STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSON

IN RE: THE NARRAGANSETT ELECTRIC COMPANY	**:**	
d/b/a NATIONAL GRID GAS INFRASTRUCTURE,	**:**	**DOCKET NO. 4916**
SAFETY, AND RELIABILITY PLAN FOR FY 2020	**:**	

REPORT AND ORDER

I. Introduction

On December 21, 2018, the Narragansett Electric Company d/b/a National Grid (National Grid or Company) filed its proposed Gas Infrastructure, Safety, and Reliability Plan (Plan or Gas ISR Plan) for FY 2020, with the Public Utilities Commission (PUC or Commission) pursuant to R.I. Gen. Laws § 39-1-27.7.1.[1] The Gas ISR Plan set forth proposals that the Company identified as necessary to enhance the safety and reliability of its natural gas distribution system. The Gas ISR Plan was designed to protect and improve the gas delivery system through, *inter alia*, proactively replacing leak-prone gas mains and services, accelerating the Company's replacement of leak-prone facilities, and upgrading the system's pressure regulating systems. This year's Plan also includes $44.46 million for the first phase of the Southern Rhode Island Project, to install five miles of new twenty-inch diameter steel distribution main in the City of Warwick, Town of West Warwick, and Town of East Greenwich, Rhode Island.

The Plan included pre-filed testimony from three employees of the National Grid USA Service Company: John B. Currie, Director of New England Gas Network Strategy; Melissa Little, Director, New England Revenue Requirements; and Michael J. Pini, Lead Program Manager for

[1] All filings in this docket are available at the PUC offices located at 89 Jefferson Boulevard, Warwick, Rhode Island or at http://www.ripuc.org/eventsactions/docket/4916page.html.

New England Gas Pricing. The 2017 System Integrity Report was included as part of the Plan, as directed by the Commission in Docket 4719, the 2019 Gas ISR.[2]

The original Plan proposed ISR spending totaling $162.46 million, including $36.59 million for non-discretionary capital expenditures, and $125.87 million for discretionary capital expenditures.[3] A calculation of bill impacts for an average residential customer utilizing 845 therms per year showed an annual increase of $20.81 or 1.6%.[4]

On March 4, 2019, the Company filed a revised Section 3 of the Plan which reflected a reduced revenue requirement, due to the Company's recently filed tax return. On March 6, the Company filed a revised Section 4, Rate Design & Bill Impacts which showed a lower annual increase of $18.56 or 1.4%.[5]

The Division of Public Utilities and Carriers (Division) presented prefiled testimony from Mr. David Effron, its revenue requirement consultant, and Rodney Walker, its gas operations consultant. The Division recommended approval of the Company's Plan, subject to four recommendations. On March 7, 2019 the Commission conducted an evidentiary hearing. By then, the Company and Division had reached an agreement concerning the Division's recommendations. At an Open Meeting held on March 19, 2019, the PUC granted the Company's motions for protective treatment and unanimously approved the proposed FY 2020 Gas ISR Plan, subject to a prudency review of the Southern Rhode Island Gas Expansion Project upon completion of the project.

[2] Docket 4719, Order (Nov. 21, 2018); http://www.ripuc.org/eventsactions/docket/4781-NGrid-Ord23339%20(11-21-18).pdf.
[3] FY 2020 Gas ISR Plan, Section 2, Gas Capital Investment Plan at 2 (Dec. 20, 2018).
[4] FY 2020 Gas ISR Plan, Section 4, Rate Design & Bill Impacts, Attach 2 at 1; Direct Test. of Michael J. Pini at 5 (Dec. 20, 2018).
[5] FY 2020 Gas ISR Plan, Revised Section 4, Rate Design & Bill Impacts, Attach 2R at 1 (Mar. 6. 2019).

II. Detailed Description of the 2020 Gas ISR Plan

A. Non-Discretionary Work

The Company proposed a total of $36.59 million for Non-Discretionary work in three main work categories: (1) Public works projects; (2) Mandated programs; and (3) Damage/Failure Programs.[6]

1. Public Works

The purpose of this program is to address existing gas infrastructure conflicts, as appropriate, in conjunction with municipal reconstruction projects and local water and sewer projects.[7] The Company has an ongoing plan to replace targeted gas mains on a risk-based approach. The Plan incorporated $18.32 million in spending for the replacement of approximately thirteen miles of leak-prone gas main consisting of cast iron and unprotected steel main.[8] The Company estimated that $1.38 million will be reimbursed under agreement with third parties.[9] The Company also coordinates scheduling with various municipalities for other system improvement work, such as the replacement of leak-prone pipe, system reliability upgrades, elimination of redundant mains, and regulator station upgrades.[10] The Company manages a five-year work planning process to provide flexibility in scheduling, coordinating and engineering projects, recognizing that municipal schedules and plans can change due to funding, political demands and maintenance issues.[11]

[6] This year's filing did not include the "Special Project" category found in prior ISR Plans.
[7] FY 2020 Gas ISR Plan, Section 2 at 3 (Dec. 20, 2018).
[8] The 2019 Revised Plan provided for the replacement of ten miles of leak-prone pipe. The Company noted that for FY 2020, municipal water projects in Providence and East Providence were contributing to the increase in replacement miles to thirteen.
[9] FY 2020 Gas ISR Plan Section 2 at 4 (Dec. 20, 2018).
[10] *Id*.
[11] *Id*.

2. Mandated Programs

Spending for Mandated Programs for the 2020 Gas ISR Plan proposed a total of $19.40 million in the following five categories: (1) Corrosion; (2) Purchase Meter Replacement; (3) Reactive Leaks; (4) Reactive Service Replacement- Non-leak/Other, and (5) Reactive Main Replacement- Maintenance.

The Corrosion program serves to extend the life of buried steel cable facilities by twenty years or more, ensuring proper coating by establishing proper conditions on pipe segments through installation of rectifiers, anodes, insulators, and test stations.[12] Federal law requires cathodic protection of all new buried steel gas facilities. The program also includes control line work at existing regulator stations and cathodic protection upgrades. For FY 2020, the Company proposed to spend $1.17 million which aligns costs with prior experience.[13] The Purchase Meter Replacement program does exactly what its title says, pays for the replacement of aging/outdated gas meters. In FY 2020, the Company proposed to replace 16,289 meters, representing 5.8% of the existing meter population in Rhode Island, at a cost of $3.4 million.[14]

The Reactive Leaks category provides funding for the leak sealing of cast iron bell joints discovered during proactive leak surveys, public odor calls or other activities. Additionally, this category covers remediating leaking gas services through insertion, replacement, or abandonment of the services. In prior ISR plans, these programs were reported separately. Beginning this Plan year, the Company has grouped the programs under a single Reactive Leak category and proposed to spend $12.10 million.[15]

[12] *Id*. at 5.
[13] *Id.*
[14] *Id*.
[15] *Id*.

The Reactive Service Replacement Non-Leak/Other program included an FY 2020 expenditure proposal of $2.06 million in capital costs for service relocations, meter protection service abandonments, and the installation of curb valves, especially for locations where Company personnel have encountered difficulty in gaining access to meters.[16]

The Reactive Main Replacement Maintenance program contemplates emergency main replacements or modifications due to leaks or other unplanned events where main conditions dictate immediate replacement and/or gas facilities are subject to water intrusion or exposure and require remediation. In recent years, the Company's requests for work in this category has been minimal due to the increased Proactive Main Replacement program. The FY 2019 budget for this work was proposed to be level-funded with FY 2019 at $0.67 million.[17]

3. Damage Failure Program

The Company proposed a budget of $0.25 million for funding safety and reliability projects associated with remediation of damage or failure occurrences, initiated in response to events outside the Company's control.[18]

B. Discretionary Programs

For FY 2020, the Company proposed to spend a total of $125.87 million for discretionary work, broken down into three major categories: (1) Proactive Main Replacement; (2) Gas System Reliability; and (3) The Southern Rhode Island Gas Expansion Project.

1. Proactive Main Replacement

Under Proactive Main Replacement, there are three programs: (1) Proactive Main Replacement <16-inch; (2) Proactive Large Diameter Program > 16 inch; and (3) Proactive

[16] *Id*. at 6.
[17] *Id*.
[18] *Id*. at 7.

Atwells Avenue Main Replacement. The Company proposed continuing its program of replacing leak-prone gas mains by spending $62.88 million for 48.2 miles of leak-prone gas mains and 3,604 service relay, inserts, or tie-ins.[19] This program consists of the installation of 43.6 miles and the abandonment of approximately 47.0 miles of cast iron mains and unprotected steel main with a diameter less than sixteen inches.[20] The cost of this program has increased in recent years due to the greater number of cast iron mains being replaced. Moreover, cast iron mains are typically located in urban areas with higher customer density and greater underground congestion.[21] In FY 2020, the Company increased the cast iron abandonment percentage to sixty percent of the total leak-prone pipe inventory, an increase of five percent from the FY 2019 Plan. For the Proactive Main Replacement (≤16-inch), the Company proposed spending of $57.18 million.[22]

The Company also operates approximately thirty-seven miles of large diameter (≥ 16 inch) leak-prone gas mains which the Company rehabilitates through a sealing and lining program. For 2020, the Company proposed to rehabilitate 1,100 feet of a 16-inch cast iron main by lining and another 2,500 feet of 16-inch cast iron main will be rehabilitated by sealing. Additionally, the Company proposed lining 1,500 feet of a 20-inch cast iron main.[23] All of these mains are in the City of Providence.

In addition to these repairs, the Company reported that during the winter of 2017-18, a twelve-inch low-pressure cast iron main on Atwells Avenue in Providence experienced four breaks. The Company has determined that it is necessary to abandon 1.3 miles of cast iron main between FY 2020 and FY 2022, with the highest risk portion of the main, a 0.2 mile segment, to

[19] *Id*.
[20] *Id*.
[21] *Id.* at 8.
[22] *Id*.
[23] *Id.* at 9.

be addressed in FY 2020 at an estimated cost of $1.18 million. The cost for this segment is significantly higher than normal because congestion both above and below ground. In FY 2020, the Company will spend an additional $0.10 million to engineer the next the abandonment of the next segment of 0.6 miles, to take place in FY 2021.[24] The total cost for the Atwells Avenue main replacement project for FY 2020 is $1.28 million.[25]

2. Gas System Reliability

The Company's Gas System Reliability Plan included thirteen programs to address system automation, valve installation/replacement, take stations, pressure regulation, heating, LNG facilities, gas network reliability and resiliency, replacement pipe on bridges, access protection remediation, capital tools, and equipment.[26] The Revised FY 2020 Gas ISR Plan contained a total of $18.53 million in spending for Gas System Reliability.[27]

The Company proposed to fund the Gas System Control program at $0.57 million to address telemetry upgrade and meter reading platform upgrades.[28] Under this program, the Company will replace 3G telemetry with new 4G devices, because Verizon has announced that it is eliminating its 3G network by 2021 to free up space for new networks. Therefore, unless the Company undertakes a telemetry upgrade, its current devices would be unable to communicate with the gas system. The Company indicated that 350 4G telemetry devices will be purchased in FY 2019 and 350 in FY 2020.[29]

[24] *Id*. at 10.
[25] *Id*.
[26] *Id*.
[27] *Id*.
[28] *Id*.
[29] *Id*.

For FY 2020, the Company budgeted $0.16 million for the Valve Installation/Replacement program to replace inoperable valves, ensuring the Company's continued ability to isolate portions of the distribution system, thus avoiding broader shutdowns.[30]

Spending for the System Automation is targeted at $1.20 million for FY 2020. This program is intended to meet federal Department of Transportation requirements for pipeline safety by maintaining 196 gas pressure regulator stations disbursed throughout the Company's Rhode Island gas service territory. The Company's ability to provide safe and reliable service is governed to a large extent by the Company's ability to maintain adequate pressure in its gas lines. The Company's FY 2020 proposal would provide AC power, telemetry, and/or remote control to approximately twenty-five sites.[31]

The Heater Installation Program provides for the installation and replacement of gas system heaters which are operated to ensure proper conditioning and control of gas temperatures at key Company facilities. In FY 2018, the Company spent $0.20 million for preliminary work on replacement of heaters at its Cranston gate station and in FY 2019 budgeted $0.80 million for engineering and construction work. Construction of the new heaters is planned for FY 2020 at a cost of $1.25 million.[32]

The Company's Pressure Regulating Facilities program is designed to reliably control gas distribution system pressures and maintain continuity of supply during normal and critical gas demand periods. Each regulator station has specific flow and pressure requirements, based on the anticipated needs of the station. The Company proposed FY2020 spending projection for the Pressure Regulating Facilities program at $4.7 million to replace regulators at two East Providence

[30] *Id.* at 11.
[31] *Id*. at 12.
[32] *Id*.

facility sites, one in Providence and another in Pawtucket. The plan included enhancements in response to regulator station work prioritized through condition-based assessments, which include, in part, station accessibility, pipe condition, water intrusion, redundancy, station isolation, and common mode failure. These projects follow all applicable state and federal codes to ensure safe and continuous supply of natural gas to the Company's customers.[33]

The Allens Avenue Multi-Station Rebuild Project is a multi-year project designed to replace or retire eight existing pressure regulating facilities at the major gas interchange. The work includes the abandonment and/or removal of obsolete pipe and equipment in support of the safety and reliability of the Company's system at this location. Four of the existing stations that feed the 99 pounds per square inch gauge (psig) distribution system will be replaced by and consolidated into a new single station. Three additional regulator stations feeding the system at other pressures will be relocated off-property. The new on-site facilities are designed with storm hardening protections to ensure safe and continued operations in the event of adverse weather impacts and flooding. For FY 2020, the Company proposed spending $4.44 million.[34]

The Company planned spending $1.05 million in the Take Station Refurbishment program to install remote operated valves at four stations, for design costs for future station construction and control line replacement work. The remote operated valves will be installed at high pressure connection points and will support the ability to shorten response time in the event of a major gas leak.[35]

The Gas Planning program identifies projects that support system reliability through standardization and simplification of system operations (e.g., system up-ratings and de-ratings and

[33] *Id*. at 13.
[34] *Id*. at 14.
[35] *Id*. at 14-15.

regulator elimination), integration of systems (e.g., tie-ins), and new supply sources (e.g., take stations). For FY 2020, the Company proposed to spend approximately $1.30 million which includes funding for the initial phase of a multi-year project designed to eliminate a single feed system and engineering costs to address enhancements to the Cumberland Take Station on Scott Road.[36]

The Instrumentation & Regulation Reactive Program was established to address capital projects. Projects may include: instrumentation replacement due to failure; replacement of obsolete/unreliable equipment, such as regulators, pilots, boilers, heat exchangers, odorant equipment, station valves; and necessary replacement of building roofs or doors. The Company proposed spending $1.37 million for FY 2020.[37]

The LNG program addresses specific and blanket capital project requirements to support the Company's LNG operations. Of the total $1.43 million requested for FY 2020, the Company has ear-marked $0.67 million for projects at the Exeter, Rhode Island LNG facility. These funds will pay for engineering to: (1) prepare for replacement of the second of two boil-off compressors; and, (2) for a future project to install a fully automated emergency shutdown system. For Aquidneck Island LNG needs, the Company budgeted $0.20 million for engineering costs associated with peak shaving requirements. The remaining $0.56 Million is slated for the blanket program at the Exeter LNG plant, which is aligned with recent historical spending for this facility.[38]

The Company proposed spending $0.20 million for engineering-related costs to replace main in the Glenbridge Avenue bridge in Providence. Construction costs for this project are not

[36] *Id*. at 15.
[37] *Id*.
[38] *Id*. at 16.

expected until FY 2021.[39] The Access Protection Remediation program is designed to reduce the risk of public injury by restricting and/or deterring access to the Company's elevated gas facilities.[40] This program was budgeted at $0.26 million to identify and execute projects in this program. Finally, the Company proffered a budget of $0.60 million in the Capital Tools & Equipment program.[41]

3. Southern Rhode Island Gas Expansion Project

The Company has identified a need to increase gas distribution capacity in the Southern Rhode Island service territory by installing approximately five miles of new 20-inch steel distribution main parallel to the exiting 12-inch distribution main located beneath R.I. Route 2 through the City of Warwick, the Town of West Warwick, and the Town of East Greenwich. In support of its proposal, the Company reported that current growth forecasts indicate that the maximum vaporization capacity at its Exeter, LNG facility will be exceeded by calendar year 2019, which could result in approximately 3,750 customers with below minimum pressures who would be at risk of losing service.[42] Additionally, regulator station pressures are predicted to fall below the minimum threshold which would cause downstream pressure problems. Moreover, the Company is aware of several commercial customers located in the Quonset Industrial Park who are seeking to expand existing and create new operations who could not be served without this project.

The Company plans to place the new distribution mains into service in phases between FY 2020 and FY 2022, with operations commencing at 99 psig, with the potential to operate at 200 psig after a district regulator station in installed.[43] The Company expects an increase in capacity

[39] *Id*.
[40] *Id*.
[41] *Id*. 17.
[42] *Id*.
[43] *Id*. at 18.

of approximately 1,100 dekatherms per hour upon project completion. There will be improved system reliability by decreasing the Company's dependence on pressure support from the Exeter LNG facility.[44]

Between FY 2020 and FY 2022, the Company estimates that it will spend a total of $109.98 million for the Southern Rhode Island Gas Expansion Project, consisting of main installation, regulation station investment and other upgrades and investments. Between FY 2020 and FY 2022, the total estimated cost for the main installation work is $81.30 million, based on 90 percent design at an 80 percent confidence level. Factors contributing to the 80 percent confidence level include assumptions around the presence of ledge, permitting and work-hour restrictions, requirements for night work, and handling of contaminated soil and ground water. For FY 2020, the Company expects to spend a total of $39.92 million for the main installation work.[45]

Other improvements in the project will include the installation of a launcher and receiver to support in-line inspections of the 200 psig main, material testing to support the maximum operating pressure increase from 150 psig to 200 psig for 5.2 miles of existing main in the City of Cranston and Town of West Warwick, and the installation of a remote operating valve. At present, the Company has estimated that it will spend $4.54 million for material testing. However, this figure may change when the Company awards the testing contract.

In summary, for FY 2020, the Company estimated it will spend a total of $44.46 million for the Southern Rhode Island Project. This includes $39.92 million for the installation of 2.4 miles of gas main and $4.54 million for the material testing required to increase the maximum

[44] *Id*.
[45] *Id*. at 19.

operating pressure from 150 psig to 200 psig for the 5.2 miles of existing main in Cranston and West Warwick.[46]

The Company reported that as of December 31, 2017, approximately 1,190 miles, or 37%, of the 3,205 miles in the Company's gas distribution system in Rhode Island is made up of leak-prone pipe. The 1,190 miles of leak-prone pipe comprise 395 miles of unprotected steel and 745 miles of cast iron and wrought iron gas main and 50 miles of vintage Aldyl-A and Polybutylene plastic. At the current pace of proposed replacement, the Company will eliminate or rehabilitate all leak-prone pipe within the next 17 years.[47]

III. Summary of National Grid's Prefiled Testimony

The Company presented the testimony of John B. Currie, Jurisdictional Lead for gas issues in Rhode Island, to describe the FY 2020 Gas ISR Plan, which was attached to his testimony as Exhibit JBC-1. Mr. Currie explained the purpose of the Plan, as well as the extent of the proposed capital investments, including non-discretionary and discretionary spending, and special projects. Mr. Currie explained that the Company has agreed with a Division proposed that the Southern Rhode Island Gas Expansion Project be managed as a distinct spending portfolio from the rest of the Gas ISR 2020 Plan.

Ms. Melissa Little testified that the Company's revenue requirement for the FY 2020 Gas ISR Plan was an incremental $7,290,355 over base rates. The revenue requirement consisted of the following elements: (1) the revenue requirement of $4,009,777 comprised of the Company's return, taxes, and depreciation expense associated with FY 2020 proposed non-growth ISR capital investment in gas utility infrastructure; and (2) the FY 2020 revenue requirement on incremental

[46] *Id*. at 21.
[47] *Id*. at 22.

non-growth ISR capital investment for FY 2018 through FY 2019 totaling $926,896; and FY 2020 property tax expense of $2,353,682.[48]

On March 4, 2018, after having filed its federal tax return, the Company filed its Revised Revenue Requirement of $6,474,720, a reduction of $815,635, due primarily to the impact of revisions to vintage FY 2018 accumulated deferred income taxes.[49]

Mr. Pini sponsored Section 4 of the FY 2020 Gas ISR Plan, as Revised. His testimony discussed the calculation of the proposed FY 2020 Gas ISR factors and the customer bill impacts of the proposed factors. Mr. Pini explained that the proposed rate design was based on the revenue requirement of incremental capital investment over that which was reflected in rate base in the Company's most recent general rate case in Docket No. 4770, utilizing the rate base allocator approved in the Amended Settlement in Docket No. 4770.[50]

In the original filing, for the average residential heating customer using 845 therms annually, the ISR factors would result in an annual bill increase of $20.81 or 1.6%.[51] In the Revised Plan, the impact to the average residential heating customer was further adjusted downward to $18.56 or an overall 1.4% increase over current rates.[52]

IV. Summary of the Division of Public Utilities and Carriers's Prefiled Testimony

Division consultant Rod Walker, a natural gas operations consultant, in his first appearance before the PUC, addressed the ISR Plan evaluation process and provided analysis of the elements

[48] FY2020 Gas ISR Plan, Direct Test of Melissa Little at 3 (Dec.20, 2018).
[49] FY2020 Gas ISR Plan Revised Section 3, Attach 1R at 1 (March 4, 2019); http://www.ripuc.org/eventsactions/docket/4916-NGrid-RevRevenueRequirement%20(3-4-19).pdf.
[50] FY2020 Gas ISR Plan, Direct Test. of Michael J. Pini. at 3. (Dec. 20, 2018).
[51] *Id.* at 5.
[52] Revised FY 2020 Gas ISR Plan, Section 4: Rate Design & Bill Impacts, Attach 2R at 1 (Mar. 6, 2019); http://www.ripuc.org/eventsactions/docket/4916-NGrid-ReviBillImpacts(3-6-19).pdf.

of the proposed plan.[53] He described this year's ISR filing as a collaborative process between the Company and the Division, with multiple written and oral communications and site visits.

He explained that Rhode Island's natural gas distribution system is one of the oldest systems in the United States, with some of the infrastructure installed over one hundred years ago. The types of leak-prone pipe in the system include cast iron, wrought iron, unprotected steel, Aldyl-A, and polybutylene plastic pipe. He contended that although the Company has done an admirable job in reducing leak-prone pipes, the system still has one of the largest collections of leak-prone infrastructure nationwide, if not the largest, at 1,124 miles.[54] Based on the current replacement schedule, it will take another 20.9 years, at a rate of 53.6 miles per year, to eliminate all the leak-prone pipe. He noted that the number of Type 1 (most hazardous) leaks has been increasing. Mr. Walker expressed concern that the "worst offender" leaks may not be identified with the Company's current risk analysis. He was also concerned about the lack of information concerning isolated services (metallic services attached to plastic or non-metallic mains) and indicated that this lack of knowledge was risky.

Mr. Walker made four recommendations for the Commission to consider: (1) The Company should accelerate efforts to install new software to provide more robust tools to risk rank natural gas infrastructure, especially leak-prone infrastructure; (2) the Company should develop a list of isolated services that details as specifically as possible, the type of material, date of installation, condition, and risk posed by these services; (3) the Company should review its system planning, modeling main replacement operations, gas procurement and risk evaluations teams to ensure that they are coordinated in their identification of and development of capital

[53] Direct Test. Rod Walker (Feb. 5, 2019); http://www.ripuc.org/eventsactions/docket/4916-DIV-Walker_2-5-19.pdf.
[54] Id. at 7.

programs for infrastructure safety and reliability so that the elimination of leak-prone and deteriorating infrastructure is synced up with areas of the gas distribution system needing hardening and pressure improvement; (4) the Commission should direct the Company to track unit costs by project and produce an annual set of standard unit cost tables showing typical costs by size and material pipe with sensitivity for projects in congested areas, rural areas, and replacement versus new construction.[55]

In surrebuttal testimony, Mr. Walker continued to press his prior recommendations. He testified that, in his opinion, subject to the receipt of more detailed data and information, the projected estimate for the Southern Rhode Island Gas Expansion Project was four to five times more expensive than similar work performed under similar conditions by other utilities.[56]

On February 5, 2019, Division consultant David Effron, filed a memorandum and opined that the revenue requirement associated with the FY 2020 Gas ISR Plan was reasonably calculated, subject to the future reconciliation of the FY 2020 Plan revenue requirements.[57]

V. Hearing

At the March 7, 2019 hearing, National Grid presented testimony of John B. Currie, Melissa Little, and Michael J. Pini, all of whom adopted their original and supplemental prefiled testimony and exhibits under oath.

On cross-examination, Mr. Currie confirmed that the Division and the Company had reached agreement on the four recommendations made by Mr. Walker. First, the Company committed, on the record, to providing a comprehensive listing for the entire inventory of leak prone pipe by the end of calendar year 2019, after the implementation of the Gas Business

[55] *Id*. at 13-14.
[56] Surrebuttal Test. of Rod Walker at 7 (Feb. 27, 2019).
[57] Memo of David Effron (Feb. 4, 2019*);* http://www.ripuc.org/eventsactions/docket/4916-DIV-Effron_2-5-19.pdf.

Enablement program.[58] Second, the Company will provide the Division with a list of the "worst offenders" in the leak-prone pipe inventory within a few weeks of the hearing.[59] Third, the Company has agreed to initiate a program in FY 2021 to replace approximately 100 isolated services per year for a period of seven years.[60] Fourth, the Company agreed to provide Excel spreadsheets of detailed cost information for proactive main replacement projects.[61]

Mr. Currie also confirmed that the Company would be meeting with Division representatives to share detailed cost estimate information concerning the Southern Rhode Island Gas Expansion Project shortly after the conclusion of the hearing, prior to awarding the bid for the project. Without revealing the number of bidders, which the Commission ruled was confidential information, Mr. Currie did testify that he was comfortable with the number of bidders because the size and scope of the project naturally limits the number of companies capable of undertaking the work.[62]

Mr. Currie indicated that the Company would not need to install additional pipeline into the Quonset business park and that future customers in Quonset would be responsible for any additional capital investment to get the gas from the terminus of the new pipeline on Route 2 to the business park.[63] Mr. Currie also confirmed that the proposed main replacement projects in the FY 2020 ISR were to replace existing leak-prone infrastructure and were not designed to increase capacity or pressure in any significant manner.[64]

Division witness, Rod Walker, expounded on his prefiled testimony, wherein he opined that the costs for the proposed Southern Rhode Island Gas Expansion Project were, in his

[58] Hr'g. Tr. at 35 (Mar. 7, 2019)
[59] *Id*. at 37.
[60] *Id*. at 39.
[61] *Id*. at 41.
[62] *Id*. at 47-48.
[63] *Id*. at 53-54.
[64] *Id*. at 68.

experience, four to five times greater than similar projects. Mr. Walker reiterated his qualifications as a gas engineer who has done several hundred similar projects, although not necessarily ones with 20 inch mains. He did say that he had a client with a very similar project that did include 20 inch main, so that he felt he was familiar with costs.[65] Mr. Walker conceded that in forming this opinion, he did not perform an in-depth analysis of the proposed costs associated with Southern Rhode Island Gas Expansion Project. He indicated that the Division and the Company had worked out an agreement wherein the Company would provide further information and data to see whether Mr. Walker's initial impression of these costs would be changed. He acknowledged that he did not fully understand the proposed costs and allowed that such costs might be appropriate in Rhode Island, after all. He averred that it is imperative to ascertain all underlying cost factors, including the contractor base in Rhode Island.[66] He acknowledged that he had not yet seen the bids for the project, but was expecting access to that information prior to the Commission's decision in this docket.

VI. Commission's Findings

At an Open Meeting held on March 19, 2019, the Commission voted unanimously to approve the Company's FY 2020 Gas ISR plan and granted the Company's motions for protective treatment of confidential information contained in the Plan. The Commission did express concerns about the variance between the opinion expressed by the Division's expert, Mr. Walker, at the hearing, vis a vis his prefiled testimony and determined that the cost issue is one that bears close monitoring. Therefore, the Commission determined that the Southern Rhode Island Gas Expansion Project shall be subject to a prudency review upon completion of the multi-year project.

[65] *Id*. at 109.
[66] *Id*. at 122.

Furthermore, the Commission decided that the issue of transporting gas from the new pipeline to the Quonset Office Park shall be scrutinized closely.

Accordingly, it is hereby

(23521) ORDERED:

1. The Narragansett Electric Company d/b/a National Grid's proposed FY 2020 Revised Gas Infrastructure, Safety, and Reliability Plan and associated compliance tariffs are hereby approved for usage on and after April 1, 2019.
2. The Narragansett Electric Company d/b/a National Grid's motions for protective treatment are hereby granted.
3. The implementation of the Southern Rhode Island Gas Infrastructure Project shall be subject to a prudency review upon completion of the multi-year project.
4. The Company shall develop, maintain, and provide to the Division, the global list of all aging leak-prone infrastructure risks ranked in its overall replacement program.
5. The Company shall identify and develop a comprehensive risk-based list of its isolated services and commit to replacing all these services within a seven (7) year period, starting in FY2021.
6. The Company shall provide the Division with its Excel spreadsheets associated with this filing.
7. The Company shall provide the Division with its Excel spreadsheets associated with each future Gas ISR filing, as part of its annual filing requirement.
8. The Company shall provide the Division with cost information and data of such sufficient detail to satisfy the Division as to the reasonableness of the cost estimates of the various

components of the Southern RI Gas Expansion Project and to update the Division on these costs on a regular basis throughout the project, at no less than ninety-day intervals.

EFFECTIVE APRIL 1, 2019, IN WARWICK, RHODE ISLAND, PURSUANT TO AN OPEN MEETING DECISION ON MARCH 19, 2019. WRITTEN ORDER ISSUED APRIL 11, 2019.

PUBLIC UTILITIES COMMISSION

*Margaret E. Curran, Chairperson

Marion Gold, Commissioner

Abigail Anthony, Commissioner

NOTICE OF RIGHT OF APPEAL

Pursuant to R.I. Gen. Laws §39-5-1, any person aggrieved by a decision or order of the PUC may, within seven (7) days from the date of the order, petition the Rhode Island Supreme Court for a Writ of Certiorari to review the legality and reasonableness of the decision of order.

*Note: Margaret E. Curran, Chairperson did not participate in this matter.