249	313	45	0	0
	AIM (Millennium)	3,317	2,483	4,651	5,828	5,758
	M3	3,665	8,119	10,634	5,561	5,239
	AGT Citygate	260	0	0	0	0
	Beverly	100	0	0	0	0
	Storage	2,414	2,475	2,478	2,492	2,648
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		906	887	887	887	887
Unserved	Valley	0	0	0	0	0
	Providence	0	130	169	191	211
	Warren	0	4	4	4	5
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	133	173	195	216
TOTAL		43,450	43,778	44,066	44,340	44,897

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Day with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	64	65	65	66	66
	Providence	310	313	316	318	319
	Warren	11	12	12	12	12
	Westerly	6	6	6	7	7
Fuel Reimbursement		4	4	4	4	4
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		396	400	403	405	407
<u>RESOURCES</u>						
TGP	Dawn PNGTS	29	29	29	29	29
	Dawn Iroquois	1	1	1	1	1
	Niagara	1	1	1	1	1
	Zone 4	41	41	41	41	41
	Dracut	35	50	50	50	50
	TGP Citygate	0	0	0	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	49	49	49	49	49
	EGTS South Point	1	1	1	1	1
	TCO Appalachia	41	41	41	41	41
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	8	8	0	0	0
	AIM (Millennium)	9	9	18	18	18
	M3	18	18	16	17	17
	AGT Citygate	2	0	0	0	0
	Beverly	5	5	5	5	5
	Storage	28	28	29	29	29
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		116	104	107	109	110
Unserved	Valley	0	1	1	1	2
	Providence	0	0	0	0	0
	Warren	0	2	2	2	2
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	3	3	4	4
TOTAL		396	400	403	405	407

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Heating Season (Nov-Mar) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,989	4,992	5,035	5,060	5,124
	Providence	24,191	24,208	24,414	24,534	24,845
	Warren	895	896	903	908	919
	Westerly	496	496	500	503	509
Fuel Reimbursement		457	454	444	487	496
Underground Storage Refill		0	0	0	0	0
LNG Refill		35	0	0	0	0
TOTAL		31,063	31,046	31,298	31,491	31,894
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,517	2,482	2,367	2,368	2,598
	Dawn Iroquois	74	74	73	73	78
	Niagara	114	134	113	88	91
	Zone 4	5,893	5,226	5,013	5,125	5,391
	Dracut	949	1,492	1,561	1,597	1,657
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	7,185	5,743	4,349	5,788	5,880
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	5,759	4,568	3,652	4,905	4,934
	Transco Leidy	130	111	96	99	124
	AIM (Ramapo)	375	391	0	0	0
	AIM (Millennium)	1,377	1,368	2,466	2,468	2,485
	M3	1,850	4,604	6,662	3,983	3,571
	AGT Citygate	430	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,329	2,555	2,583	2,593	2,637
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		788	753	753	753	753
Unserviced	Valley	0	1	1	1	2
	Providence	0	27	89	130	171
	Warren	0	3	4	4	4
	Westerly	0	0	0	0	0
		0	31	94	135	177
TOTAL		31,063	31,046	31,298	31,491	31,894

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Non-Heating Season (Apr-Oct) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,848	1,863	1,872	1,879	1,886
	Providence	8,959	9,032	9,075	9,109	9,146
	Warren	332	334	336	337	338
	Westerly	184	185	186	187	187
Fuel Reimbursement		354	338	346	384	391
Underground Storage Refill		3,525	3,935	3,918	3,929	4,116
LNG Refill		887	887	887	887	887
TOTAL		16,088	16,575	16,619	16,713	16,952
<u>RESOURCES</u>						
TGP	Dawn PNGTS	25	270	0	0	0
	Dawn Iroquois	0	27	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	3,118	3,547	3,827	3,911	3,922
	Dracut	0	0	26	27	28
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	7,217	6,254	4,750	6,168	6,291
	EGTS South Point	85	67	60	107	107
	TCO Appalachia	203	203	203	203	203
	Transco Leidy	12	33	23	26	28
	AIM (Ramapo)	42	87	88	0	0
	AIM (Millennium)	1,939	1,115	2,254	3,419	3,352
	M3	3,059	4,692	5,184	2,713	2,742
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	49	3	3	145
Liquid for Portables and Refill		0	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	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		16,088	16,575	16,619	16,713	16,952

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales and Customer Choice)
(BBtu)

		Design Annual with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	6,837	6,855	6,907	6,938	7,010
	Providence	33,150	33,240	33,489	33,643	33,991
	Warren	1,227	1,230	1,239	1,245	1,258
	Westerly	679	681	686	690	697
Fuel Reimbursement		811	793	790	871	887
Underground Storage Refill		3,525	3,935	3,918	3,929	4,116
LNG Refill		923	887	887	887	887
TOTAL		47,151	47,622	47,916	48,204	48,846
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,542	2,752	2,367	2,368	2,598
	Dawn Iroquois	74	100	74	74	79
	Niagara	279	232	179	89	92
	Zone 4	9,011	8,774	8,841	9,036	9,313
	Dracut	949	1,492	1,588	1,624	1,685
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	14,402	11,997	9,098	11,956	12,170
	EGTS South Point	168	149	142	189	189
	TCO Appalachia	5,962	4,771	3,854	5,108	5,137
	Transco Leidy	143	143	119	124	152
	AIM (Ramapo)	417	478	88	0	0
	AIM (Millennium)	3,317	2,483	4,720	5,887	5,837
	M3	4,909	9,296	11,846	6,697	6,313
	AGT Citygate	430	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,416	2,603	2,586	2,595	2,782
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		923	887	887	887	887
Unserviced	Valley	0	1	1	1	2
	Providence	0	27	89	130	171
	Warren	0	3	4	4	4
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	31	94	135	177
TOTAL		47,151	47,622	47,916	48,204	48,846

Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

		Normal Heating Season (Nov-Mar) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,281	4,283	4,320	4,341	4,395
	Providence	20,986	20,999	21,177	21,280	21,549
	Warren	756	756	763	767	776
	Westerly	433	434	437	439	445
Fuel Reimbursement		453	418	411	453	461
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		26,909	26,891	27,108	27,280	27,627
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,930	1,916	1,725	1,752	1,934
	Dawn Iroquois	47	48	41	43	50
	Niagara	110	132	98	67	68
	Zone 4	5,300	4,597	4,399	4,492	4,764
	Dracut	375	20	114	28	32
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	7,140	5,695	4,278	5,745	5,830
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	5,496	4,478	3,628	4,793	4,786
	Transco Leidy	98	86	77	85	98
	AIM (Ramapo)	59	143	0	0	0
	AIM (Millennium)	1,377	1,368	2,403	2,405	2,422
	M3	599	3,742	5,603	3,111	2,866
	AGT Citygate	0	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,334	2,399	2,475	2,490	2,505
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		753	753	753	753	753
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		26,909	26,891	27,108	27,280	27,627

Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

		Normal Non-Heating Season (Apr-Oct) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,701	1,715	1,723	1,730	1,737
	Providence	8,341	8,409	8,448	8,480	8,514
	Warren	300	303	304	305	307
	Westerly	172	174	174	175	176
Fuel Reimbursement		346	327	335	373	379
Underground Storage Refill		3,530	3,806	3,810	3,826	3,984
LNG Refill		887	887	887	887	887
TOTAL		15,278	15,621	15,682	15,777	15,984
<u>RESOURCES</u>						
TGP	Dawn PNGTS	7	208	0	0	0
	Dawn Iroquois	0	26	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	2,940	3,372	3,601	3,680	3,688
	Dracut	0	0	9	10	10
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	7,173	6,093	4,621	5,982	6,170
	EGTS South Point	85	67	60	107	105
	TCO Appalachia	203	203	203	203	203
	Transco Leidy	11	33	21	22	24
	AIM (Ramapo)	14	42	45	0	0
	AIM (Millennium)	1,939	1,115	2,232	3,407	3,320
	M3	2,519	4,153	4,686	2,230	2,182
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	76	3	3	145
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		134	134	134	134	134
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	0	0	0	0	0
TOTAL		15,278	15,621	15,682	15,777	15,984

Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales and Customer Choice)
(BBtu)

		Normal Annual with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	5,982	5,998	6,043	6,070	6,132
	Providence	29,327	29,408	29,626	29,761	30,064
	Warren	1,056	1,059	1,067	1,072	1,083
	Westerly	605	607	612	614	621
Fuel Reimbursement		798	745	746	827	840
Underground Storage Refill		3,530	3,806	3,810	3,826	3,984
LNG Refill		887	887	887	887	887
TOTAL		42,187	42,512	42,790	43,057	43,610
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,937	2,125	1,725	1,752	1,934
	Dawn Iroquois	47	74	42	44	51
	Niagara	274	230	163	68	69
	Zone 4	8,240	7,969	8,001	8,171	8,452
	Dracut	375	20	123	37	43
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	14,313	11,788	8,899	11,727	12,000
	EGTS South Point	167	149	142	189	188
	TCO Appalachia	5,699	4,681	3,831	4,996	4,989
	Transco Leidy	109	119	97	107	122
	AIM (Ramapo)	73	185	45	0	0
	AIM (Millennium)	3,317	2,483	4,635	5,812	5,742
	M3	3,118	7,896	10,290	5,341	5,049
	AGT Citygate	0	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,422	2,475	2,478	2,492	2,650
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		887	887	887	887	887
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		42,187	42,512	42,790	43,057	43,610

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

Cold Snap Heating Season (Nov-Mar) with Proposed Resources

		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,485	4,487	4,525	4,547	4,603
	Providence	21,988	21,999	22,186	22,294	22,568
	Warren	792	792	799	803	813
	Westerly	454	454	458	460	466
Fuel Reimbursement		442	425	416	458	465
Underground Storage Refill		0	0	0	0	0
LNG Refill		19	0	0	0	0
TOTAL		28,180	28,157	28,385	28,562	28,915
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,010	1,982	1,817	1,842	2,023
	Dawn Iroquois	49	50	46	47	54
	Niagara	110	132	100	69	71
	Zone 4	5,312	4,612	4,411	4,503	4,776
	Dracut	595	790	829	856	881
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	7,149	5,703	4,282	5,746	5,830
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	5,501	4,478	3,628	4,793	4,786
	Transco Leidy	102	90	78	88	99
	AIM (Ramapo)	234	271	0	0	0
	AIM (Millennium)	1,377	1,368	2,419	2,421	2,438
	M3	1,148	3,966	5,948	3,332	3,057
	AGT Citygate	202	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,327	2,399	2,475	2,490	2,504
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		772	753	753	753	753
Unserviced	Valley	0	0	0	0	0
	Providence	0	46	81	102	121
	Warren	0	4	4	4	5
	Westerly	0	0	0	0	0
		0	50	85	106	126
TOTAL		28,180	28,157	28,385	28,562	28,915

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

Cold Snap Non-Heating Season (Apr-Oct) with Proposed Resources

		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,701	1,715	1,723	1,730	1,737
	Providence	8,341	8,409	8,448	8,480	8,514
	Warren	300	303	304	305	307
	Westerly	172	174	174	175	176
Fuel Reimbursement		346	327	335	373	379
Underground Storage Refill		3,523	3,806	3,810	3,826	3,983
LNG Refill		887	887	887	887	887
TOTAL		15,271	15,621	15,682	15,778	15,983
<u>RESOURCES</u>						
TGP	Dawn PNGTS	7	208	0	0	0
	Dawn Iroquois	0	26	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	2,940	3,372	3,601	3,680	3,688
	Dracut	0	0	9	10	10
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	7,173	6,093	4,621	5,982	6,169
	EGTS South Point	85	67	60	107	105
	TCO Appalachia	198	203	203	203	203
	Transco Leidy	11	33	21	22	24
	AIM (Ramapo)	14	42	45	0	0
	AIM (Millennium)	1,939	1,115	2,232	3,407	3,320
	M3	2,517	4,153	4,686	2,230	2,182
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	76	3	3	145
Liquid for Portables and Refill		0	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
TOTAL		15,271	15,621	15,682	15,778	15,983

Rhode Island Energy
Comparison of Resources and Requirements
Cold Snap (Sales and Customer Choice)
(BBtu)

		Cold Snap Annual with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	6,186	6,202	6,249	6,277	6,340
	Providence	30,329	30,408	30,634	30,774	31,082
	Warren	1,092	1,095	1,103	1,108	1,120
	Westerly	626	628	632	635	642
Fuel Reimbursement		787	751	751	831	844
Underground Storage Refill		3,523	3,806	3,810	3,826	3,983
LNG Refill		906	887	887	887	887
TOTAL		43,450	43,778	44,066	44,340	44,897
<u>RESOURCES</u>						
TGP	Dawn PNGTS	2,017	2,190	1,817	1,842	2,023
	Dawn Iroquois	49	76	47	48	55
	Niagara	274	230	166	70	72
	Zone 4	8,252	7,984	8,012	8,182	8,464
	Dracut	595	790	838	866	892
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,331	1,332	1,334	1,334
TET/AGT	M2	14,322	11,796	8,903	11,728	11,999
	EGTS South Point	167	149	142	189	188
	TCO Appalachia	5,699	4,681	3,831	4,996	4,989
	Transco Leidy	113	123	98	110	123
	AIM (Ramapo)	249	313	45	0	0
	AIM (Millennium)	3,317	2,483	4,651	5,828	5,758
	M3	3,665	8,119	10,634	5,561	5,239
	AGT Citygate	202	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,414	2,475	2,478	2,492	2,648
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		906	887	887	887	887
Unserved	Valley	0	0	0	0	0
	Providence	0	46	81	102	121
	Warren	0	4	4	4	5
	Westerly	0	0	0	0	0
		0	50	85	106	126
TOTAL		43,450	43,778	44,066	44,340	44,897

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

Design Day with Proposed Resources

		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	54	54	55	55	55
	Providence	262	264	265	267	268
	Warren	10	10	10	10	10
	Westerly	5	5	5	5	5
Fuel Reimbursement		3	3	3	3	3
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		335	337	339	341	342
<u>RESOURCES</u>						
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	25	24	25	45	45
	TGP Citygate	0	0	0	0	0
	Storage	11	11	11	11	11
TET/AGT	M2	40	40	40	40	40
	EGTS South Point	1	1	1	1	1
	TCO Appalachia	34	34	34	34	34
	Transco Leidy	1	1	1	1	1
	AIM (Ramapo)	6	6	0	0	0
	AIM (Millennium)	8	8	15	15	15
	M3	13	14	12	12	12
	AGT Citygate	1	0	0	0	0
	Beverly	5	5	5	0	5
	Storage	29	28	29	29	29
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		101	104	105	92	88
Unserved	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	1	1	1	1
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	1	1	1	1
TOTAL		335	337	339	341	342

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Heating Season (Nov-Mar) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,058	4,048	4,069	4,091	4,149
	Providence	19,674	19,627	19,730	19,838	20,120
	Warren	728	726	730	734	745
	Westerly	403	402	404	407	412
Fuel Reimbursement		382	374	364	399	407
Underground Storage Refill		0	0	0	0	0
LNG Refill		24	0	0	0	0
TOTAL		25,269	25,178	25,297	25,469	25,833
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,937	1,896	1,797	1,810	1,988
	Dawn Iroquois	63	63	63	63	67
	Niagara	110	131	101	75	78
	Zone 4	4,689	4,060	3,891	3,970	4,219
	Dracut	556	785	846	911	998
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	5,941	4,744	3,578	4,774	4,852
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	4,662	3,719	3,012	4,040	4,051
	Transco Leidy	126	111	84	95	116
	AIM (Ramapo)	242	250	0	0	0
	AIM (Millennium)	1,141	1,133	1,905	1,907	1,921
	M3	1,257	3,545	5,283	3,057	2,711
	AGT Citygate	154	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,323	2,474	2,469	2,496	2,561
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		777	753	753	753	753
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	1	1	1	2
	Westerly	0	0	0	0	0
		0	1	1	1	2
TOTAL		25,269	25,178	25,297	25,469	25,833

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Non-Heating Season (Apr-Oct) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,360	1,367	1,375	1,383	1,391
	Providence	6,595	6,631	6,668	6,707	6,745
	Warren	244	245	247	248	250
	Westerly	135	136	137	137	138
Fuel Reimbursement		307	294	298	330	338
Underground Storage Refill		3,518	3,872	3,803	3,833	4,038
LNG Refill		887	887	887	887	887
TOTAL		13,047	13,433	13,415	13,526	13,788
<u>RESOURCES</u>						
TGP	Dawn PNGTS	11	188	0	0	0
	Dawn Iroquois	0	25	1	1	1
	Niagara	165	98	66	1	1
	Zone 4	2,598	3,017	3,239	3,321	3,331
	Dracut	0	0	12	13	13
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	5,864	5,059	3,898	5,087	5,297
	EGTS South Point	84	67	60	107	106
	TCO Appalachia	198	203	203	203	203
	Transco Leidy	12	33	23	25	27
	AIM (Ramapo)	16	54	56	0	0
	AIM (Millennium)	1,606	923	1,765	2,709	2,649
	M3	2,273	3,564	3,955	1,924	1,881
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	66	3	3	144
Liquid for Portables and Refill		0	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
TOTAL		13,047	13,433	13,415	13,526	13,788

Rhode Island Energy
Comparison of Resources and Requirements
Design Year (Sales Only)
(BBtu)

		Design Annual with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	5,418	5,415	5,444	5,474	5,540
	Providence	26,269	26,258	26,398	26,545	26,865
	Warren	972	972	977	982	994
	Westerly	538	538	541	544	551
Fuel Reimbursement		689	668	662	730	745
Underground Storage Refill		3,518	3,872	3,803	3,833	4,038
LNG Refill		911	887	887	887	887
TOTAL		38,316	38,610	38,712	38,996	39,621
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,948	2,084	1,797	1,810	1,988
	Dawn Iroquois	63	88	64	64	68
	Niagara	274	229	167	76	79
	Zone 4	7,287	7,077	7,131	7,291	7,550
	Dracut	556	785	857	923	1,012
	TGP Citygate	0	0	0	0	0
	Storage	1,109	1,332	1,332	1,334	1,334
TET/AGT	M2	11,805	9,803	7,476	9,862	10,149
	EGTS South Point	166	149	142	189	189
	TCO Appalachia	4,860	3,921	3,215	4,243	4,254
	Transco Leidy	138	143	107	119	143
	AIM (Ramapo)	258	304	56	0	0
	AIM (Millennium)	2,747	2,057	3,670	4,616	4,571
	M3	3,530	7,109	9,239	4,981	4,592
	AGT Citygate	154	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,410	2,540	2,471	2,499	2,704
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		911	887	887	887	887
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	1	1	1	2
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	1	1	1	2
TOTAL		38,316	38,610	38,712	38,996	39,621

Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

		Normal Heating Season (Nov-Mar) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	3,423	3,430	3,451	3,469	3,518
	Providence	16,784	16,816	16,920	17,008	17,248
	Warren	605	606	609	613	621
	Westerly	347	347	349	351	356
Fuel Reimbursement		364	337	333	367	373
Underground Storage Refill		0	0	0	0	0
LNG Refill		0	0	0	0	0
TOTAL		21,522	21,536	21,662	21,808	22,117
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,202	1,262	1,081	1,103	1,284
	Dawn Iroquois	22	30	29	30	35
	Niagara	100	124	76	47	51
	Zone 4	4,036	3,411	3,247	3,340	3,601
	Dracut	375	0	0	0	0
	TGP Citygate	0	0	0	0	0
	Storage	1,125	1,323	1,332	1,334	1,334
TET/AGT	M2	5,861	4,678	3,492	4,735	4,817
	EGTS South Point	83	82	82	82	83
	TCO Appalachia	4,300	3,562	2,978	3,903	3,849
	Transco Leidy	76	68	71	77	92
	AIM (Ramapo)	28	36	0	0	0
	AIM (Millennium)	1,141	1,133	1,848	1,850	1,863
	M3	404	2,649	4,155	1,998	1,730
	AGT Citygate	0	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,332	2,415	2,612	2,623	2,648
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		338	662	558	587	628
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		21,522	21,536	21,662	21,808	22,117

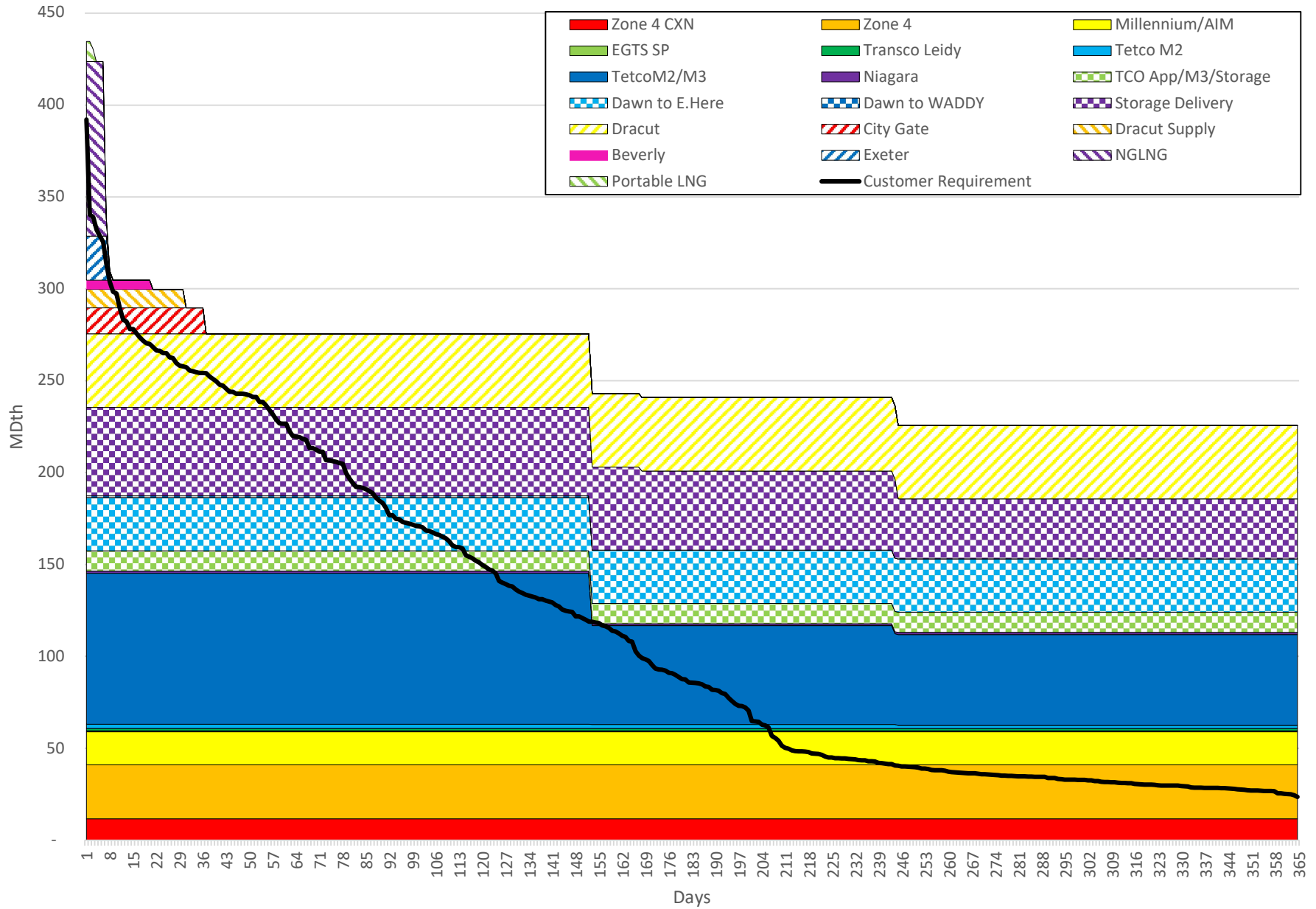
Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

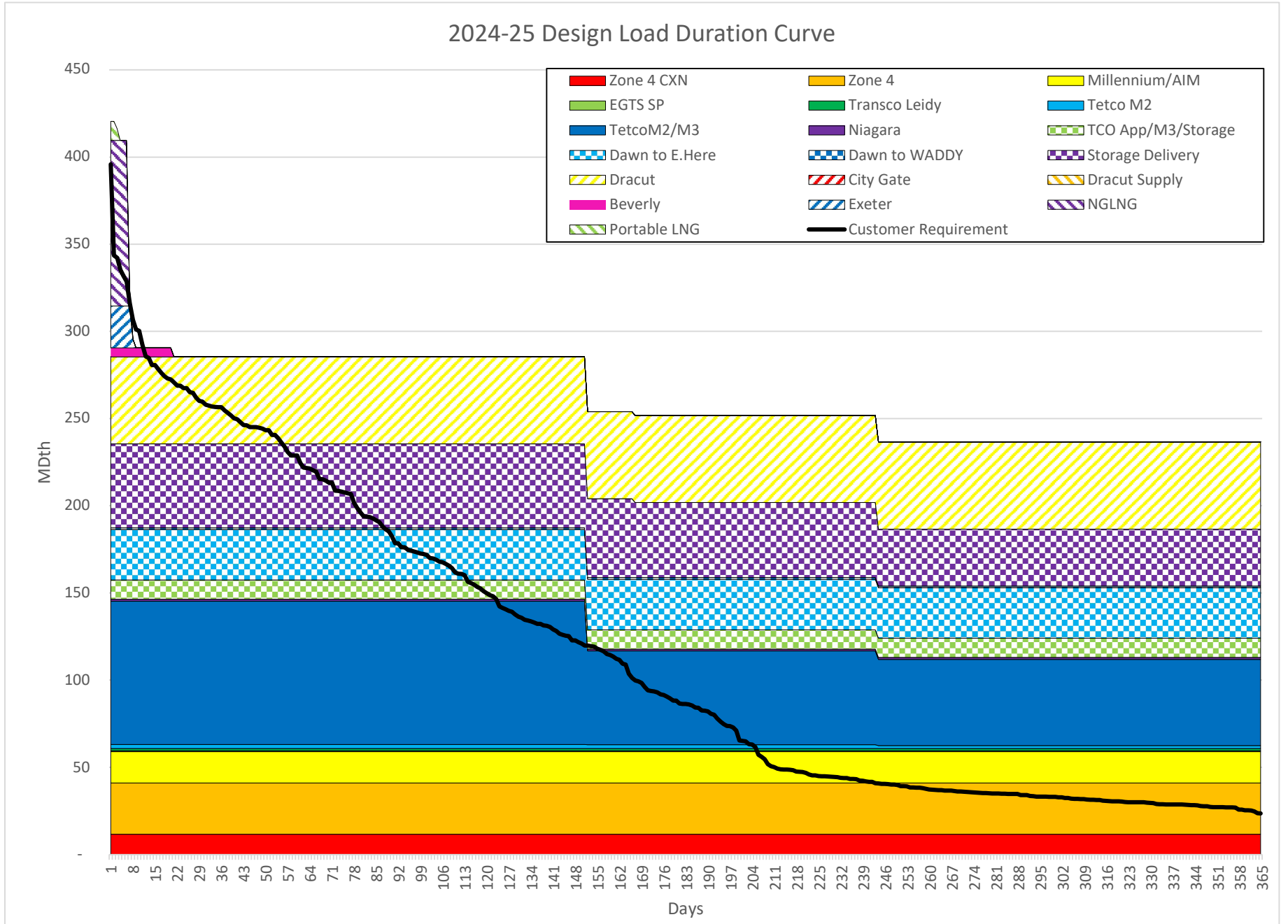
		Normal Non-Heating Season (Apr-Oct) with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	1,236	1,244	1,251	1,258	1,265
	Providence	6,058	6,100	6,134	6,168	6,204
	Warren	218	220	221	222	223
	Westerly	125	126	127	127	128
Fuel Reimbursement		242	268	257	294	308
Underground Storage Refill		3,544	3,814	3,946	3,959	4,122
LNG Refill		472	797	692	721	762
TOTAL		11,896	12,569	12,628	12,751	13,014
<u>RESOURCES</u>						
TGP	Dawn PNGTS	0	139	0	0	0
	Dawn Iroquois	0	25	0	0	0
	Niagara	165	98	66	0	0
	Zone 4	2,125	2,755	2,821	2,936	2,994
	Dracut	0	0	0	0	1
	TGP Citygate	0	0	0	0	0
	Storage	0	0	0	0	0
TET/AGT	M2	5,748	4,974	4,019	5,119	5,271
	EGTS South Point	84	67	60	106	102
	TCO Appalachia	203	203	203	203	203
	Transco Leidy	11	31	19	21	23
	AIM (Ramapo)	3	18	20	0	0
	AIM (Millennium)	1,606	923	1,745	2,692	2,604
	M3	1,731	3,126	3,538	1,538	1,542
	AGT Citygate	0	0	0	0	0
	Beverly	0	0	0	0	0
	Storage	87	76	3	3	140
Liquid for Portables and Refill		0	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	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		11,896	12,569	12,628	12,751	13,014

Rhode Island Energy
Comparison of Resources and Requirements
Normal Year (Sales Only)
(BBtu)

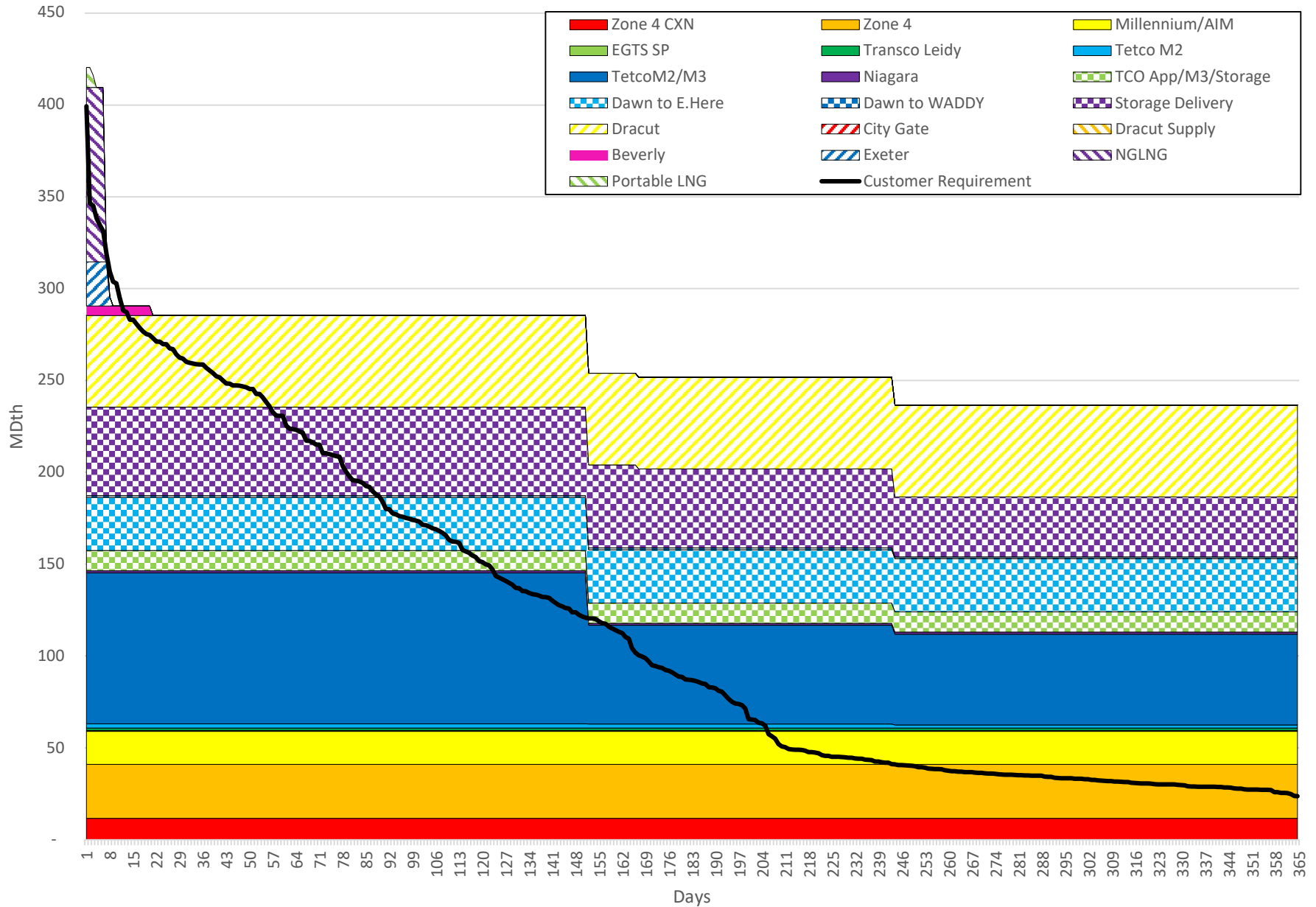
		Normal Annual with Proposed Resources				
		<u>2023-2024</u>	<u>2024-2025</u>	<u>2025-2026</u>	<u>2026-2027</u>	<u>2027-2028</u>
<u>REQUIREMENTS</u>						
Firm Sendout	Valley	4,659	4,674	4,702	4,727	4,784
	Providence	22,842	22,916	23,053	23,176	23,452
	Warren	823	825	830	835	845
	Westerly	472	473	476	478	484
Fuel Reimbursement		606	606	590	661	680
Underground Storage Refill		3,544	3,814	3,946	3,959	4,122
LNG Refill		472	797	692	721	762
TOTAL		33,418	34,106	34,291	34,559	35,130
<u>RESOURCES</u>						
TGP	Dawn PNGTS	1,202	1,401	1,081	1,103	1,284
	Dawn Iroquois	22	54	29	30	35
	Niagara	265	222	142	47	51
	Zone 4	6,161	6,166	6,069	6,275	6,595
	Dracut	375	0	0	0	1
	TGP Citygate	0	0	0	0	0
	Storage	1,125	1,323	1,332	1,334	1,334
TET/AGT	M2	11,608	9,651	7,511	9,854	10,088
	EGTS South Point	166	149	142	188	185
	TCO Appalachia	4,502	3,765	3,181	4,106	4,052
	Transco Leidy	87	99	91	98	115
	AIM (Ramapo)	31	55	20	0	0
	AIM (Millennium)	2,747	2,057	3,593	4,542	4,466
	M3	2,134	5,775	7,694	3,535	3,272
	AGT Citygate	0	0	0	0	0
	Beverly	100	100	100	100	100
	Storage	2,419	2,491	2,615	2,625	2,788
Liquid for Portables and Refill		0	0	0	0	0
LNG From Storage		472	797	692	721	762
Unserviced	Valley	0	0	0	0	0
	Providence	0	0	0	0	0
	Warren	0	0	0	0	0
	Westerly	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
		0	0	0	0	0
TOTAL		33,418	34,106	34,291	34,559	35,130

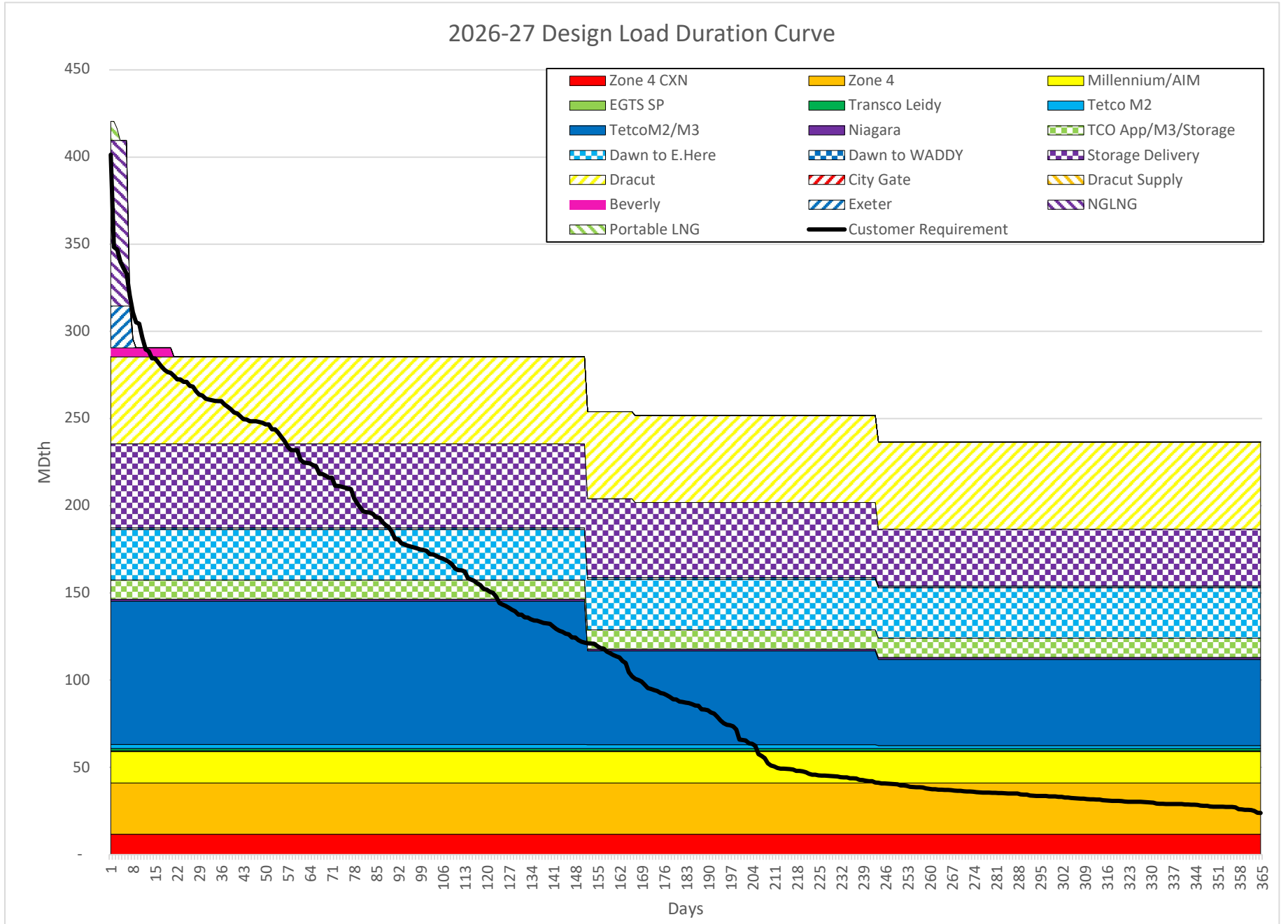
2023-24 Design Load Duration Curve



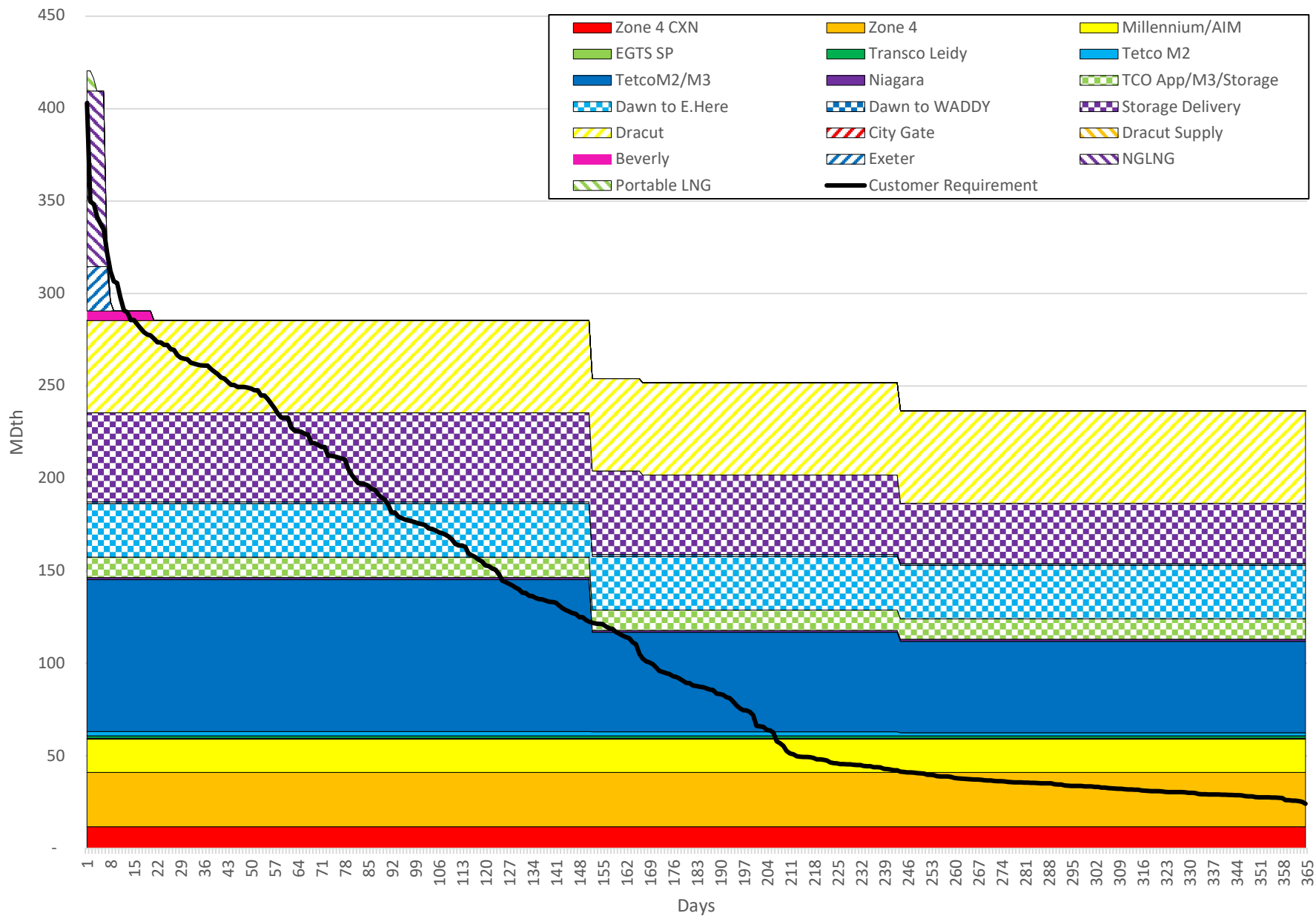


2025-26 Design Load Duration Curve





2027-28 Design Load Duration Curve



The Narragansett Electric Company Gas Cost Recovery Cost of Gas (\$000)	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
<i>Design Weather Scenario - SCC Adj FT1</i>													
FIXED COSTS													
Total Transportation Fixed Costs													
Total Storage Delivery Fixed Costs													
Total Storage Fixed Costs													
Total Liquefaction Fixed Costs													
Total Supplier Fixed Costs													
LESS:													
AMA Credits													
Hourly Peaking Fixed Costs													
TOTAL FIXED COSTS													88,871.6
VARIABLE COSTS													
<u>Commodity</u>													
Commodity for Purchases to City Gate													
Commodity for Purchases to Injections													
Total Commodity Costs													129,563.6
<u>Withdrawal</u>													
Underground Storage Withdrawal Value													
LNG Storage Withdrawal Value													
Total Storage Withdrawal Value													22,494.6
<u>Transportation</u>													
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:													
LNG Trucking													
Storage Refill													
Liquefaction													
Total Storage and Liquefaction													12,960.8
TOTAL VARIABLE COSTS													144,330.1
TOTAL FIXED AND VARIABLE COSTS													233,201.8
NGPMP Credit													13,902.7
TOTAL GAS COSTS													219,299.0

Narragansett Electric Company
Volume & Cost Summary
Sendout Volumes (MDth)

Design Weather Scenario - SCC Adj FT1

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
Algonquin													
TETCO CDS Long Haul	1,353	1,419	1,419	1,328	1,419	1,331	490	1,187	618	903	1,159	1,377	14,003
TETCO SCT Long Haul	-	32	54	52	1	-	-	-	-	-	-	-	140
AIM	285	333	391	359	329	289	278	264	272	272	264	284	3,621
AGT M3	338	187	371	373	573	964	1,233	-	-	-	40	799	4,877
TCO Appalachia	835	1,230	1,210	1,131	1,204	-	50	43	50	-	32	23	5,807
Storage	79	540	556	535	210	86	-	-	-	-	-	-	2,007
Total Algonquin	2,889	3,741	4,002	3,778	3,736	2,670	2,052	1,495	940	1,175	1,495	2,483	30,455
Tennessee													
TGP Long Haul	688	997	875	819	691	340	55	89	-	-	119	332	5,006
TGP ConneXion	342	358	360	336	360	339	217	339	351	142	338	350	3,833
Storage	-	173	462	425	403	-	-	-	-	-	-	-	1,463
Total Tennessee	1,031	1,528	1,697	1,581	1,453	679	273	428	351	142	458	682	10,303
Other													
Dawn via PNGTS	105	565	804	741	259	24	-	-	-	-	-	-	2,498
Dracut	-	182	358	283	126	-	-	-	-	-	-	-	948
Dawn / Niagara / Waddington	7	48	56	55	20	32	33	31	32	32	-	-	346
Dominion / Transco Leidy	32	50	49	46	32	20	16	4	18	2	16	18	304
LNG Vapor	58	60	495	155	21	19	19	19	19	19	19	19	923
LNG Truck	35	-	-	-	-	-	-	-	-	-	-	-	35
Beverly	-	20	70	10	-	-	-	-	-	-	-	-	100
City Gate	42	94	2	214	77	-	-	-	-	-	-	-	430
Total Other	280	1,019	1,833	1,504	535	95	68	54	70	54	35	37	5,583
Total Purchases	4,200	6,288	7,532	6,863	5,724	3,443	2,393	1,977	1,361	1,371	1,987	3,202	46,340
LESS:													
Liquefaction	-	-	-	-	-	131	136	132	136	136	132	84	887
LNG Truck	35	-	-	-	-	-	-	-	-	-	-	-	35
AGT Storage Refill	-	-	-	-	-	19	541	500	112	318	467	459	2,416
TGP Storage Refill	-	-	-	-	-	138	-	259	211	-	249	252	1,109
Total	35	-	-	-	-	288	677	891	460	454	848	795	4,448
Total Sendout	4,164	6,288	7,532	6,863	5,724	3,155	1,716	1,086	901	917	1,139	2,407	41,893
Datacheck	4,164	6,288	7,532	6,863	5,724	3,155	1,716	1,086	901	917	1,139	2,407	41,893
Delta	-	-	-	-	-	-	-	-	-	-	-	-	-

Narragansett Electric Company
Volume & Cost Summary
Cost of Gas (\$000)

Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
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DEMAND

[REDACTED]											
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Total Demand	[REDACTED]											109,387
Datacheck	[REDACTED]											109,387
Delta	[REDACTED]											-

Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
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COMMODITY

[REDACTED]											
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TOTAL COMMODITY	[REDACTED]											157,291
Datacheck	[REDACTED]											157,291
Delta	[REDACTED]											-

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total												
TOTAL DC+CC	[REDACTED]												266,678												
LESS:																									
Liquefaction																									
LNG Truck																									
AGT Storage Refill																									
TGP Storage Refill																									
Total Liquefaction & Storage	[REDACTED]												12,961												
TOTAL GAS COST													253,717												
Commodity to Sendout													144,330												
Days/month													30	31	31	29	31	30	31	30	31	31	30	31	366
Unit Commodity Cost (\$/MMBtu)																									\$3.445
NYMEX (06/05/2023)	\$2.981	\$3.456	\$3.724	\$3.655	\$3.378	\$3.075	\$3.062	\$3.171	\$3.283	\$3.331	\$3.297	\$3.380													

The Narragansett Electric Company		Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
Gas Cost Recovery														
Cost of Gas (\$000)														
<i>Normal Weather Scenario - Sales</i>														
FIXED COSTS														
Total Transportation Fixed Costs														
Total Storage Delivery Fixed Costs														
Total Storage Fixed Costs														
Total Liquefaction Fixed Costs														
Total Supplier Fixed Costs														
LESS:														
AMA Credits														
Hourly Peaking Fixed Costs														
TOTAL FIXED COSTS														82,068.9
VARIABLE COSTS														
<u>Commodity</u>														
Commodity for Purchases to City Gate														
Commodity for Purchases to Injections														
Total Commodity Costs														77,965.7
<u>Withdrawal</u>														
Underground Storage Withdrawal Value														
LNG Storage Withdrawal Value														
Total Storage Withdrawal Value														17,905.1
<u>Transportation</u>														
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:														
LNG Trucking														
Storage Refill														
Liquefaction														
Total Storage and Liquefaction														10,760.2
TOTAL VARIABLE COSTS														88,573.6
TOTAL FIXED AND VARIABLE COSTS														170,642.5
NGPMP Credit														13,902.7
TOTAL GAS COSTS														156,739.7

Narragansett Electric Company Volume & Cost Summary Sendout Volumes (MDth)
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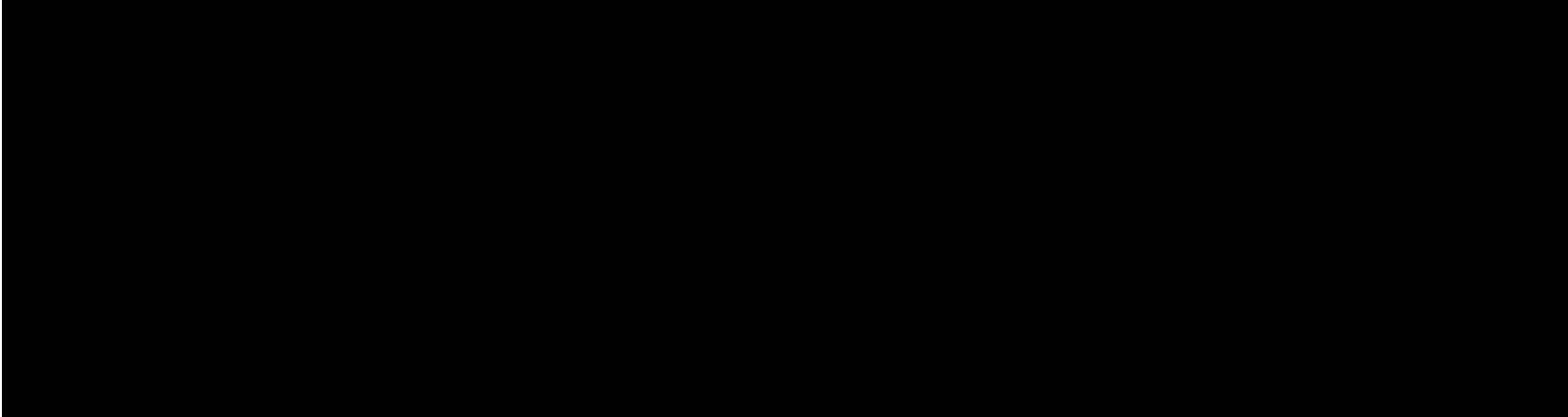
Normal Weather Scenario - Sales

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
Algonquin													
TETCO CDS Long Haul	1,118	1,175	1,175	1,099	1,175	1,058	490	958	378	704	922	1,111	11,366
TETCO SCT Long Haul	-	9	16	5	-	-	-	-	-	-	-	-	29
AIM	225	226	226	212	242	222	226	219	226	226	218	226	2,693
AGT M3	119	-	-	-	282	473	789	-	-	-	9	447	2,119
TCO Appalachia	509	986	951	877	867	-	50	43	50	-	32	23	4,387
Storage	79	531	569	540	201	85	-	-	-	-	-	-	2,006
Total Algonquin	2,051	2,927	2,937	2,733	2,768	1,838	1,555	1,220	654	930	1,181	1,807	22,600
Tennessee													
TGP Long Haul	394	574	665	624	334	165	20	31	-	-	85	244	3,135
TGP ConneXion	277	260	298	279	285	288	97	287	254	38	283	288	2,935
Storage	-	168	479	437	400	-	-	-	-	-	-	-	1,483
Total Tennessee	671	1,002	1,442	1,340	1,019	453	117	318	254	38	368	532	7,552
Other													
Dawn via PNGTS	13	218	490	389	72	-	-	-	-	-	-	-	1,181
Dracut	-	52	133	189	-	-	-	-	-	-	-	-	375
Dawn / Niagara / Waddington	-	38	45	32	5	32	33	32	33	33	-	-	284
Dominion / Transco Leidy	25	34	39	33	24	18	16	3	18	2	16	18	247
LNG Vapor	19	33	180	86	19	19	19	19	19	19	19	19	472
LNG Truck	-	-	-	-	-	-	-	-	-	-	-	-	-
Beverly	-	20	52	28	-	-	-	-	-	-	-	-	100
City Gate	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Other	57	396	939	758	120	69	69	53	71	55	35	37	2,659
Total Purchases	2,779	4,325	5,317	4,830	3,907	2,360	1,741	1,591	979	1,022	1,583	2,376	32,812
LESS:													
Liquefaction	-	-	-	-	-	-	81	78	43	81	105	84	472
LNG Truck	-	-	-	-	-	-	-	-	-	-	-	-	-
AGT Storage Refill	-	-	-	-	-	23	540	504	112	313	467	459	2,419
TGP Storage Refill	-	-	-	-	-	145	-	259	221	-	249	252	1,125
Total	-	-	-	-	-	168	622	841	376	394	821	795	4,016
Total Sendout	2,779	4,325	5,317	4,830	3,907	2,192	1,120	750	603	628	763	1,581	28,796
Datacheck	2,779	4,325	5,317	4,830	3,907	2,192	1,120	750	603	628	763	1,581	28,796
Delta	-	-	-	-	-	-	-	-	-	-	-	-	-

Narragansett Electric Company
Volume & Cost Summary
Cost of Gas (\$000)

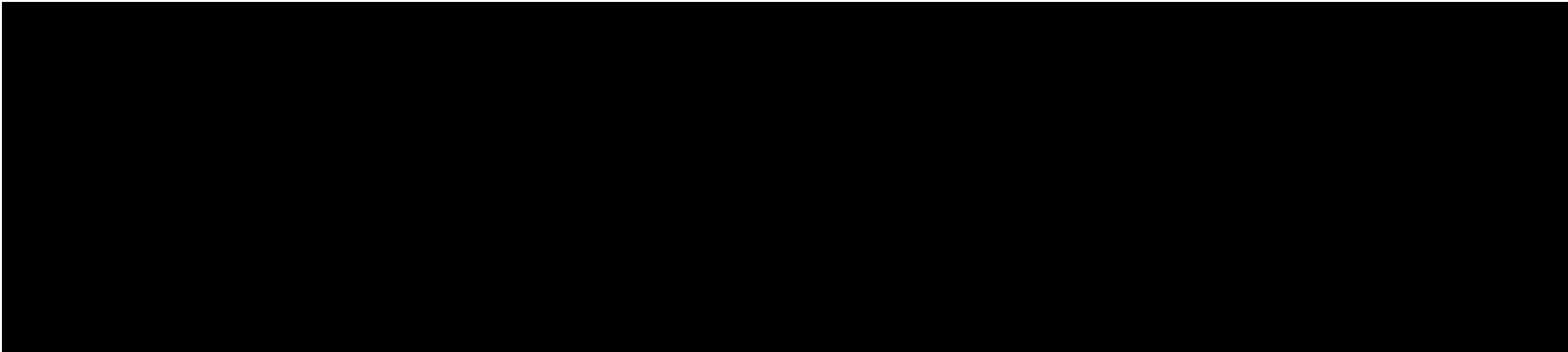
Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
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DEMAND



Total Demand												102,584
Datacheck												102,584
Delta												-

Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
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TOTAL COMMODITY												99,334
Datacheck												99,334
Delta												-

	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total
TOTAL DC+CC	[REDACTED]												201,918
LESS:	[REDACTED]												
Liquefaction	[REDACTED]												
LNG Truck	[REDACTED]												
AGT Storage Refill	[REDACTED]												
TGP Storage Refill	[REDACTED]												
Total Liquefaction & Storage	[REDACTED]												10,760
TOTAL GAS COST	[REDACTED]												191,158
Commodity to Sendout	[REDACTED]												88,574
Days/month	30	31	31	29	31	30	31	30	31	31	30	31	366
Unit Commodity Cost (\$/MMBtu)	[REDACTED]												\$3.076
NYMEX (06/05/2023)	\$2.981	\$3.456	\$3.724	\$3.655	\$3.378	\$3.075	\$3.062	\$3.171	\$3.283	\$3.331	\$3.297	\$3.380	

Rhode Island Energy
Design Year
Fixed + Variable + Commodity Cost per Dth per Day by Path (100% Load Factor)
SCC Adj FT1
Existing and Proposed Assets

Pursuant to an agreement reached between the Division and Rhode Island Energy,
the exhibit referenced above (Exhibit 20) is not attached to this year's plan.

Rhode Island Energy
SCC Adj FT1
Fixed Cost per Dth per Day by Contract (100% Load Factor)
Existing and Proposed Assets

Pursuant to an agreement reached between the Division and Rhode Island Energy,
the exhibit referenced above (Exhibit 21) is not attached to this year's plan.

**Rhode Island Energy
Customer Choice Proposed Releases
2023/24**

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%	5,040	5,040
TGP ConneXion	11,600	TGP 64026	5.4%	1,993	1,993
Dawn via PNGTS	29,000	PNGTS 233317	13.55%	4,983	
		TCPL 64273	13.57%	4,993	
		Enbridge M12274	13.57%	4,993	
		TGP 62930	13.55%	4,983	4,983
AIM	18,000	MPL 210165	4.2%	1,546	
		AGT 510801	8.4%	3,093	3,093
TETCO CDS Long Haul	45,934	TETCO 800303	21.5%	7,893	
		AGT 93011E	21.5%	7,893	7,893
		AGT 510985	21.5%	7,893	
TCO Appalachia	40,000	TCO 31524	18.7%	6,873	
		AGT 90106	18.7%	6,873	6,873
		AGT 510985	18.7%	6,873	
AGT M3	18,099	AGT 93011E	5.0%	1,829	1,829
		AGT 510985	8.5%	3,110	
		AGT 90107	3.5%	1,281	1,281
Dracut	20,000	TGP 62930	9.3%	3,436	3,436
TETCO SCT Long Haul	2,099	TETCO 800156	0.981%	361	
		AGT 93001ESC	1.114%	410	410
		AGT 510985	1.114%	410	

Customer Choice Design Day Transportation Requirement

36,782

*Based on June 2023 Pools