

National Grid

The Narragansett Electric Company

FY 2020 Gas Infrastructure,
Safety and Reliability Plan

Annual Reconciliation

August 3, 2020

Docket No. 4916

Submitted to:
Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

August 3, 2020

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

**RE: Docket 4916 - Gas Infrastructure, Safety, and Reliability Plan Fiscal Year 2020
Reconciliation Filing**

Dear Ms. Massaro:

I have enclosed 10 copies of National Grid's fiscal year (FY) 2020 Gas Infrastructure, Safety, and Reliability (ISR) Plan Reconciliation filing, which relates to National Grid's FY 2020 Gas ISR Plan filing in the above-referenced docket. This filing provides an overview and description of the \$154.28¹ million of actual capital investment spending by category and an explanation by category of major variances to the budget of \$162.46 million, as approved by the Public Utilities Commission (PUC) in Docket No. 4916.

The pre-filed direct testimonies of Amy S. Smith and Melissa A. Little are enclosed with this filing. Ms. Smith presents National Grid's FY 2020 Gas ISR Plan Annual Reconciliation filing, including the actual spending for the period April 1, 2019 to March 31, 2020. Ms. Smith also provides details concerning the major spending variances by specific ISR Plan categories for this time period. Ms. Little's testimony presents the updated FY 2020 ISR revenue requirement associated with actual capital spending levels for each of FY 2018 through FY 2020, incremental to the estimated revenue requirement on FY 2018 through FY 2020 capital investment that was included in base rates effective September 1, 2018, and actual tax deductibility percentages for FY 2019 capital additions. As explained in Ms. Little's testimony, actual tax deductibility percentages for FY 2020 capital investment will not be known until National Grid files its FY 2020 federal income tax return in December 2020. Consequently, the actual tax deductibility percentages for FY 2020 capital investment will be reflected in the Company's FY 2021 Gas ISR Reconciliation filing and will generate a true-up adjustment in that filing. The updated FY 2020 revenue requirement also includes an adjustment associated with the ISR property tax recovery formula approved in Docket No. 4323 and in Docket No. 4770. Finally, the Company's FY 2020 revenue requirement includes the impact of the Tax Cuts and Jobs Act of 2017, which went into effect on December 22, 2017, on vintage FY 2018 through FY 2020 investment. In

¹ The Company's fourth quarter report for the FY 2019 Gas ISR Plan (also referred to as the Plan) indicated an adjusted total spending of \$155.29 million. When preparing this annual reconciliation filing, the Company finalized adjustments totaling approximately -\$1.01 million, which resulted in total spending of \$154.28 million.

Luly E. Massaro, Commission Clerk
Docket 4916 - Gas ISR FY2020 Reconciliation Filing
August 3, 2020
Page 2 of 2

particular, the revenue requirement reflects (1) the reduction of the federal income tax rate from 35 percent to 21 percent commencing January 1, 2018; and (2) the changes to the bonus depreciation rules for certain capital investments, including ISR-eligible investments, effective September 28, 2017.

As explained in Ms. Little's testimony, the updated FY 2020 revenue requirement associated with the above-referenced items totals \$5,502,510 which is comprised of (1) the FY 2020 revenue requirement on vintages FY 2018, FY 2019 and FY 2020 ISR capital investments above or below the level of capital investment reflected in base distribution rates in Docket No. 4770, (2) the property tax recovery mechanism component, and (3) a true-up to the FY 2019 ISR revenue requirement to reflect actual income tax deductibility as reported on the Company's FY 2019 federal income tax return.

Please note that the FY 2020 Gas ISR Reconciliation has been included in the calculation of the Gas ISR factor contained in National Grid's annual Distribution Adjustment Charge (DAC) filing in Docket No. 5040, which National Grid filed with the PUC today under separate cover. The DAC filing includes a reconciliation of forecasted collections to actual collections.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-7288.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Jennifer Brooks Hutchinson", with a long horizontal flourish extending to the right.

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4916 Service List
Leo Wold, Esq.
Al Mancini, Division
John Bell, Division

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.



Joanne M. Scanlon

August 3, 2020
Date

Docket No. 4916 - National Grid's FY 2020 Gas Infrastructure, Safety and Reliability (ISR) Plan - Service List 8/15/2019

Name/Address	E-mail Distribution	Phone
Robert Humm, Esq. National Grid 280 Melrose St. Providence, RI 02907	robert.humm@nationalgrid.com ;	401-784-7415
	celia.obrien@nationalgrid.com ;	
	Joanne.scanlon@nationalgrid.com ;	
Amy Smith William Richer Melissa Little Ann Little Theresa Burns Michael Pini Nathan Kocon	amy.smith@nationalgrid.com ;	
	William.richer@nationalgrid.com ;	
	Melissa.Little@nationalgrid.com ;	
	Ann.leary@nationalgrid.com ;	
	Theresa.Burns@nationalgrid.com ;	
	Michael.Pini@nationalgrid.com ;	
	Nathan.Kocon@nationalgrid.com ;	
Leo Wold, Esq. Division of Public Utilities and Carriers	Leo.Wold@dpuc.ri.gov ;	401-780-2177
	dmacrae@riag.ri.gov ;	
	MFolcarelli@riag.ri.gov ;	
	Al.mancini@dpuc.ri.gov ;	
	John.bell@dpuc.ri.gov ;	
	John.spirito@dpuc.ri.gov ;	
	Jonathan.Schrag@dpuc.ri.gov ;	
	Ronald.gerwatowski@dpuc.ri.gov ;	
Rod Walter, CEO/President Rod Walker & Associates	Rwalker@RWalkerConsultancy.com ;	706-244-0894
Office of Energy Resources (OER) Andrew Marcaccio, Esq. Dept. of Administration Division of Legal Services One Capitol Hill, 4 th Floor Providence, RI 02908	Andrew.marcaccio@doa.ri.gov ;	

Christopher Kearns, OER Carrie Gill Nick Ucci	Christopher.Kearns@energy.ri.gov ;	
	Carrie.Gill@energy.ri.gov ;	
	Nicholas.Ucci@energy.ri.gov ;	
File an original & nine (9) copies w/: Luly E. Massaro, Commission Clerk Margaret Hogan, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick RI 02888	Luly.massaro@puc.ri.gov ;	401-780-2107
	Margaret.hogan@puc.ri.gov ;	
	Cynthia.WilsonFrias@puc.ri.gov ;	
	Sharon.ColbyCamara@puc.ri.gov ;	
	Todd.bianco@puc.ri.gov ;	
	Alan.nault@puc.ri.gov ;	

**Testimony of
Amy Smith**

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4916
FY 2020 GAS INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN
ANNUAL RECONCILIATION FILING
WITNESS: AMY S. SMITH**

PRE-FILED DIRECT TESTIMONY

OF

AMY SMITH

August 3, 2020

Table of Contents

I. Introduction..... 1

II. Purpose of Testimony 3

III. FY 2020 Gas ISR Plan Actual Spending..... 4

 A. Non-Discretionary Work 6

 B. Discretionary Work..... 9

IV. Annual Reconciliation 16

V. Conclusion 17

I. Introduction

Q. Please state your name and business address.

A. My name is Amy Smith. My business address is 40 Sylvan Road, Waltham, MA 02451.

Q. By whom are you employed and in what capacity?

A. I am employed by National Grid USA Service Company, Inc. (Service Company) as the Director, New England Jurisdiction. I am the New England state jurisdictional lead for all gas system issues, including those related to the capital investment strategies for Narragansett Electric Company, d/b/a National Grid (National Grid or the Company). In my role, I work closely with the Rhode Island Jurisdictional President and Jurisdiction staff on all local gas issues related to the Rhode Island gas system in the Rhode Island service territory. My responsibilities include working with regulators on issues related to the gas system, developing strategies to support Company objectives regarding investment in the gas system, and providing testimony regarding capital investments in National Grid's gas system during state regulatory proceedings.

Q. Please describe your educational background and professional experience.

A. In 1982, I graduated from Simmons College with a Bachelor of Arts in Economics and Mathematics. In 1991, I joined Boston Gas Company (now National Grid) as an analyst in Gas Supply Planning. Since that time, I have held a variety of positions in Rates and Regulation, Performance Measurement, Credit and Collections, Customer Regulatory

1 Relations, Emergency Dispatch, Gas Resource Planning, Network Strategy, Construction,
2 Gas Pipeline Safety and Compliance and Gas Investment, Resource and Rate Case
3 Planning. I assumed my current position on April 1, 2019. In addition, from 1984 to 1989,
4 I worked for the Massachusetts Department of Public Utilities (the Department).

5
6 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**
7 **(PUC)?**

8 A. Yes. In 2020, 2011, and 2012, I testified at the PUC in support of the Company's Gas
9 Infrastructure, Safety, and Reliability (ISR) Plans. In 2020, I filed testimony with the PUC
10 in support of the FY 2021 Gas ISR Plan. In 2011 and 2012, I testified at the PUC in
11 support of the Company's Gas Infrastructure, Safety, and Reliability Plans. In 2011, I
12 testified at a technical session in support of the Company's first Gas ISR Plan and
13 presented the Company's five-year capital plan along with an explanation of how the
14 existing Accelerated Replacement Program (ARP) would be closed out and transitioned to
15 the new Gas ISR Plan (Docket 4219). In 2012, I also testified at a technical session in
16 support of the Company's Gas ISR Plan for FY 2013 and addressed regulatory reporting
17 requirements. (Docket 4306). Additionally, in 2019, I filed testimony with the PUC in
18 support of the Company's Reconciliation of the FY 2019 Infrastructure, Safety, and
19 Reliability Plan.

II. Purpose of Testimony

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the Company's FY 2020 Annual Reconciliation filing for the Gas ISR Plan (also referred to as the Plan), including the actual spending for the period April 1, 2019 through March 31, 2020. As part of this filing, I also provide detailed information regarding the major spending variances by specific Plan categories for the period April 1, 2019 through March 31, 2020. As discussed in her pre-filed direct testimony, Company witness Melissa A. Little uses the actual spending information to calculate the FY 2020 Plan revenue requirement, which is then reconciled with the Company's actual Plan revenues for FY 2020. The reconciliation balance is then included in the Company's annual Distribution Adjustment Charge (DAC) filing, which will be reflected in rates effective November 1, 2020.

Q. Are you sponsoring any attachments with your testimony?

A. Yes. I am sponsoring the following attachment that accompanies my testimony:

- Attachment AS-1 Gas Infrastructure, Safety, and Reliability Plan Fiscal Year 2020 Annual Reconciliation

III. FY 2020 Gas ISR Plan Actual Spending

Q. Please summarize the results of the Company's Gas ISR Plan actual spending for FY 2020 to the FY 2020 budget.

A. Attachment AS-1 to my testimony is the Company's FY 2020 Gas ISR Plan Annual Report and Reconciliation of actual spending for the period April 1, 2019 to March 31, 2020. As set forth in Table 1 of Attachment AS-1, for FY 2020, the Company spent \$154.28 million for capital investments under the Plan, which is comprised of \$111.55 million for Gas ISR excluding the Southern Rhode Island Gas Expansion Project (Gas ISR) and \$42.73 million for the Southern RI Gas Expansion Project (Gas Expansion Project). This amount represents a variance of approximately \$8.18 million less than the approved Plan annual budget of \$162.46 million, which is comprised of \$118.00 million for Gas ISR and \$44.46 million for the Gas Expansion Project. The \$8.18 million under-budget variance for the year is discussed below in more detail for each specific category of the Plan.

A total of 61.6 miles of leak-prone pipe were abandoned across all programs, which is slightly above the plan of 60.0 miles for FY 2020. This amount includes 11.8 miles for the Public Works program, 48.3 miles for the Proactive Leak-Prone Pipe program, and 1.5 from Reliability and Reinforcement programs. Elimination of cast and wrought iron and unprotected steel pipe (i.e., leak-prone pipe) remains a key element of the Company's overall ISR Plan and provides for further enhanced safety and reliability of the gas

1 distribution system through removal of leak-prone pipe. These materials have been
2 identified in the Company's Distribution Integrity Management Plan (DIMP) as riskier
3 assets and have been targeted for replacement through a 20-year replacement plan. The
4 DIMP provides a structured approach to identification, evaluation, and mitigation of risks
5 associated with the gas distribution system. The Company has eliminated approximately
6 160 gas leaks through abandonment of the 61.6 miles of leak-prone gas main in FY 2020.

7
8 Notably, the Company's fourth quarter report for the FY 2020 Gas ISR Plan indicated
9 adjusted total spending of \$155.29 million. When preparing this annual reconciliation
10 filing, the Company finalized net adjustments totaling approximately -\$1.01 million
11 (credit), which resulted in total spending of \$154.28 million. The adjustments were
12 completed as the result of a work order closeout review that determined, in some
13 instances, that capital/cost of removal was incorrectly charged on expense-only jobs.
14 Thus, the capital expense-to-operating expense adjustments were completed to properly
15 account for the costs. These adjustments primarily provided credits in the Reactive Leaks
16 category.

17
18 **Q. What were the primary drivers for the \$8.18 million under-budget variance in FY**
19 **2020?**

20 A. As shown in Attachment AS-1 at Table 2, several drivers primarily contributed to the
21 \$8.18 million under-budget variance in FY 2020. First, there was an under-budget

1 variance of \$1.03 million in the Non-Discretionary category, including an under-budget
2 variance of \$0.42 million for the Public Works program, underspending of \$0.36 million
3 for Mandated programs, and an under-budget variance of \$0.25 million for
4 Damage/Failure. Second, there was an under-budget variance of \$5.42 million in the
5 Discretionary category, excluding the Gas Expansion Project. The Discretionary
6 underspend included underspending of \$2.83 million in the Proactive Main Replacement
7 category, which was primarily driven by underspending in the Large Diameter LPCI sub-
8 category, and underspending of \$2.60 million in the Reliability category. Third, there
9 was an under-budget variance of \$1.73 million for the Southern Rhode Island Gas
10 Expansion Project, which was driven by underspend in the Existing Facilities sub-
11 category.

12
13 **A. Non-Discretionary Work**

14 **Q. Please explain the under-budget variance of \$0.42 million for the Public Works**
15 **program in FY 2020.**

16 **A.** For FY 2020, the Company spent a net of \$16.52 million, net reimbursements, compared
17 to an annual budget of \$16.94 million for the Public Works program, resulting in an
18 under-budget variance of \$0.42 million. The Non-Reimbursable sub-category spent
19 \$16.29 million against a fiscal year budget of \$16.94 million, resulting in an
20 underspending variance of \$0.65 million. The Non-Reimbursable underspending
21 variance was due to the timing of when work requests were received and permitting

1 issues in Providence. For FY 2020, the Company installed 14.6 miles of a plan of 14.0
2 miles for new gas main and has abandoned 11.8 miles of a plan of 14.0 miles of leak-
3 prone pipe through the Public Works program. The underspend for Public Works is
4 primarily the result of the Company receiving and starting work later than originally
5 forecasted and the timing of when the Company was able to receive permits from cities
6 and towns, which the Company applied for later in the construction season due to when
7 the Company received the work requests. Significant projects completed during the year
8 include Route 6 & 10 Phases 3A & 4 Westminster Street Bridge Relays (installed 364
9 feet and abandoned 445 feet), Route 6 & 10 Phase 3B Broadway Bridge Relay (installed
10 503 feet and abandoned 503 feet), Butler Street in Cranston (installed 2,957 feet and
11 abandoned 2,515 feet), and Mauran Street in Cranston (installed 8,356 feet and
12 abandoned 7,495 feet).

13
14 **Q. Please explain the under-budget variance of \$0.36 million for the Mandated**
15 **Programs category in FY 2020.**

16 A. Spending for Mandated Programs was \$0.36 million under-budget for FY 2020. There
17 are two primary drivers of the underspend in this category. First, the Reactive Leaks and
18 Reactive Service Replacement category was under-spent because the Company needed to
19 repair fewer leaks than forecasted. The Reactive Leaks and Reactive Service
20 Replacement category also received a \$0.84 million credit related to the work order
21 closeout review, as mentioned above, which further contributed to the underspend in this

category. Second, the Corrosion category was also under-spent, which was the result of corrosion surveys, which revealed that the condition of pipes was in more favorable shape. Consequently, there was a higher percentage of operating expense repair work and a lower percentage of capitalized pipe replacement work. The fiscal year underspend in these categories is mostly offset by budget overspend in several categories including Purchase Meters, Reactive Main Replacement, and the Pipeline Integrity Verification Program (IVP). First, the Purchase Meters category incurred higher than forecasted spend because the Company received some meters in FY 2020 that should have been delivered in FY 2019 due to a meter shortage from the Company's primary supplier, higher meter shop costs, along with higher unit costs for meters purchased from alternate suppliers because of a meter shortage from a primary supplier. Second, the Reactive Main Replacement category saw more reactive main replacement work materialize than originally forecasted. Third, the Pipeline IVP, which did not have a budget for FY 2020, incurred closeout costs primarily for work performed in FY 2019 with invoices paid in FY 2020.

Q. Please explain the under-budget variance of \$0.25 million for the Damage/Failure program in FY 2020.

A. For FY 2020, the Company spent \$0 of an annual budget of \$0.25 million for the Damage/Failure Reactive program, resulting in an underspending variance of \$0.25

1 million. The Company did not experience any reactive projects that qualified for this
2 program in FY 2020.

3
4 **B. Discretionary Work**

5 **Q. Please explain the under-budget variance of \$2.83 million for the Proactive Main**
6 **Replacement program in FY 2020.**

7 A. For FY 2020, the Company spent approximately \$60.05 million of a budget of \$62.88
8 million for the Proactive Main Replacement program, resulting in an underspending
9 variance of \$2.83 million. In FY 2020, the Company installed 46.9 miles of new main
10 against a plan of 44.0 miles and abandoned 48.3 miles of leak-prone pipe of a plan of 45
11 miles within the Proactive Main Replacement program. Across all programs, the
12 Company was able to abandon 61.6 miles of leak-prone pipe of a plan of 60 miles for FY
13 2020. The primary driver of the underspending variance was the Large Diameter LPCI
14 sub-category, which experienced delays in receiving permits from the City of Providence
15 and resulted in a majority of the planned FY 2020 work being deferred until FY 2021. In
16 addition, there was underspending for the Atwells Avenue project because the final
17 restoration of Segment 2 was not completed as planned in FY 2020. The underspending
18 was partially offset by overspending in the Proactive Main Replacement Leak Prone Pipe
19 subcategory. Due to favorable weather conditions, the Company was able to complete
20 some final restoration paving earlier than forecasted and begin some FY 2021 work in FY
21 2020.

1 **Q. Please explain the \$2.60 million under-budget variance for the Reliability programs**
2 **in FY 2020.**

3 A. For FY 2020, the Company spent approximately \$15.93 million against a budget of
4 \$18.53 million for the Reliability program, resulting in an underspending variance of
5 \$2.60 million. There are several drivers of this underspending variance. The first driver
6 was the Pressure Regulating Facilities projects located in Providence and East
7 Providence, which were delayed and eventually deferred until FY 2021 due to the
8 permitting issues and the fact that funds were either not spent or were allocated to other
9 Reliability programs in FY 2020. Pressure Regulating Facilities was also under-spent
10 because of a project delay in Pawtucket due to an easement issue and that project was
11 deferred until FY 2021. The second driver was underspending in the Gas System
12 Reliability – Gas Planning category, which was due to the deferral of the Scott Road
13 Take Station until FY 2021. Please note that for the Gas System Reliability – Gas
14 Planning category, most of the station work was completed for the Wood at Woodlawn
15 regulator station project in Bristol, and the remaining work to be completed in FY 2021 is
16 related site abandonment and final site restoration. The third driver was underspending in
17 the LNG program due to delays associated with vendor contract negotiations and timing
18 of project start dates. The fourth driver was the Take Stations category, which was
19 underspent because some FY 2020 work was pulled forward into FY 2019 and potential
20 work to replace it was not able to be completed in FY 2020. The Company was able to
21 accelerate and complete take station work at the George Washington Highway location in

1 Lincoln. The fifth driver was the deferral of a portion of the Heater Program at the Laten
2 Knight Take Station until FY 2021 for contractor availability and pricing. The sixth
3 driver was the System Automation program, which experienced lower than anticipated
4 installation costs for some locations. The System Automation program also experienced
5 some timing delays with installing telemetry at some regulator stations, resulting in a
6 partial deferral until FY 2021.

7
8 The underspend in several categories, as described above, was partially offset by
9 overspend of \$3.87 million on the Allens Avenue Multi Station Rebuild project, which
10 incurred higher than expected costs for the project, but separately was able to accelerate a
11 portion of the project timeline that pulled forward a \$1.30 million scope of project work
12 from FY 2021 into FY 2020; the \$1.30 budget reduction is reflected in the FY 2021 ISR
13 Budget approved by the Rhode Island Public Utilities Commission on March 17, 2020 in
14 Docket No. 4996. The Company was also able to move forward, from FY 2021 to
15 FY2020, an additional scope of work valued at approximately \$1.60 million for the
16 Allen's Avenue Multi Station Rebuild project. However, due to the timing of contractor
17 invoicing and payments, approximately \$1.40 million of those charges will be incurred in
18 the FY 2021 ISR. The reliability underspend was also partially offset by overspend in the
19 Replace Pipe on Bridges category, which incurred site preparation and excavation costs,
20 not included in the original budget, related to lining repair work for pipe on the bridge at
21 Scituate Avenue in Johnston. The lining repair work was covered under warranty by the

original contractor; however, the site preparation and excavation costs were not covered under warranty. Additionally, the Replace Pipe on Bridges category incurred preparation expenses related to the Goat Island project in Newport.

Q. Please explain the under-budget variance of \$0.26 million for Pipeline on the Southern Rhode Island Gas Expansion Project in FY 2020.

A. For FY 2020, the Company spent \$40.18 million of an annual budget of \$39.92 million related to pipeline on the Southern Rhode Island Gas Expansion Project (Gas Expansion Project). The Company entered into a contract with Bond Brothers, Inc. (Bond) for constructing all three phases of the Project. Phase 1 (12,640 feet) of construction commenced on April 22, 2019. At the beginning of the fiscal year, the forecast anticipated having 12,640 feet installed by November 1, 2019. On June 22, 2019, the Company and Bond implemented a Recovery Plan which expected to have 12,640-feet installed by November 15, 2019; the need for a schedule Recovery Plan was primarily driven by schedule delays necessary to remove excess bedrock, which exceeded the original project assumptions.

With the implementation of the Recovery Plan, the project was able to install the full 12,640 feet of pipeline scheduled for Phase 1, out of which, natural gas was introduced into 11,550 feet of the newly installed pipe on November 25, 2019, which helped meet the forecasted gas demand before the winter weather. The remaining footage of pipeline,

1 approximately 1,090 feet, was installed and capped in Phase 1 and will be gassed in
2 during Phase 2 of the project. This approach was followed to ensure gas customers
3 would not be impacted during the heating season.

4
5 In the fourth quarter, the project activities primarily focused on preparation for Phase 2,
6 which included permitting, means and methods for upcoming jack and bore pipe
7 installations, coordination with the Rhode Island Department of Transportation (RIDOT),
8 and test pitting to confirm and determine pipe center line locations. Leading into the
9 fourth quarter, the project anticipated receiving Phase 2 manufactured pipe at the end of
10 March 2020. However, due to the COVID-19 Pandemic, manufacturing of that pipe was
11 temporarily shut down and delivery was delayed by one month. The project team was
12 able to source pipe from various vendors, who continued to meet the Company's
13 standards for the project to keep the project moving forward and prevent the project
14 contractor from experiencing idle time of its workforce; the pipe was received in the first
15 quarter of FY 2021. The pipe manufacturers resumed their operations and additional pipe
16 has been delivered.

17
18 Additionally, in FY 2020, the project incurred incremental paving expenses of
19 approximately \$0.34 million to comply with RIDOT permits, requests, and new concrete
20 base standards.

1 **Q. Please explain the under-budget variance of \$1.99 million for Existing Facilities on**
2 **the Southern Rhode Island Gas Expansion Project in FY 2020.**

3 A. For FY 2020, the Company spent \$2.55 million of an annual budget of \$4.54 million in
4 the Existing Facilities category, which includes the Maximum Operating Pressure (MOP)
5 Project, Project Development – Regulator Station Investment, and New Regulator Station
6 Installation. The Company’s FY 2020 Gas ISR plan in Docket No. 4916 included \$4.54
7 million for material testing work on the MOP Project. On further review of the existing
8 facilities portfolio, the Company decided to complete the material verification work in
9 FY 2020 as planned and shift the actual pressure increase to FY 2021. The shift did not
10 change the total anticipated cost of \$4.537 million but was forecasted to cause an
11 underspending variance of \$0.98 in FY 2020 based on the excavation and material
12 verification pricing agreements which were reached with two contractors in July 2019.
13 The remaining FY 2020 budgeted funds or forecasted underspend of \$0.98 million were
14 allocated equally to fund anticipated preparation work in two associated categories,
15 Regulator Station Investment projects and a Proposed New Regulator Station, all of
16 which were beneficial to start in FY 2020 and are part of the same overall Existing
17 Facilities portfolio. As of the beginning of FY 2020, these two categories were set to
18 begin field work in FY 2021 and FY 2022, although the work has now been deferred
19 until FY 2022 and FY 2023 and did not have budgeted funding in FY 2020 for the
20 preparation work.

1 For the MOP Project, there were two drivers of the \$1.16 million underspending variance
2 to the \$3.56 million allocated budget. The first was that actual incurred costs were
3 slightly lower than originally estimated, as no sites encountered the need for dewatering
4 and the team was able to open multiple locations at the same time. The second was that
5 due to the later than initially forecasted field work start date, the material verification
6 work and excavation at 2 of the 26 excavation locations (of 43 total locations) originally
7 planned for FY 2020, was not completed and was deferred until FY 2021. Additionally,
8 retesting is being conducted at 2 test sites in FY 2021.

9
10 There was a \$0.36 million underspending variance to the allocated budget of \$0.49
11 million in the Project Development – Regulator Station Investment category. In FY
12 2020, the Company completed the needs analysis and the options analysis, and completed
13 the conceptual designs to support the options analysis. The project started the design for
14 the Regulator Station Investment – Upgrades to Existing Pressure Regulating Facilities at
15 Cranston Take Station and Cowesett Regulator Station and plans to continue that work
16 along with project development in FY 2021. Although some planning activities for
17 future years were able to be accelerated into FY 2020, the field work start date for several
18 projects was able to be deferred into FY 2022 and FY 2023 because of demand forecast
19 changes and the corresponding preparation for those projects will primarily occur in the
20 fiscal year before the start of the field work. Additionally, the initial planning for the
21 Remote Operating Valve Installation is now forecasted to occur in FY 2021.

1 There was a \$0.47 million underspending variance to the allocated budget of \$0.49
2 million in the New Regulator Station Installation category. For FY 2020, the Company
3 completed an initial site analysis and incurred costs of \$0.02 million of an allocated fiscal
4 year budget of \$0.491 million. In FY 2021 and FY 2022, the Company will be
5 performing the needs analysis and the options analysis for the New Regulator Installation
6 project.

7
8 **IV. Annual Reconciliation**

9 **Q. What is the amount of FY 2020 capital spending that the Company is seeking to**
10 **reconcile in this filing?**

11 A. The Company is seeking to reconcile its FY 2020 actual capital spending of \$154.28
12 million in this filing. As noted in prior Gas ISR Plan filings, in implementing the Gas
13 ISR Plan in any fiscal year, the circumstances encountered during the year may require
14 reasonable deviations from the original Plan approved by the PUC.¹ As detailed above,
15 the reasons for the \$8.18 million net capital underspending variance for FY 2020 are
16 consistent with the intent of the Gas ISR Plan to maintain the overall safety and reliability
17 of the Company's gas system, which exceeded plan on abandonment miles of leak prone-
18 pipe, and to ensure that customers are charged only for the appropriate Plan costs in the
19 ISR annual reconciliation filing.

20
¹ See FY 2012 Gas ISR Plan filed with the PUC on December 20, 2010, at Section 1, page 3 of 6, in
Docket No. 4219.

1 V. **Conclusion**

2 Q. **Does this conclude your testimony?**

3 A. Yes.

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4916
FY 2020 GAS INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN
ANNUAL RECONCILIATION FILING**

Attachment AS-1

FY 2020 Gas Infrastructure, Safety and Reliability Plan Annual Reconciliation Filing

Gas Infrastructure, Safety, and Reliability Plan

Fiscal Year 2020 Annual Reconciliation Filing

EXECUTIVE SUMMARY

The Narragansett Electric Company d/b/a/ National Grid (Company) submits this Annual Reconciliation filing for the fiscal year (FY) 2020 Gas Infrastructure, Safety, and Reliability (ISR) Plan, which the Rhode Island Public Utilities Commission (PUC) approved in Docket No. 4916. The Company's fourth quarter report for the FY 2020 Gas ISR Plan (also referred to as the Plan) indicated an adjusted total spending of \$155.29 million. When preparing this annual reconciliation filing, the Company finalized net adjustments totaling approximately -\$1.01 million (credit), which resulted in total spending of \$154.28 million. The adjustments were completed as the result of a work order closeout review that determined, in some instances, that capital/cost of removal was incorrectly charged on expense-only jobs. Thus, the capital expense-to-operating expense adjustments were completed to properly account for the costs. These adjustments primarily provided credits in the Reactive Leaks category.

This filing provides an overview and description of the reconciled \$154.28 million of actual capital investment spending by category, as well as an explanation by category of major variances to the budget of \$162.46 million approved in Docket No. 4916. The total spending of \$154.28 million is comprised of \$111.55 million for Gas ISR excluding the Southern Rhode Island Gas Expansion Project (Gas ISR) and \$42.73 million for the Southern Rhode Island Gas Expansion Project (Gas Expansion Project). The total budget of \$154.28 million represents a variance of approximately \$8.18 million less than the approved Plan annual budget of \$162.46 million, which was comprised of \$118.00 million for Gas ISR and \$44.46 million for the Gas Expansion Project.

FY 2020 Actual Results

As set forth in Table 1 below, in FY 2020, the Company spent \$35.57 million for Non-Discretionary capital work (i.e., work required by legal, regulatory code, and/or agreement, with limited exceptions), \$75.99 million for Discretionary capital work (without the Gas Expansion Project), and \$42.73 million for the Gas Expansion Project under the total Gas ISR Plan. These amounts are approximately \$1.03 million less than planned on Non-Discretionary programs, approximately \$5.42 million less than planned on Discretionary program, and approximately \$1.73 million less than planned on the Gas Expansion Project compared to the annual Gas ISR capital budget of \$36.59 million for Non-Discretionary programs, \$81.41 million for Discretionary program, and \$44.46 million for the Gas Expansion Project as approved in Docket

No. 4916. A total of 61.6 miles of leak-prone pipe was abandoned across all programs, which is slightly above the plan of 60.0 miles for FY 2020. The Company eliminated approximately 160 gas leaks through abandonment of the leak-prone gas main in FY 2020. The variances by category of work are shown in Table 1, with the key drivers discussed in greater detail below. Additional details of each sub-category are provided in Table 2.

Table 1

**The Narragansett Electric Company
d/b/a National Grid - RI Gas
Capital Spending by Investment Categories - Summary
FY 2020 through March 31, 2020
(\$000)**

Investment Categories	Budget	Actual	Variance
NON-DISCRETIONARY			
Public Works*	\$16,940	\$16,523	(\$416)
Mandated Programs	\$19,403	\$19,043	(\$360)
Damage / Failure (Reactive)	\$250	\$0	(\$250)
NON-DISCRETIONARY SUB-TOTAL	\$36,593	\$35,566	(\$1,027)
DISCRETIONARY			
Proactive Main Replacement	\$62,881	\$60,053	(\$2,828)
Reliability Programs	\$18,528	\$15,933	(\$2,595)
SUBTOTAL DISCRETIONARY (Without Gas Expansion)	\$81,410	\$75,986	(\$5,424)
Southern RI Gas Expansion Project	\$44,459	\$42,729	(\$1,731)
DISCRETIONARY TOTAL (With Gas Expansion)	\$125,869	\$118,715	(\$7,154)
GAS ISR TOTAL (Without Gas Expansion)	\$118,003	\$111,553	(\$6,450)
GAS ISR TOTAL (With Gas Expansion)	\$162,462	\$154,281	(\$8,181)

() in Variance column denotes an under-spend

*Public Works Program includes reimbursements which were credited as received throughout the year.

Non-Discretionary Work¹

Public Works Program - \$0.42 million variance to fiscal year budget

For FY 2020, the Company spent a net of \$16.52 million, net reimbursements, compared to an annual budget of \$16.94 million for the Public Works program, resulting in an under-budget variance of \$0.42 million. The Non-Reimbursable sub-category spent \$16.29 million against a fiscal year budget of \$16.94 million, resulting in an underspending variance of \$0.65 million. The Non-Reimbursable underspending variance was due to the timing of when work requests were received and permitting issues in Providence. For FY 2020, the Company installed 14.6 miles of a plan of 14.0 miles for new gas main and has abandoned 11.8 miles of a plan of 14.0 miles of leak-prone pipe through the Public Works program. The underspend for Public Works is primarily the result of the Company receiving and starting work later than originally forecasted and the timing of when the Company was able to receive permits from cities and towns, which the Company applied for later in the construction season due to when the Company received the work requests. Significant projects completed during the year include Route 6 & 10 Phases 3A & 4 Westminster Street Bridge Relays (installed 364 feet and abandoned 445 feet), Route 6 & 10 Phase 3B Broadway Bridge Relay (installed 503 feet and abandoned 503 feet), Butler Street in Cranston (installed 2,957 feet and abandoned 2,515 feet), and Mauran Street in Cranston (installed 8,356 feet and abandoned 7,495 feet). Public Works cost detail is provided in the table below.

Public Works		
Category	FY 20 Actuals	% of Total Spend
Base Labor, Overtime, Employee Expenses	\$1,564,357	9%
Benefits	\$1,018,556	6%
Clearing Burdens	\$2,936,072	17%
Contractor/Consultants	\$9,638,722	56%
Restoration/Police/Permits	\$993,937	6%
Materials	\$1,314,539	8%
Other	(\$134,150)	-1%
Subtotal	\$17,332,033	100%
City State Construction Reimbursements	(\$808,983)	

¹ Non-Discretionary programs include projects that are required by legal, regulatory code, and/or agreement, or which are the result of damage or failure, with limited exceptions.

Mandated Programs – \$0.36 million under-budget variance

Spending for Mandated Programs was \$0.36 million under-budget for FY 2020. There are two primary drivers of the underspend in this category. First, the Reactive Leaks and Reactive Service Replacement category was underspent because there were fewer leaks and the Company only needed to repair fewer leaks than forecasted. Second, the Corrosion category was also underspent, which was the result of corrosion surveys, which revealed that the condition of pipes was in more favorable shape. Consequently, there was a higher percentage of operating expense repair work and a lower percentage of capitalized pipe replacement work. The fiscal year underspend in these categories is mostly offset by budget overspend in several categories including Purchase Meters, Reactive Main Replacement, and the Pipeline Integrity Verification Program (IVP). First, the Purchase Meters category incurred higher than forecasted spend because the Company received some meters in FY 2020 that should have been delivered in FY 2019 due to a meter shortage from the Company's primary supplier, higher meter shop costs, along with higher unit costs for meters purchased from alternate suppliers because of a meter shortage from a primary supplier. Second, the Reactive Main Replacement category saw more reactive main replacement work materialize than originally forecasted. Third, the Pipeline IVP, which did not have a budget for FY 2020, incurred closeout costs primarily for work performed in FY 2019 with invoices paid in FY 2020.

Damage/Failure – \$0.25 million under-budget variance

For FY 2020, the Company spent \$0 of an annual budget of \$0.25 million for the Damage/Failure Reactive program, resulting in an underspending variance of \$0.25 million. The Company did not experience any reactive projects that qualified for this program in FY 2020.

Discretionary Work²

Proactive Main Replacement Program – \$2.83 million under-budget variance

For FY 2020, the Company spent approximately \$60.05 million of a budget of \$62.88 million for the Proactive Main Replacement program, resulting in an underspending variance of \$2.83 million. In FY 2020, the Company installed 46.9 miles of new main against a plan of 44.0 miles and abandoned 48.3 miles of leak-prone pipe of a plan of 45 miles within the Proactive Main Replacement program. Across all programs, the Company was able to abandon 61.6 miles

² With limited exceptions, discretionary programs are not required by legal, regulatory code, or agreement, or a result of damage or failure.

of leak-prone pipe of a plan of 60 miles for FY 2020. The primary driver of the underspending variance was the Large Diameter LPCI sub-category, which experienced delays in receiving permits from the City of Providence and resulted in a majority of the planned FY 2020 work being deferred until FY 2021. In addition, there was underspending for the Atwells Avenue project because the final restoration of Segment 2 was not completed as planned in FY 2020. The underspending was partially offset by overspending in the Proactive Main Replacement Leak Prone Pipe subcategory. Due to favorable weather conditions, the Company was able to complete some final restoration paving earlier than forecasted and begin some FY 2021 work in FY 2020. Proactive Main Replacement cost detail is provided in the table below.

Proactive Main Replacement		
Category	FY 20 Actuals	% of Total Spend
Base Labor, Overtime, Employee Expenses	\$4,814,873	8%
Benefits	\$3,001,778	5%
Clearing Burdens	\$10,705,723	18%
Contractor/Consultants	\$31,942,957	53%
Restoration/Police/Permits	\$6,544,062	11%
Materials	\$3,327,726	6%
Other	(\$283,822)	0%
Subtotal	\$60,053,297	100%

Reliability Program – \$2.60 million under-budget variance

For FY 2020, the Company spent approximately \$15.93 million against a budget of \$18.53 million for the Reliability program, resulting in an underspending variance of \$2.60 million. There are several drivers of this underspending variance. The first driver was the Pressure Regulating Facilities projects located in Providence and East Providence, which were delayed and eventually deferred until FY 2021 due to the permitting issues and the fact that funds were either not spent or were allocated to other Reliability programs in FY 2020. Pressure Regulating Facilities was also under spent because of a project delay in Pawtucket due to an easement issue and that project was deferred until FY 2021. The second driver was underspending in the Gas System Reliability – Gas Planning category, which was due to the deferral of the Scott Road Take Station until FY 2021. Please note that for the Gas System Reliability – Gas Planning category, most of the station work was completed for the Wood at Woodlawn regulator station project in Bristol, and the remaining work to be completed in FY 2021 is related site abandonment and final site restoration. The third driver was underspending in the LNG program due to delays associated with vendor contract negotiations and timing of

project start dates. The fourth driver was the Take Stations category, which was underspent because some FY 2020 work was pulled forward into FY 2019 and potential work to replace it was not able to be completed in FY 2020. The Company was able to accelerate, and complete take station work at the George Washington Highway location in Lincoln. The fifth driver was the deferral of a portion of the Heater Program at the Laten Knight Take Station until FY 2021 for contractor availability and pricing. The sixth driver was the System Automation program, which experienced lower than anticipated installation costs for some locations. The System Automation program also experienced some timing delays with installing telemetry at some regulator stations, resulting in a partial deferral until FY 2021.

The underspend in several categories, as described above, was partially offset by overspend of \$3.87 million on the Allens Avenue Multi Station Rebuild project, which incurred higher than expected costs for the project, but separately was able to accelerate a portion of the project timeline that pulled forward a \$1.30 million scope of project work from FY 2021 into FY 2020; the \$1.30 budget reduction is reflected in the FY 2021 ISR Budget approved by the Rhode Island Public Utilities Commission on March 17, 2020 in Docket No. 4996. The Company was also able to move forward, from FY 2021 to FY2020, an additional scope of work valued at approximately \$1.60 million for the Allen's Avenue Multi Station Rebuild project. However, due to the timing of contractor invoicing and payments, approximately \$1.40 million of those charges will be incurred in the FY 2021 ISR. The reliability underspend was also partially offset by overspend in the Replace Pipe on Bridges category, which incurred site preparation and excavation costs, not included in the original budget, related to lining repair work for pipe on the bridge at Scituate Avenue in Johnston. The lining repair work was covered under warranty by the original contractor; however, the site preparation and excavation costs were not covered under warranty. Additionally, the Replace Pipe on Bridges category incurred preparation expenses related to the Goat Island project in Newport.

Southern Rhode Island Gas Expansion Project

Pipeline – \$0.26 million overspending variance to fiscal year budget

For FY 2020, the Company spent \$40.18 million of an annual budget of \$39.92 million related to pipeline on the Southern Rhode Island Gas Expansion Project (Gas Expansion Project). The Company entered into a contract with Bond Brothers, Inc. (Bond) for constructing all three phases of the Project. Phase 1 (12,640 feet) of construction commenced on April 22, 2019. At the beginning of the fiscal year, the forecast anticipated having 12,640 feet installed by November 1, 2019. On June 22, 2019, the Company and Bond implemented a Recovery Plan which expected to have 12,640-feet installed by November 15, 2019; the need for a schedule

Recovery Plan was primarily driven by schedule delays necessary to remove excess bedrock, which exceeded the original project assumptions.

With the implementation of the Recovery Plan, the project was able to install the full 12,640 feet of pipeline scheduled for Phase 1, out of which, natural gas was introduced into 11,550 feet of the newly installed pipe on November 25, 2019, which helped meet the forecasted gas demand before the winter weather. The remaining footage of pipeline, approximately 1,090 feet, was installed and capped in Phase 1 and will be gasged in during Phase 2 of the project. This approach was followed to ensure gas customers would not be impacted during the heating season.

In the fourth quarter, the project activities primarily focused on preparation for Phase 2, which included permitting, means and methods for upcoming jack and bore pipe installations, coordination with the Rhode Island Department of Transportation (RIDOT), and test pitting to confirm and determine pipe center line locations. Leading into the fourth quarter, the project anticipated receiving Phase 2 manufactured pipe at the end of March 2020. However, due to the COVID-19 Pandemic, manufacturing of that pipe was temporarily shut down and delivery was delayed by one month. The project team was able to source pipe from various vendors, who continued to meet the Company's standards for the project, to keep the project moving forward and prevent the project contractor from experiencing idle time of its workforce; the pipe was received in the first quarter of FY 2021. The pipe manufacturers resumed their operations and additional pipe has been delivered.

Additionally, in FY 2020, the project incurred incremental paving expenses of approximately \$0.34 million to comply with RIDOT permits, requests, and new concrete base standards.

Existing Facilities -Maximum Operating Pressure (MOP) Project – \$1.16 million underspending variance to \$3.56 million fiscal year budget

For FY 2020, the MOP Project incurred costs of \$2.40 million of an annual budget of \$3.56 million, resulting in an underspending variance of \$1.16 million. FY 2020 project activities included project scoping, preparation, and completing the majority of material testing in the field. There were two drivers of the \$1.16 million underspending variance. The first was that actual incurred costs were slightly lower than originally estimated, as no sites encountered the need for dewatering and the team was able to open multiple locations at the same time. The second was that due to the later than initially forecasted field work start date, the material verification work and excavation at 2 of the 26 excavation locations (of 43 total locations) originally planned for FY 2020, was not completed and was deferred until FY 2021.

Additionally, retesting is being conducted at 2 test sites in FY 2021. From the Existing Facilities FY 2020 budget of \$4.54 million, this project has been allocated a fiscal year budget of \$3.56 million. The remaining \$0.98 million has been allocated equally to the two projects for Existing Facilities – Project Development, which are described below.

To maximize the benefit of the Project, which will have an MOP of 200 psig, the pressure of the existing 5.2 miles (27,578 feet) of main making up the Cranston Line must be increased from 150 psig to 200 psig. The purpose of this Project is to perform material verification on the existing Cranston Line to confirm the line can operate at 200 psig, prior to increasing the MOP to 200 psig. The Project calls for material verification at 43 locations consisting of 26 excavation sites.

The Company's FY 2020 Gas ISR plan in Docket No. 4916 included \$4.54 million of material testing work to be completed in FY 2020. On further review of the existing facilities portfolio, the Company decided to complete the material verification work in FY 2020 as planned and shift the actual pressure increase to FY 2021. The shift did not change the total anticipated cost of \$4.537 million but was forecasted to cause an underspending variance of \$0.98 million in FY 2020 based on the excavation and material verification pricing agreements which were reached with two contractors in July 2019.

The remaining FY 2020 budgeted funds or forecasted underspend of \$0.98 million were allocated equally to fund anticipated preparation work in two associated categories, Regulator Station Investment projects and a Proposed New Regulator Station, all of which were beneficial to start in FY 2020 and are part of the same overall Existing Facilities portfolio. As of the beginning of FY 2020, these two categories were set to begin field work in FY 2021 and FY 2022, although the work has now been deferred until FY 2022 and FY 2023 and did not have budgeted funding in FY 2020 for the preparation work.

To complete the FY 2020 Material Verification MOP Project work, the Company entered into pricing agreements with two contractors, M.S.R. Utility Maintenance Corporation (MSR) for excavation and Massachusetts Material Technologies (MMT) for materials verification testing. The excavation work generally consists of creating 5-foot x 8-foot holes around and 2-feet below the section of pipe being tested. Once a section of pipe is exposed, any protective coating is being removed prior to material verification testing. The material verification work generally consists of strapping test equipment onto the live pipeline and collecting mechanical and chemical data to confirm the pipe can handle the 200 psig.

Existing Facilities-Project Development - Regulator Station Investment – \$0.36 million underspending variance to allocated fiscal year budget of \$0.49 million

In FY 2020, the Company completed the needs analysis and the options analysis, and completed the conceptual designs to support the options analysis. The project started the design for the Regulator Station Investment – Upgrades to Existing Pressure Regulating Facilities at Cranston Take Station and Cowesett Regulator Station and plans to continue that work along with project development in FY 2021. Although some planning activities for future years were able to be accelerated into FY 2020, the field work start date for several projects was able to be deferred into FY 2022 and FY 2023 because of demand forecast changes and the corresponding preparation for those projects will primarily occur in the fiscal year before the start of the field work. Additionally, the initial planning for the Remote Operating Valve Installation is now forecasted to occur in FY 2021.

**Existing Facilities - New Regulator Station Installation – \$0.47 million underspending
variance to allocated fiscal year budget of \$0.49 million**

For FY 2020, the Company completed an initial site analysis and incurred costs of \$0.02 million of an allocated fiscal year budget of \$0.491 million. In FY 2021 and FY 2022, the Company will be performing the needs analysis and the options analysis for the New Regulator Installation project.

Southern Rhode Island Gas Expansion Project cost detail is provided in the tables below.

**The Narragansett Electric Company
d/b/a National Grid - RI Gas
Southern Rhode Island Gas Expansion Project - Cost Detail by Category
FY 2020 through March 31, 2019**

Pipeline

Cost Element	Actual	Budget	Variance
Internal Labor	\$791,409		
Contractors	\$29,260,941		
Materials	\$2,410,911		
Other/Overhead	\$7,715,720		
Grand Total	<u>\$40,178,981</u>	<u>\$39,922,433</u>	<u>\$256,548</u>

Existing Facilities

Cost Element	Actual	Budget	Variance
Internal Labor	\$111,555		
Contractors	\$1,896,232		
Materials	\$126		
Other/Overhead	\$541,871		
Grand Total	<u>\$2,549,784</u>	<u>\$4,537,000</u>	<u>(\$1,987,216)</u>

() in Variance column denotes an under-spend

The Narragansett Electric Company
d/b/a National Grid
R.I.P.U.C. Docket No. 4916
FY 2020 Gas Infrastructure, Safety, and Reliability Plan
Annual Reconciliation Filing
Attachment AS-1
Page 11 of 11

Table 2

The Narragansett Electric Company
d/b/a National Grid - RI Gas
Capital Spending by Investment Categories - Detail
FY 2020 through March 31, 2020
(\$000)

Investment Categories	Budget	Actual	Variance
NON-DISCRETIONARY			
Public Works			
CSC/Public Works - Non-Reimbursable	\$16,940	\$16,290	(\$650)
CSC/Public Works - Reimbursable	\$1,381	\$1,042	(\$338)
CSC/Public Works - Reimbursements	(\$1,381)	(\$809)	\$572
Public Works Total	\$16,940	\$16,523	(\$416)
Mandated Programs			
Corrosion	\$1,166	\$938	(\$229)
Purchase Meters (Replacements)	\$3,400	\$5,125	\$1,726
Pipeline Integrity IVP (Integrity Verification Program)	\$0	\$180	\$180
Reactive Leaks (CI Joint and Service Replacement)	\$12,104	\$9,457	(\$2,646)
Service Replacements (Reactive) - Non-Leaks/Other	\$2,063	\$1,832	(\$231)
Main Replacement (Reactive) - Maintenance (incl Water Intrusion)	\$670	\$1,478	\$808
Other Mandated	\$0	\$33	\$33
Mandated Total	\$19,403	\$19,043	(\$360)
Damage / Failure (Reactive)			
Damage / Failure Total	\$250	\$0	(\$250)
NON-DISCRETIONARY TOTAL	\$36,593	\$35,566	(\$1,027)
DISCRETIONARY			
Proactive Main Replacement			
Main Replacement (Proactive) - Leak Prone Pipe	\$57,184	\$58,032	\$848
Main Replacement (Proactive) - Large Diameter LPCI Program	\$4,418	\$1,115	(\$3,302)
Atwells Avenue	\$1,280	\$906	(\$374)
Proactive Main Replacement Total	\$62,881	\$60,053	(\$2,828)
Reliability			
Gas System Control	\$571	\$362	(\$209)
System Automation	\$1,198	\$967	(\$231)
Heater Program	\$1,250	\$887	(\$363)
Pressure Regulating Facilities	\$4,695	\$1,516	(\$3,180)
Allens Ave Multi Station Rebuild	\$4,437	\$8,311	\$3,873
Take Stations	\$1,050	\$186	(\$864)
Valve Installation/Replacement	\$159	\$1	(\$158)
Gas System Reliability - Gas Planning	\$1,303	\$475	(\$828)
I&R - Reactive	\$1,372	\$1,187	(\$185)
Distribution Station Overpressure Protection	\$0	\$102	\$102
LNG	\$1,434	\$560	(\$874)
Replace Pipe on Bridges	\$200	\$697	\$498
Access Protection Remediation	\$256	\$17	(\$239)
Tools & Equipment	\$603	\$666	\$63
Reliability Total	\$18,528	\$15,933	(\$2,595)
SUBTOTAL DISCRETIONARY (Without Gas Expansion)	\$81,410	\$75,986	(\$5,424)
Southern RI Gas Expansion Project			
Pipeline	\$39,922	\$40,179	\$257
Existing Facilities	\$4,537	\$2,550	(\$1,987)
Southern RI Gas Expansion Project Total	\$44,459	\$42,729	(\$1,731)
DISCRETIONARY TOTAL (With Gas Expansion)	\$125,869	\$118,715	(\$7,154)
GAS ISR TOTAL (Without Gas Expansion)	\$118,003	\$111,553	(\$6,450)
GAS ISR TOTAL (With Gas Expansion)	\$162,462	\$154,281	(\$8,181)

() in Variance column denotes an under-spend

PRE-FILED DIRECT TESTIMONY

OF

MELISSA A. LITTLE

August 3, 2020

Table of Contents

I.	Introduction and Qualifications.....	1
II.	Gas ISR Plan FY 2020 Revenue Requirement.....	5
III.	Conclusion.....	18

1 **I. Introduction and Qualifications**

2 **Q. Please state your full name and business address.**

3 A. My name is Melissa A. Little, and my business address is 40 Sylvan Road, Waltham,
4 Massachusetts 02451.

5
6 **Q. Please state your position at National Grid and your responsibilities within that**
7 **position.**

8 A. I am a Director for New England Revenue Requirements in the Strategy and Regulation
9 department of National Grid USA Service Company, Inc. (Service Company). The
10 Service Company provides engineering, financial, administrative, and other technical
11 support to subsidiary companies of National Grid USA (National Grid). My current
12 duties include revenue requirement responsibilities for National Grid's electric and gas
13 distribution activities in New England, including the gas operations of The Narragansett
14 Electric Company d/b/a National Grid (Narragansett or the Company).

15
16 **Q. Please describe your educational and professional experience.**

17 A. In 2000, I received a Bachelor of Science degree in Accounting Information Systems
18 from Bentley College (now Bentley University). In September 2000, I joined
19 Pricewaterhouse Coopers LLP in Boston, Massachusetts, where I worked as an associate
20 in the Assurance practice. In November 2004, I joined National Grid in the Service
21 Company as an Analyst in the General Accounting group. After the merger of National
22 Grid and KeySpan in 2007, I joined the Regulation and Pricing department as a Senior

1 Analyst in the Regulatory Accounting function, also supporting the Niagara Mohawk
2 Power Corporation Revenue Requirement team. I was promoted to Lead Specialist in
3 July 2011 and moved to the New England Revenue Requirement team. In August 2017, I
4 was promoted to my current position.
5

6 **Q. Have you previously testified before the Rhode Island Public Utilities Commission**
7 **(PUC)?**

8 A. Yes. Among other testimony, I testified in support of the Company's revenue
9 requirement (1) in the 2017 general rate case filing in Docket No. 4770; (2) for
10 Narragansett Electric, in the Fiscal Year (FY) 2018 Electric Infrastructure, Safety, and
11 Reliability (ISR) Plan and reconciliation filings in Docket No. 4682, FY 2019 in Docket
12 4783, FY 2020 in Docket No. 4915, and FY 2021 in Docket No. 4995; and (3) for
13 Narragansett Gas, in the Gas ISR Plan and reconciliation filings for FY 2016 in Docket
14 No. 4540, FY 2017 in Docket No. 4590, FY 2018 in Docket No. 4678, FY 2019 in Docket
15 No. 4781, FY 2020 in Docket No. 4916 and FY 2021 in Docket No. 4996.
16

17 **Q. What is the purpose of your testimony?**

18 A. In this docket, the PUC approved a Gas ISR factor that went into effect April 1, 2019.
19 The ISR factor was based on a projected FY 2020 Gas ISR revenue requirement of
20 \$6,474,720 associated with the Company's estimated ISR capital investment for FY 2020

1 and FY 2019, and actual ISR capital investment in FY 2018¹ that was incremental to the
2 levels reflected in rate base in the Company's recent base rate case (Docket No. 4770).

3 On September 1, 2018, new distribution base rates as approved in Docket No. 4770
4 became effective. The revenue requirements on actual ISR additions made from FY 2012
5 through FY 2017 plus forecasted ISR additions for FY 2018, FY 2019 and a portion of
6 FY 2020 were included in these new base rates. Thus, the purpose of my testimony is to
7 present an updated FY 2020 Gas ISR revenue requirement associated with the actual
8 capital investment levels for each of FY 2018 through FY 2020 incremental to the level
9 of investment assumed in Docket No. 4770, and actual tax deductibility percentages for
10 FY 2019 capital additions.

11
12 At this time, the Company's Tax Department estimates that the Company will not earn
13 taxable income and will not utilize prior years' tax net operating losses (NOL) in FY
14 2020. In Docket No. 4770, the accumulated deferred income taxes included in rate base
15 assumed estimated NOL utilization. Therefore, the NOL utilization assumed in base
16 rates has been reversed in the vintage year FY 2020 ISR revenue requirement based on
17 this most recent estimate of FY 2020 tax deductibility. Actual tax deductibility
18 percentages for FY 2020 capital investment will not be known until the Company files its
19 FY 2020 income tax return in December of this year. Consequently, the actual tax
20 deductibility percentages for FY 2020 capital investment will be reflected in the

¹ The Company's fiscal year is the 12 months ending March 31 of each year.

1 Company's FY 2021 Gas ISR Reconciliation filing and will generate a true-up
2 adjustment in that filing.

3
4 The updated FY 2020 revenue requirement also includes an adjustment associated with
5 the ISR property tax recovery formula that was approved in Docket No. 4323 and Docket
6 No. 4770. As the vintage years, FY 2012 through FY 2017, were rolled into the base
7 rates approved in Docket No. 4770 that became effective on September 1, 2018, the ISR
8 property tax recovery adjustment covers only the months of September 2018 through
9 March of 2019 and the 12-month period ended March 31, 2020.

10
11 As shown in Attachment MAL-1 on Page 1, Line 9, the updated FY 2020 Gas ISR
12 revenue requirement collectible through the Company's ISR factor for the FY 2020
13 period amounts to \$5,502,510. This is a decrease of \$972,209 from the projected
14 FY 2020 ISR revenue requirement of \$6,474,720 previously approved by the PUC in this
15 docket. This revenue requirement includes updated tax deductibility percentages for
16 FY 2019. The decrease in the projected to actual revenue requirement is attributable to
17 underspending of ISR capital investment against the approved FY 2019 and FY 2020 ISR
18 Plans, a decrease in the actual effective FY 2020 property tax rate compared with the
19 projected effective FY 2020 property tax rate in FY 2020 ISR Plan, partially offset by
20 decreases in FY 2019 actual NOL utilization and FY 2020 estimated NOL utilization
21 compared with the projected FY 2019 and FY 2020 NOL utilization included in the FY
22 2020 Plan, and the FY 2019 revenue requirement income tax true up.

1 **Q. Are there any schedules attached to your testimony?**

2 A. Yes, I am sponsoring the following attachments:

- 3 • Attachment MAL-1: FY 2020 Gas Infrastructure, Safety and Reliability Plan Revenue
4 Requirement Twelve-month Summary and Calculation and FY
5 2019 Gas Infrastructure, Safety and Reliability Plan Revenue
6 Requirement Twelve-month Summary and Calculation for the
7 seven months September 1, 2018 through March 31, 2019
8
- 9 • Attachment MAL-2: FY 2019 Gas Infrastructure, Safety and Reliability Plan Revenue
10 Requirement Calculation for the five months April 1, 2018
11 through August 31, 2018
12

13

14 **II. Gas ISR Plan FY 2020 Revenue Requirement**

15 **Q. Did the Company calculate the updated FY 2020 Gas ISR Plan revenue requirement**
16 **in the same fashion as calculated in the previous ISR factor submissions and the**
17 **FY 2019 ISR factor reconciliation?**

18 A. Yes, the Company calculated the FY 2020 Gas ISR Plan revenue requirement in the
19 same fashion as calculated in the previous Gas ISR factor reconciliation. Similar to the
20 FY 2019 filing, the calculation incorporates the approved weighted average cost of
21 capital and depreciation rates from Docket No. 4770 and known tax deductibility
22 percentages for FY 2019, while reflecting that the actual revenue requirement on
23 FY 2012 through FY 2017 capital investment, in addition to the estimated revenue
24 requirement on FY 2018 through FY 2020 capital investment that was included in base
25 rates effective September 1, 2018. Therefore, the updated FY 2020 revenue requirement
26 calculation is presented in two parts: (1) the FY 2020 revenue requirement on
27 incremental FY 2018 through FY 2020 capital investment and the FY 2019 revenue

1 requirement on incremental FY 2018 through FY 2019 capital investment reflecting
2 known tax deductibility (representing the seven-month period after new base rates were
3 effective) and (2) the FY 2019 revenue requirement on incremental FY 2012 through
4 FY 2019 capital investment reflecting known tax deductibility (representing the five-
5 month period before new base rates were effective).

6
7 The Company also changed the presentation of the property tax adjustment calculation
8 which is discussed later in my testimony.

9
10 Other than these changes, the updated FY 2020 ISR revenue requirement calculation is
11 identical to the ISR revenue requirement used to develop the approved ISR factors that
12 became effective April 1, 2019 and, as described previously in the testimony in this
13 proceeding, incorporating updated ISR investment amounts and known tax deductibility
14 percentages. I will rely on the testimony included in the Company's FY 2020 ISR Plan
15 Proposal filing in this docket for the detailed description of the revenue requirement
16 calculation and will limit my testimony to the following: (1) a description of the impact of
17 Docket No. 4770 to the Gas ISR revenue requirement, (2) a summary of the revenue
18 requirement update shown on Page 1 of Attachment MAL-1, (3) a summary of FY 2019
19 revenue requirement income tax true-up shown on Page 2 of Attachment MAL-1 and the
20 update for the known tax deductibility percentages, and (4) a presentation change in the
21 property tax recovery calculation.

1 **Q. Please summarize the change in the FY 2020 ISR revenue requirement proposed in**
2 **this reconciliation filing as compared to the FY 2020 revenue requirement effective**
3 **April 1, 2019 which was based on projected capital spending approved in the FY**
4 **2019 and FY 2020 ISR Plans.**

5 **A.** Per Attachment MAL-1, Page 1, Line 9 (c), the FY 2020 ISR reconciliation results in an
6 reduction to the FY 2020 ISR revenue requirement of \$972,209, which is the net impact
7 of: (1) a \$959,527 increase in the FY 2020 revenue requirement on vintage FY 2019 ISR
8 capital spending caused by the actual income tax deductibility update, particularly a \$15
9 million decrease in NOL utilization, which was partially offset by lower FY 2019 capital
10 spending compared to the estimated FY 2019 capital spending approved in the Plan; (2)
11 \$198,209 decrease in the FY 2020 ISR revenue requirement on vintage 2020 ISR capital
12 spending due to lower FY 2020 capital spending compared to the Plan, offset by a
13 reduction in FY 2020 NOL utilization; (3) a \$2,337,078 reduction in the FY 2020
14 property tax recovery adjustment as the actual FY 2020 effective property tax rate was
15 lower than the effective rate assumed in the FY 2020 plan, in addition to the underspend
16 of FY 2020 capital investment against the FY 2020 Plan; and (4) a \$605,248 increase to
17 the FY 2019 revenue requirement on vintage FY 2019 capital spending to reflect actual
18 FY 2019 tax deductibility as described in detail later in this testimony.

1 **Q. Would you describe the impact on the FY 2020 ISR revenue requirement**
2 **recoverable through the FY 2020 ISR factor resulting from the implementation of**
3 **new gas base distribution rates that were approved by the PUC in Docket No. 4770**
4 **and put into effect on September 1, 2018?**

5 A. The ISR mechanism was established to allow the Company to recover outside of base
6 rates its costs associated with capital investment incurred to expand its gas infrastructure
7 and improve the reliability and safety of its gas facilities. When new base rates are
8 implemented, as was the case in Docket No. 4770, the costs being recovered associated
9 with pre-rate case ISR capital investment cease to be recovered through a separate ISR
10 factor, and are instead recovered through base rates, and the underlying ISR capital
11 investment becomes a component of base distribution rate base from that point forward.
12 In November 2017, the Company filed an application with the PUC seeking a change in
13 base rates for its gas and electric distribution businesses. The proceeding culminated
14 with the PUC's approval of a settlement agreement with the Division and numerous
15 intervenors establishing new base rates for the Company. The Company's rate base in
16 that request reflected projected capital investments through August 31, 2019. In its base
17 rate request, the Company proposed to maintain consistency with the existing ISR
18 mechanism for the FY 2019 and FY 2020 periods. Consequently, the forecast used to
19 develop rate base in the first year of the distribution rate case included actual capital
20 investment through the test year ending June 30, 2017, nine months of the ISR approved
21 capital investment levels for vintage FY 2018, 12 months of vintage FY 2019 investment

1 and five months of vintage FY 2020 investment (using the FY 2018 ISR approved capital
2 spending level as a proxy for FY 2018, FY 2019 and FY 2020).

3
4 **Q. Please continue.**

5 A. As a result of the implementation of new base rates pursuant to Docket No. 4770
6 effective September 1, 2018, the cumulative amount of forecasted ISR capital
7 investments was rolled into base rates effective at that date. Consequently, the FY 2019
8 tax true-up is reflecting only a five-month (April 1, 2018 through August 31, 2018)
9 amount of revenue requirement associated with the ISR capital investment that was rolled
10 into base rates effective September 1, 2018. The FY 2019 revenue requirement for
11 incremental FY 2018 and incremental FY 2019 ISR investments that are incremental to
12 the estimated level of investment assumed in base rates reflects seven months (September
13 1, 2018 through March 31, 2019) of a full year of revenue requirement as none of these
14 incremental investments are included in the Company's base rate rate-base. These
15 incremental FY vintage amounts are to remain in the ISR recovery mechanism as
16 provided for in the terms of the Docket No. 4770 approved Settlement Agreement.
17 Therefore, the FY 2020 ISR revenue requirement includes two Attachments: Attachment
18 MAL-1 presents the 12-month FY 2020 revenue requirement and the seven-month
19 (September 1, 2018 through March 31, 2019) FY 2019 revenue requirement reflecting
20 actual tax deductibility on actual FY 2018 through FY 2020 capital investment spending,
21 incremental to the estimated FY 2018 through FY 2020 capital investments included in

1 Docket No. 4770; Attachment MAL-2 reflects the five-month (April 1, 2018 through
2 August 31, 2018) FY 2019 revenue requirement reflecting actual tax deductibility on
3 actual FY 2012 through FY 2019 the incremental capital investment spending.
4

5 **Q. How was the Gas ISR revenue requirement revised for the change in the federal**
6 **income tax rate from 35 percent to 21 percent?**

7 A. The decrease in the federal income tax rate from 35 percent to 21 percent reduced the
8 amount of income tax to be recovered from customers on the return on equity component
9 of each Gas ISR vintage year revenue requirement. The return on rate base in each
10 revenue requirement is calculated by multiplying the Gas ISR rate base by the weighted
11 average cost of capital (WACC). The equity component of the return on rate base is the
12 taxable component of the Gas ISR revenue requirement. The federal income taxes that
13 the Company recovers from customers are derived by grossing up the WACC to a pre-tax
14 rate of return. Consequently, the Company revised the pre-tax WACC to reflect the
15 change in the federal income tax rate. The calculation of the revised pre-tax WACC is
16 shown on Page 20 of Attachment MAL-1 and Page 32 of Attachment MAL-2. The pre-
17 tax WACC approved in Docket No. 4323 was 10.05 percent at the 35 percent tax rate and
18 8.78 percent at the 21 percent tax rate, which became effective January 1, 2018. The pre-
19 tax WACC approved in Docket No. 4770 is 8.41 percent effective September 1, 2018.
20 The Company used the Docket No. 4323 revised pre-tax WACC of 8.78 percent for the
21 revenue requirement calculation of April 1, 2018 through August 31, 2018 and the

1 approved pre-tax WACC of 8.41 percent to calculate the return on rate base included in
2 the revenue requirement for the period from September 1, 2018 through March 31, 2020.
3

4 **Q. Were there any other revisions to the Gas ISR revenue requirement that were the**
5 **result of the change in the federal income tax rate from 35 percent to 21 percent?**

6 A. Yes. Effective December 31, 2017, the Company has restated its deferred tax balances
7 based on the new 21 percent federal income tax rate because the Company is paying
8 income taxes as the book/tax timing differences reverse at the 21 percent federal income
9 tax rate. However, because deferred taxes are an offset to rate base in the Gas ISR
10 revenue requirement, reducing the deferred tax balances based on the 21 percent federal
11 income tax rate has the effect of artificially increasing rate base. To counteract this
12 artificial increase to rate base, a new line item called Excess Deferred Income Taxes has
13 been added to each vintage year's revenue requirement calculation reflecting the value of
14 the decrease to ISR rate base as of December 31, 2017. The excess deferred income taxes
15 represent the net benefit as of December 31, 2017, that will eventually be earned by the
16 Company through reduced future income taxes and must ultimately be passed back to
17 customers. The pass back of excess deferred income taxes to customers is fully reflected
18 in base distribution rates under Docket No. 4770 per the Company's Excess Deferred
19 Income Tax True-Up - Second Compliance filing dated May 30, 2019 and as approved
20 by the PUC on June 17, 2019; thus, there is no need to adjust the excess deferred tax
21 balance in the ISR revenue requirements.
22

1 **Q. Please describe the calculation of the excess deferred income tax amounts.**

2 A. The excess deferred income taxes are calculated on Page 33 of Attachment MAL-2. The
3 Company derived the excess deferred income tax amounts by calculating the cumulative
4 balance of ISR book to tax depreciation differences as of December 31, 2017, by vintage
5 fiscal year and multiplying that amount by the 14 percent change in the tax rate
6 (35 percent minus 21 percent).

7
8 **Q. How was the Gas ISR revenue requirement revised for the change in the bonus**
9 **depreciation rules resulting from the Tax Act?**

10 A. Bonus depreciation, sometimes known as first year bonus depreciation, is an
11 accelerated tax depreciation method that was first established in 2002 as an economic
12 stimulus to incent United States corporations to increase capital investments. Bonus
13 depreciation allows companies to take an immediate tax deduction for some portion of
14 certain qualified capital investments based on the bonus depreciation rates in effect for
15 that year of investment. Bonus depreciation rates have ranged from a high of 100 percent
16 in some years to as low as 30 percent for calendar year 2019, as specified in the tax laws
17 prior to the passage of the Tax Act. Pursuant to those prior tax laws, bonus depreciation
18 was set to expire at the end of calendar year 2019. However, the Tax Act changed the
19 rules for bonus depreciation for certain capital investments, including ISR-eligible
20 investments, effective September 28, 2017. Based on the 2017 Tax Act, property
21 acquired prior to September 28, 2017 and placed in service during tax years beginning

1 after December 31, 2017 are allowed bonus depreciation. As indicated in the Company's
2 FY 2021 ISR Plan Section 3, the Company's original interpretation of the 2017 Tax Act
3 was that no deduction for bonus depreciation would be allowed in FY 2019 and FY 2020.
4 However, based on current industry practice, the Company has included actual FY 2019
5 and estimated FY 2020 bonus depreciation in its calculation of accumulated deferred
6 income taxes in the respective vintage year's rate base. The Company's FY 2020 revenue
7 requirement includes the impact of the 2017 Tax Act on vintage FY 2018 through FY
8 2020 investments.

9
10 **Q. Are there any updates to the FY 2019 revenue requirement reflected in the FY 2020**
11 **Gas ISR Reconciliation?**

12 A. Yes. The Company filed its FY 2019 Gas ISR Reconciliation on August 1, 2019.
13 However, the Company had not filed its FY 2019 income tax return until later that year in
14 December. As a result, the Company used certain tax assumptions at the time of its FY
15 2019 ISR Reconciliation filing. The Company has revised its vintage FY 2019 revenue
16 requirement to reflect the following updates in Attachment MAL-1, Pages 7 and 13 and
17 Attachment MAL-2, Pages 2 and 3: (1) actual capital repairs deduction rate of 85.18
18 percent, as shown on Attachment MAL-1 at Page 7, Line 2 and Attachment MAL-2 at
19 Page 3, Line 2; (2) actual percentage of plant eligible for bonus depreciation of 14.20
20 percent, as shown on Attachment MAL-1 at Page 7, Line 11 and Attachment MAL-2 at
21 Page 3, Line 11; (3) actual tax loss on retirements of \$375,698, as shown on

Attachment MAL-1 at Page 7, Line 19 and Attachment MAL-2 at Page 3, Line 19; (4) actual NOL utilization of \$1,091,119, as shown on Attachment MAL-1 at Page 13, Line 10 (b) and Attachment MAL-2 at Page 2, Line 17 (a). The net result of these tax deductibility updates is an increase to the FY 2019 ISR revenue requirement of \$605,248, as shown on Attachment MAL-1, Page 2 at Line 13 and carried forward to Page 1 of that Attachment at Line 7.

Q. Are there any updates to the FY 2020 Property Tax calculation in the FY 2020 Gas ISR Reconciliation?

A. Yes, to simplify the property tax calculation, format changes were made as shown in Attachment MAL-1 at Page 17 and Page 18. In previous ISR Plan and Reconciliation filings, the property tax calculation was presented in two parts: the first part showed the net ISR plant additions by vintage investment year multiplied by the rate case effective property tax rate; the second part showed all net ISR additions as well as net plant amounts embedded in the most recent rate case multiplied by the difference between the rate case effective property tax rates as approved in Docket No. 4323 or Docket No. 4770 and the ISR year effective rate. The sum of these two parts would arrive at the total property tax mechanism adjustment. Starting with this FY 2020 ISR Reconciliation filing, the net ISR plant additions are multiplied directly by the ISR year effective property tax rate; the net plant amount embedded in base rates is multiplied by the difference between the rate case effective property tax rate as approved in Docket No. 4770 and the ISR year effective rate, to arrive at the same result. These revisions to the

1 presentation of the property tax recovery adjustment in no way change the underlying
2 calculation of the property tax adjustment mechanism established in Docket No. 4323.

3
4 **Q. Please summarize the updated FY 2020 ISR revenue requirement.**

5 A. As shown in Attachment MAL-1 at Page 1, Line 9, the updated FY 2020 ISR revenue
6 requirement amounts to \$5,502,510 which is comprised of (1) the FY 2020 revenue
7 requirement on vintages FY 2018, FY 2019 and FY 2020 ISR capital investments above
8 or below the level of capital investment reflected in base distribution rates in Docket No.
9 4770, (2) the property tax recovery mechanism component, and (3) a true-up to the FY
10 2019 ISR revenue requirement to reflect actual income tax deductibility as reported on
11 the Company's FY 2019 federal income tax return.

12
13 **Q. Please describe how the attachments to your testimony are structured.**

14 A. Page 1 of Attachment MAL-1 summarizes the individual components of the updated FY
15 2020 Gas ISR revenue requirement as compared to the approved FY 2020 Gas ISR Plan
16 revenue requirement effective April 1, 2019. Page 1, Column (a) reflects the approved
17 FY 2020 Gas ISR Plan revenue requirement on projected incremental ISR capital
18 spending as well as the projected FY 2020 property tax recovery adjustment. Page 1,
19 Column (b) represents (1) the FY 2020 ISR revenue requirements on actual incremental
20 FY 2018, FY 2019 and FY 2020 ISR capital spending – not included in the Company's
21 base rates in Docket No. 4770– and as supported with detailed calculations on

1 Attachment MAL-1, Pages 3, 6 and 9, respectively; (2) the FY 2020 property tax
2 adjustment on incremental capital not included in the Company's base rates in Docket
3 No. 4770 in addition to the change in the effective property rate applied to embedded net
4 plant in Docket No. 4770; and (3) the reconciliation of the approved FY 2019 Gas ISR
5 revenue requirement for vintage FY 2019 plant investment with the actual vintage FY
6 2019 revenue requirement on those investments. This reconciliation is necessary because
7 the actual level of tax deductibility on FY 2019 investments was not known when the
8 Company filed the FY 2019 ISR reconciliation and FY 2020 ISR Plan proposals. A
9 summary of the updated FY 2019 ISR revenue requirement is presented on Page 2 of
10 Attachment MAL-1. Detailed calculations of the updated FY 2019 revenue requirements
11 reflecting actual FY 2019 tax depreciation on vintage FY 2019 ISR investments are
12 presented on Page 6 of Attachment MAL-1 (for the seven-months September 1, 2018
13 through March 31, 2019) and Page 3 of Attachment MAL-2 (for the five-months April 1,
14 2018 through August 31, 2018).

15
16 Attachment MAL-2 represents the five months of FY 2019 (April 1, 2018 through
17 August 31, 2018) ISR revenue requirements for incremental FY 2012 through FY 2019
18 ISR investments – meaning those investments not included in the Company's base rates
19 in Docket No. 4323– and as supported with detailed calculations on Pages 2, 5, 8, 11, 14,
20 17, 20 and 23, respectively. The actual FY 2019 tax deductibility is reflected on Page 3
21 and the resulting five-month revenue requirement for FY 2019 is included on Page 2 at
22 Line 31.

1 **Q. Has the Company provided support for the actual level of FY 2020 ISR-eligible**
2 **plant investments?**

3 **A.** Yes. The description of the FY 2020 Gas ISR program and the amount of the
4 incremental non-growth capital investment eligible for inclusion in the ISR mechanism
5 are supported by the pre-filed direct testimony and supporting attachment of Ms. Smith.
6 The ultimate revenue requirement on the incremental non-growth capital investment
7 equals the return on the investment (i.e., average rate base at the WACC), plus
8 depreciation expense and property taxes associated with the investment. Incremental
9 non-growth capital investment for this purpose is intended to represent the net change in
10 rate base for non-growth infrastructure investments since the establishment of the
11 Company's ISR mechanism effective April 1, 2011 and is defined as capital additions
12 plus cost of removal, less annual depreciation expense embedded in the Company's rates,
13 net of depreciation expense attributable to general plant. The actual ISR-eligible non-
14 growth capital investment for FY 2020 amounts to \$144.12 million² associated with the
15 Company's FY 2020 ISR Plan (non-growth infrastructure investment net of general
16 plant).

² Total ISR-eligible capital investment for FY 2020 of \$144.12 million plus total ISR-eligible cost of removal of \$10.16 million reflects \$154.28 million of actual capital spending, as referenced in the pre-filed testimony of Ms. Smith (Attachment AS-1, Page 2, Table 1).

1 **Q. What is the updated revenue requirement associated with actual capital investment?**

2 A. The updated FY 2020 revenue requirement associated with the Company's actual
3 incremental FY 2012 through FY 2020 eligible plant investments amounts to \$5,502,510.
4 This figure includes the updated FY 2020 revenue requirement of \$4,880,658 on actual
5 FY 2018 through FY 2020 incremental investment, the FY 2020 property tax recovery
6 adjustment of \$16,604, and the reconciliation of the approved FY 2019 ISR revenue
7 requirement for vintage FY 2019 investment with the actual FY 2019 revenue
8 requirement of \$605,248.

9

10 **III. Conclusion**

11 **Q. Does this conclude your testimony?**

12 A. Yes, it does.

Index of Attachments

Attachment MAL-1	FY 2020 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement Twelve-month Summary and Calculation and FY 2019 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement twelve-month Summary and Calculation for the seven months September 1, 2018 through March 31, 2019
Attachment MAL-2	FY 2019 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement Calculation for the five months April 1, 2018 through August 31, 2018

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4916
FY 2020 GAS INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN
RECONCILIATION FILING
WITNESS: MELISSA A. LITTLE
ATTACHMENTS**

Attachment MAL-1

FY 2020 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement twelve-month
Summary and Calculation

and

FY 2019 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement twelve-month
Summary and Calculation for the seven months September 1, 2018 through March 31, 2019

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2020 Annual Revenue Requirement Summary**

Line No.		Approved Fiscal Year 2020 (a)	Actual Fiscal Year 2020 (b)	Variance Fiscal Year 2020 (c)=(b)-(a)
	<u>Operation and Maintenance Expenses</u>			
1	FY 2020 Operation and Maintenance Expense	\$0	\$0	\$0
	<u>Capital Investment:</u>			
2	Actual Revenue Requirement on FY 2018 Incremental Capital Included in ISR Rate Base	\$663,731	\$662,034	(\$1,696)
3	Actual Revenue Requirement on FY 2019 Incremental Capital Included in ISR Rate Base	(\$666,404)	\$293,123	\$959,527
4	Actual Revenue Requirement on FY 2020 Incremental Capital Included in ISR Rate Base	\$4,123,711	\$3,925,501	(\$198,209)
5	Total Capital Investment Revenue Requirement	<u>\$4,121,038</u>	<u>\$4,880,658</u>	<u>\$759,621</u>
6	FY 2020 Property Tax Recovery Adjustment	\$2,353,682	\$16,604	(\$2,337,078)
7	True-Up for FY 2019 Income Tax		\$605,248	\$605,248
8	Total Capital Investment Component of Revenue Requirement	<u>\$6,474,720</u>	<u>\$5,502,510</u>	<u>(\$972,209)</u>
9	Total Fiscal Year Revenue Requirement	<u>\$6,474,720</u>	<u>\$5,502,510</u>	<u>(\$972,209)</u>
10	Incremental Fiscal Year Rate Adjustment		(\$972,209)	

Column Notes:

- (a) RIPUC Docket No. 4916, Revised Section 3, Attachment 1R, Page 1 of 19, Column (c)
(c) (c)=(b)-(a)

Line Notes for Columns (b) & 7(b) only:

- 2 Page 3 of 20, Line 30, Col. (c)
3 Page 6 of 20, Line 29, Col. (b)
4 Page 9 of 20, Line 29, Col. (a)
5 Sum of Lines 2 through Line 4
6 Page 18 of 20, Line 45, Column (g) × 1,000
7(b) Page 2 of 20, Line 13, Col. (e)
8 Sum of Line 5 through Line 7
9 Line 1 + Line 8
10 Line 9 Col (b) - Line 9 Col (a)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2019 Annual Revenue Requirement Summary

Line No.		As Reconciled				True-up (e) (e) = (d) - (a)
		Fiscal Year 2019 (a)	Apr~Aug Actuals (b)	Sep~Mar Actuals (c)	Subtotal Actuals (d) (d) = (b) + (c)	
1	Operation and Maintenance Expenses					
	FY 2019 Operation and Maintenance Expense	\$178,813	\$178,813		\$178,813	\$0
Capital Investment:						
2	Actual Revenue Requirement on Incremental FY 2012 Capital included in ISR Rate Base	\$383,479	\$383,479		\$383,479	\$0
3	Actual Revenue Requirement on Incremental FY 2013 Capital included in ISR Rate Base	\$90,065	\$90,065		\$90,065	\$0
4	Actual Revenue Requirement on Incremental FY 2014 Capital included in ISR Rate Base	\$1,207,453	\$1,207,453		\$1,207,453	\$0
5	Actual Revenue Requirement on FY 2015 Capital Included in ISR Rate Base	\$2,437,918	\$2,437,918		\$2,437,918	\$0
6	Actual Revenue Requirement on FY 2016 Capital Included in ISR Rate Base	\$2,846,263	\$2,846,263		\$2,846,263	\$0
7	Actual Revenue Requirement on FY 2017 Capital Included in ISR Rate Base	\$2,156,691	\$2,156,691		\$2,156,691	\$0
8	Actual Revenue Requirement on FY 2018 Capital Included in ISR Rate Base	\$3,389,383	\$3,018,968	\$370,415	\$3,389,383	\$0
9	Actual Revenue Requirement on FY 2019 Capital Included in ISR Rate Base	\$1,140,335	\$1,659,762	\$85,821	\$1,745,583	\$605,248
10	Total Capital Investment Revenue Requirement	\$13,651,587	\$13,800,598	\$456,236	\$14,256,834	\$605,248
11	Annual Property Tax Recovery Mechanism	\$1,816,769	\$2,836,601	(\$1,019,832)	\$1,816,769	(\$0)
12	Total Capital Investment Component of the Revenue Requirement	\$15,468,356	\$16,637,200	(\$563,596)	\$16,073,604	\$605,248
13	Total Fiscal Year Revenue Requirement	\$15,647,169	\$16,816,013	(\$563,596)	\$16,252,417	\$605,248

Column Notes

- (a) As approved per RIPUC Docket No. 4781 Reconciliation Filing, Attachment MAL-1, P 1, Column (e)
(b) Attachment MAL-2, Page 1 of 33, Col. (b), Line 1 through Line 11

Line Notes

- 1 As actual per RIPUC Docket No. 4781 Reconciliation Filing, Attachment MAL-1, P 1, Column (c)
8(c) Page 3 of 20, Line 31, Col. (b)
9(c) Page 6 of 20, Line 30, Col. (a)
10 Sum of Lines 2 through 9
11(c) Page 18 of 20, Line 45, Col. (c) × 1,000
12 Sum of Lines 10 through 11
13 Sum of Lines 1 and 12

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Reconciliation Filing
Attachment MAL-1
Page 3 of 20

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2020 Revenue Requirement on FY 2018 Actual Incremental Gas Capital
Investment**

Line No.			Fiscal Year 2018 (a)	Fiscal Year 2019 (b)	Fiscal Year 2020 (c)
1	<u>Depreciable Net Capital Included in ISR Rate Base</u>				
2	Total Allowed Capital Included in ISR Rate Base in Current Year	Page 13 of 20, Line 3, Col (a)	\$4,632,718	\$0	\$0
3	Retirements	Page 13 of 20, Line 9, Col (a)	\$12,059,428	\$0	\$0
3	Net Depreciable Capital Included in ISR Rate Base	Year 1 = Line 1 - Line 2; then = Prior Year Line 1	<u>(\$7,426,710)</u>	<u>(\$7,426,710)</u>	<u>(\$7,426,710)</u>
4	<u>Change in Net Capital Included in ISR Rate Base</u>				
5	Capital Included in ISR Rate Base	Line 1	\$4,632,718	\$0	\$0
6	Depreciation Expense		\$0	\$0	\$0
6	Incremental Capital Amount	Year 1 = Line 4 - Line 5; then = Prior Year Line 4	<u>\$4,632,718</u>	<u>\$4,632,718</u>	<u>\$4,632,718</u>
7	Cost of Removal	Page 13 of 20, Line 6, Col (a)	\$1,941,168		
8	Net Plant Amount	Year 1 = Line 6 + Line 7; Then = Prior Year	\$6,573,886	\$6,573,886	\$6,573,886
9	<u>Deferred Tax Calculation:</u>				
9	Composite Book Depreciation Rate		1/ 3.38%	3.15%	2.99%
10	Tax Depreciation	Year 1 = Page 4 of 20, Line 24, Col (a); then = Page 4 of 20, Col (d)	\$7,820,728	\$21,720	\$20,089
11	Cumulative Tax Depreciation	Year 1 = Line 10; then = Prior Year Line 11 + Current Year Line 10	\$7,820,728	\$7,842,448	\$7,862,538
12	Book Depreciation	Year 1 = Line 3 × Line 9 × 50%; then = Line 3 × Line 9	(\$125,511)	(\$234,127)	(\$222,059)
13	Cumulative Book Depreciation	Year 1 = Line 12; then = Prior Year Line 13 + Current Year Line 12	(\$125,511)	(\$359,638)	(\$581,697)
14	Cumulative Book / Tax Timer	Line 11 - Line 13	\$7,946,239	\$8,202,087	\$8,444,235
15	Effective Tax Rate		2/ 21.00%	21.00%	21.00%
16	Deferred Tax Reserve	Line 14 × Line 15	\$1,668,710	\$1,722,438	\$1,773,289
17	Less: FY 2018 Federal NOL	-Page 19 of 20, Line 9, Col (d)	(\$6,051,855)	(\$6,051,855)	(\$6,051,855)
18	Excess Deferred Tax	(Line 14 × 31.55% blended FY18 tax rate) - Line 16; then = Prior Year	\$838,328	\$838,328	\$838,328
19	Net Deferred Tax Reserve before Proration Adjustment	Line 16 + Line 17 + Line 18	<u>(\$3,544,817)</u>	<u>(\$3,491,089)</u>	<u>(\$3,440,238)</u>
20	<u>ISR Rate Base Calculation:</u>				
20	Cumulative Incremental Capital Included in ISR Rate Base	Line 8	\$6,573,886	\$6,573,886	\$6,573,886
21	Accumulated Depreciation	- Line 13	\$125,511	\$359,638	\$581,697
22	Deferred Tax Reserve	- Line 19	\$3,544,817	\$3,491,089	\$3,440,238
23	Year End Rate Base before Deferred Tax Proration	Sum of Lines 20 through 22	<u>\$10,244,214</u>	<u>\$10,424,613</u>	<u>\$10,595,821</u>
24	<u>Revenue Requirement Calculation:</u>				
24	Average Rate Base before Deferred Tax Proration Adjustment	Year 1 = 0; then Average of (Prior + Current Year Line 23)		\$10,334,414	\$10,510,217
25	Proration Adjustment	Year 1 and 2 = 0; then = Page 5 of 20, Line 41, Col (l)		\$0	\$2,183
26	Average ISR Rate Base after Deferred Tax Proration	Line 24 + Line 25		<u>\$10,334,414</u>	<u>\$10,512,400</u>
27	Pre-Tax ROR	Page 20 of 20, Line 30, Column (e)		8.41%	8.41%
28	Return and Taxes	Line 26 × Line 27		\$869,124	\$884,093
29	Book Depreciation	Year 1 = N/A; then = Line 12		(\$234,127)	(\$222,059)
30	Annual Revenue Requirement	Sum of Lines 28 through 29	N/A	\$634,997	\$662,034
31	Revenue Requirement for 7 months (Sep 1, 2018 - Mar 31, 2019)	Line 30 × 7/12		\$370,415	

1/ 3.38%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4323, in effect until Aug 31, 2018

2.99%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4770, effective on Sep 1, 2018

FY 19 Composite Book Depreciation Rate = 3.38% × 5/12 + 2.99% × 7/12

2/ The Federal Income Tax rate changed from 35% to 21% on January 1, 2018 per the Tax Cuts and Jobs Act of 2017

FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2018 Incremental Capital Investment

Line No.		Fiscal Year 2018 (a)	(b)	(c)	(d)	(e)
1	Capital Repairs Deduction					
2	Plant Additions	\$4,632,718				
3	Capital Repairs Deduction Rate	85.43%				
3	Capital Repairs Deduction	\$3,957,731				
4	Bonus Depreciation					
5	Plant Additions	\$4,632,718				
6	Less Capital Repairs Deduction	\$3,957,731				
7	Plant Additions Net of Capital Repairs Deduction	\$674,987				
8	Percent of Plant Eligible for Bonus Depreciation	100.00%				
9	Plant Eligible for Bonus Depreciation	\$674,987				
10	Bonus depreciation 100% category	15.86%				
11	Bonus depreciation 50% category	29.03%				
12	Bonus depreciation 40% category	10.54%				
13	Bonus Depreciation Rate (October 2017 - March 2018)	0.00%				
14	Total Bonus Depreciation Rate	55.43%				
15	Bonus Depreciation	\$374,112				
16	Remaining Tax Depreciation					
17	Plant Additions	\$4,632,718				
18	Less Capital Repairs Deduction	\$3,957,731				
18	Less Bonus Depreciation	\$374,112				
19	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$300,875				
20	20 YR MACRS Tax Depreciation Rates	3.75%				
21	Remaining Tax Depreciation	\$11,283				
22	FY18 tax (gain)/loss on retirements	\$1,536,434				
23	Cost of Removal	\$1,941,168				
24	Total Tax Depreciation and Repairs Deduction	\$7,820,728				

1/ Capital Repairs percentage is based on the actual results of the FY 2018 tax return.

2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY2018 tax return

3/ Actual Loss for FY2018

20 Year MACRS Depreciation		Annual		Cumulative	
MACRS basis:	Fiscal Year	2018	2019	2020	2021
	2018	3.75%	\$11,283	\$7,820,728	
	2019	7.22%	\$21,720	\$7,842,448	
	2020	6.68%	\$20,089	\$7,862,538	
	2021	6.18%	\$18,585	\$7,881,123	
	2022	5.71%	\$17,189	\$7,898,312	
	2023	5.29%	\$15,901	\$7,914,213	
	2024	4.89%	\$14,707	\$7,928,920	
	2025	4.52%	\$13,606	\$7,942,525	
	2026	4.46%	\$13,425	\$7,955,950	
	2027	4.46%	\$13,422	\$7,969,372	
	2028	4.46%	\$13,425	\$7,982,797	
	2029	4.46%	\$13,422	\$7,996,219	
	2030	4.46%	\$13,425	\$8,009,644	
	2031	4.46%	\$13,422	\$8,023,066	
	2032	4.46%	\$13,425	\$8,036,491	
	2033	4.46%	\$13,422	\$8,049,913	
	2034	4.46%	\$13,425	\$8,063,338	
	2035	4.46%	\$13,422	\$8,076,761	
	2036	4.46%	\$13,425	\$8,090,186	
	2037	4.46%	\$13,422	\$8,103,608	
	2038	2.23%	\$6,713	\$8,110,320	
		100.00%	\$300,875		

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Net Deferred Tax Reserve Proration on FY 2018 Incremental Capital Investment

Line No.	Deferred Tax Subject to Proration		(a) FY20
1	Book Depreciation	Docket no. 4916, R.S. 3, Att. 1R, page 4 Col (a)	(\$222,059)
2	Bonus Depreciation		\$0
3	Remaining MACRS Tax Depreciation	Docket no. 4916, R.S. 3, Att. 1R, page 4 Col (a)	(\$20,089)
4	FY18 tax (gain)/loss on retirements		\$0
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	(\$242,148)
6	Effective Tax Rate		21%
7	Deferred Tax Reserve	Line 5 × Line 6	(\$50,851)
8	Deferred Tax Not Subject to Proration		
9	Capital Repairs Deduction		
10	Cost of Removal		
11	Book/Tax Depreciation Timing Difference at 3/31/2017		
12	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	
13	Effective Tax Rate		
14	Deferred Tax Reserve	Line 11 × Line 12	
15	Total Deferred Tax Reserve	Line 7 + Line 13	(\$50,851)
16	Net Operating Loss		\$0
17	Net Deferred Tax Reserve	Line 14 + Line 15	(\$50,851)
18	Allocation of FY 2018 Estimated Federal NOL		
19	Cumulative Book/Tax Timer Subject to Proration	Line 5	(\$242,148)
20	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	\$0
21	Total Cumulative Book/Tax Timer	Line 17 + Line 18	(\$242,148)
22	Total FY 2018 Federal NOL		\$0
23	Allocated FY 2018 Federal NOL Not Subject to Proration	(Line 18 ÷ Line 19) × Line 20	\$0
24	Allocated FY 2018 Federal NOL Subject to Proration	(Line 17 ÷ Line 19) × Line 20	\$0
25	Effective Tax Rate		21%
26	Deferred Tax Benefit subject to proration	Line 22 × Line 23	\$0
27	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	(\$50,851)
28	Proration Calculation	(h) <u>Number of Days in Month</u>	(i) <u>Proration Percentage</u>
29	April	30	91.78%
30	May	31	83.29%
31	June	30	75.07%
32	July	31	66.58%
33	August	31	58.08%
34	September	30	49.86%
35	October	31	41.37%
36	November	30	33.15%
37	December	31	24.66%
38	January	31	16.16%
39	February	28	8.49%
40	March	31	0.00%
41	Total	365	
42	Deferred Tax Without Proration	Line 25	(\$50,851)
43	Average Deferred Tax without Proration	Line 39 × 50%	(\$25,426)
44	Proration Adjustment	Line 38 - Line 40	\$2,183

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j) Current Year Line 25 ÷ 12 × Current Month Col (i)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2020 Revenue Requirement on FY 2019 Actual Incremental Gas Capital
Investment**

Line No.			Fiscal Year 2019 (a)	Fiscal Year 2020 (b)
	<u>Depreciable Net Capital Included in ISR Rate Base</u>			
1	Total Allowed Capital Included in ISR Rate Base in Current Year	Page 13 of 20 , Line 3 ,Col (b)	(\$914,000)	\$0
2	Retirements	Page 13 of 20 , Line 9 ,Col (b)	(\$1,368,021)	\$0
3	Net Depreciable Capital Included in ISR Rate Base	Year 1 = Line 1 - Line 2; then = Prior Year Line 3	\$454,021	\$454,021
	<u>Change in Net Capital Included in ISR Rate Base</u>			
4	Capital Included in ISR Rate Base	Line 1	(\$914,000)	\$0
5	Depreciation Expense		\$0	\$0
6	Incremental Capital Amount	Year 1 = Line 4 - Line 5; then = Prior Year Line 6	(\$914,000)	(\$914,000)
7	Cost of Removal	Page 13 of 20 , Line 6 ,Col (b)	\$5,626,564	
8	Net Plant Amount	Line 1 = Line 6+7; Then = Prior Year	\$4,712,564	\$4,712,564
	<u>Deferred Tax Calculation:</u>			
9	Composite Book Depreciation Rate	As Approved in RIPUC Docket No. 4323 & 4770 1/	3.15%	2.99%
10	Tax Depreciation	Year 1 = Page 7 of 20, Line 21, Col (a); then = Page 7 of 20, Col (d)	\$5,200,130	(\$8,390)
11	Cumulative Tax Depreciation	Year 1 = Line 10; then = Prior Year Line 11 + Current Year Line 10	\$5,200,130	\$5,191,739
12	Book Depreciation	Year 1 = Line 3 × Line 9 × 50%; then = Line 3 × Line 9	\$7,157	\$13,575
13	Cumulative Book Depreciation	Year 1 = Line 12; then = Prior Year Line 13 + Current Year Line 12	\$7,157	\$20,732
14	Cumulative Book / Tax Timer	Line 11 - Line 13	\$5,192,973	\$5,171,007
15	Effective Tax Rate		21.00%	21.00%
16	Deferred Tax Reserve	Line 14 × Line 15	\$1,090,524	\$1,085,911
17	Add: FY 2019 Federal NOL incremental utilization	Page 13 of 20, Line 12, Col (b)	\$286,350	\$286,350
18	Net Deferred Tax Reserve before Proration Adjustment	Line 16 + Line 17	\$1,376,874	\$1,372,261
	<u>ISR Rate Base Calculation:</u>			
19	Cumulative Incremental Capital Included in ISR Rate Base	Line 8	\$4,712,564	\$4,712,564
20	Accumulated Depreciation	- Line 13	(\$7,157)	(\$20,732)
21	Deferred Tax Reserve	- Line 18	(\$1,376,874)	(\$1,372,261)
22	Year End Rate Base before Deferred Tax Proration	Sum of Lines 19 through 21	\$3,328,533	\$3,319,570
	<u>Revenue Requirement Calculation:</u>			
23	Average Rate Base before Deferred Tax Proration Adjustment	Year 1 = Current Year Line 22 ÷ 2; then = (Prior Year Line 22 + Current Year Line 22) ÷ 2	\$1,664,266	\$3,324,051
24	Proration Adjustment	Year 1 =0; then = Page 8 of 20, Line 41, Col (j)	\$0	(\$58)
25	Average ISR Rate Base after Deferred Tax Proration	Line 23 + Line 24	\$1,664,266	\$3,323,993
26	Pre-Tax ROR	Page 20 of 20, Line 30, Column (e)	8.41%	8.41%
27	Return and Taxes	Line 25 × Line 26	\$139,965	\$279,548
28	Book Depreciation	Line 12	\$7,157	\$13,575
29	Annual Revenue Requirement	Sum of Lines 27 through 28	\$147,122	\$293,123
30	7 months Revenue Requirement (September 1, 2018-March 31, 2019)	Line 29, Column (a) × 7 ÷ 12	85,821	

1/ 3.38%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4323, in effect until Aug 31, 2018
2.99%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4770, effective on Sep 1, 2018
FY 19 Composite Book Depreciation Rate = 3.38% × 5 / 12 + 2.99% × 7 / 12

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2019 Incremental Capital Investment

Line No.			Fiscal Year 2019 (a)	(b)	(c)	(d)	(e)
1	Capital Repairs Deduction						
2	Plant Additions	Page 6 of 20, Line 1	(\$914,000)				
3	Capital Repairs Deduction Rate	Per Tax Department	85.18%				
3	Capital Repairs Deduction	Line 1 × Line 2	(\$778,545)				
				MACRS basis: (\$116,227)			
				Annual Cumulative			
				Fiscal Year			
4	Bonus Depreciation			2019	3.75%	(\$4,359)	\$5,200,130
5	Plant Additions	Line 1	(\$914,000)	2020	7.22%	(\$8,390)	\$5,191,739
6	Less Capital Repairs Deduction	Line 3	(\$778,545)	2021	6.68%	(\$7,760)	\$5,183,979
7	Plant Additions Net of Capital Repairs Deduction	Line 4 - Line 5	(\$135,455)	2022	6.18%	(\$7,179)	\$5,176,799
8	Percent of Plant Eligible for Bonus Depreciation	Per Tax Department	100.00%	2023	5.71%	(\$6,640)	\$5,170,159
9	Plant Eligible for Bonus Depreciation	Line 6 × Line 7	(\$135,455)	2024	5.29%	(\$6,143)	\$5,164,017
10	Bonus Depreciation Rate (30% Eligible)	1 × 30% × 11.65%	3.50%	2025	4.89%	(\$5,681)	\$5,158,335
11	Bonus Depreciation Rate (40% Eligible)	1 × 40% × 26.75%	10.70%	2026	4.52%	(\$5,256)	\$5,153,080
12	Total Bonus Depreciation Rate	Line 9 + Line 10	14.20%	2027	4.46%	(\$5,186)	\$5,147,894
12	Bonus Depreciation	Line 8 × Line 11	(\$19,228)	2028	4.46%	(\$5,185)	\$5,142,709
				2029	4.46%	(\$5,186)	\$5,137,523
				2030	4.46%	(\$5,185)	\$5,132,338
				2031	4.46%	(\$5,186)	\$5,127,152
				2032	4.46%	(\$5,185)	\$5,121,967
				2033	4.46%	(\$5,186)	\$5,116,781
				2034	4.46%	(\$5,185)	\$5,111,596
				2035	4.46%	(\$5,186)	\$5,106,410
				2036	4.46%	(\$5,185)	\$5,101,225
				2037	4.46%	(\$5,186)	\$5,096,039
				2038	4.46%	(\$5,185)	\$5,090,854
				2039	2.23%	(\$2,593)	\$5,088,261
				100.00%		(\$116,227)	\$0
13	Remaining Tax Depreciation						
14	Plant Additions	Line 1	(\$914,000)				
15	Less Capital Repairs Deduction	Line 3	(\$778,545)				
16	Less Bonus Depreciation	Line 12	(\$19,228)				
17	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	Line 13 - Line 14 - Line 15	(\$116,227)				
18	20 YR MACRS Tax Depreciation Rates	IRS Publication 946	3.75%				
18	Remaining Tax Depreciation	Line 16 × Line 17	(\$4,359)				
19	FY19 tax (gain)/loss on retirements	Per Tax Department	\$375,698				
20	Cost of Removal	Page 6 of 20, Line 7	\$5,626,564				
21	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19 & 20	\$5,200,130				

- 1/ Capital Repairs percentage is the actual result of FY2019 tax return
2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY2019 tax return
3/ Actual Loss the actual result of FY2019 tax return

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Net Deferred Tax Reserve Proration on FY 2019 Incremental Capital Investment

Line No.	Deferred Tax Subject to Proration		(a) FY20
		Docket no. 4916, R.S. 3, Att. 1R, page 7 Col	
1	Book Depreciation	(a)	\$162,791
2	Bonus Depreciation		\$0
		Docket no. 4916, R.S. 3, Att. 1R, page 7 Col	
3	Remaining MACRS Tax Depreciation	(a)	(\$156,315)
4	FY19 tax (gain)/loss on retirements		\$0
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	\$6,476
6	Effective Tax Rate		21%
7	Deferred Tax Reserve	Line 5 × Line 6	\$1,360
	Deferred Tax Not Subject to Proration		
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	\$0
12	Effective Tax Rate		21%
13	Deferred Tax Reserve	Line 11 × Line 12	\$0
14	Total Deferred Tax Reserve	Line 7 + Line 13	\$1,360
15	Net Operating Loss		\$0
16	Net Deferred Tax Reserve	Line 14 + Line 15	\$1,360
	Allocation of FY 2019 Estimated Federal NOL		
17	Cumulative Book/Tax Timer Subject to Proration	Line 5	\$6,476
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	\$0
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	\$6,476
20	Total FY 2019 Federal NOL		\$0
21	Allocated FY 2019 Federal NOL Not Subject to Proration	(Line 18 ÷ Line 19) × Line 20	\$0
22	Allocated FY 2019 Federal NOL Subject to Proration	(Line 17 ÷ Line 19) × Line 20	\$0
23	Effective Tax Rate		21%
24	Deferred Tax Benefit subject to proration	Line 22 × Line 23	\$0
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	\$1,360
		(h) (i) (j)	
	Proration Calculation	Number of Days in Month Proration Percentage	FY20
26	April	30 91.78%	\$104
27	May	31 83.29%	\$94
28	June	30 75.07%	\$85
29	July	31 66.58%	\$75
30	August	31 58.08%	\$66
31	September	30 49.86%	\$57
32	October	31 41.37%	\$47
33	November	30 33.15%	\$38
34	December	31 24.66%	\$28
35	January	31 16.16%	\$18
36	February	28 8.49%	\$10
37	March	31 0.00%	\$0
38	Total	365	\$622
39	Deferred Tax Without Proration	Line 25	\$1,360
40	Average Deferred Tax without Proration	Line 39 × 50%	\$680
41	Proration Adjustment	Line 38 - Line 40	(\$58)

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j) Current Year Line 25 ÷ 12 × Current Month Col (i)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2020 Revenue Requirement on FY 2020 Actual Incremental Gas Capital Investment

Line No.			Fiscal Year 2020 (a)
	<u>Depreciable Net Capital Included in ISR Rate Base</u>		
1	Total Allowed Capital Included in ISR Rate Base in Current Year	Page 13 of 20 , Line 3 ,Col (c)	\$105,296,046
2	Retirements	Page 13 of 20 , Line 9 ,Col (c)	1/ \$4,276,135
3	Net Depreciable Capital Included in ISR Rate Base		
		Year 1 = Line 1 - Line 2; then = Prior Year Line 3	\$101,019,911
	<u>Change in Net Capital Included in ISR Rate Base</u>		
4	Capital Included in ISR Rate Base	Line 1	\$105,296,046
5	Depreciation Expense	Page 16 of 20, Line 72(c)	\$23,534,853
6	Incremental Capital Amount		
		Year 1 = Line 4 - Line 5; then = Prior Year Line 6	\$81,761,193
7	Cost of Removal	Page 13 of 20 , Line 6 ,Col (c)	\$7,055,630
8	Net Plant Amount	Line 1 = Line 6+7; Then = Prior Year	\$88,816,823
	<u>Deferred Tax Calculation:</u>		
9	Composite Book Depreciation Rate	Page 14 of 20, Line 86(e)	1/ 2.99%
10	Tax Depreciation	Year 1 =Page 10 of 20, Line 21, Col (a); then =Page 10 of 20, Col (d)	\$83,553,704
11	Cumulative Tax Depreciation	Year 1 = Line 10; then = Prior Year Line 11 + Current Year Line 10	\$83,553,704
12	Book Depreciation	Year 1 = Line 3 × Line 9 × 50% ; then = Line 3 × Line 9	\$1,510,248
13	Cumulative Book Depreciation	Year 1 = Line 12; then = Prior Year Line 13 + Current Year Line 12	\$1,510,248
14	Cumulative Book / Tax Timer	Line 11 - Line 13	\$82,043,456
15	Effective Tax Rate		21.00%
16	Deferred Tax Reserve	Line 14 × Line 15	\$17,229,126
17	Add: FY 2020 Federal NOL utilization	Page 13 of 20, Line 12, Col (c)	(\$3,063,059)
18	Net Deferred Tax Reserve before Proration Adjustment	Line 16 + Line 17	\$14,166,067
	<u>ISR Rate Base Calculation:</u>		
19	Cumulative Incremental Capital Included in ISR Rate Base	Line 8	\$88,816,823
20	Accumulated Depreciation	- Line 13	(\$1,510,248)
21	Deferred Tax Reserve	- Line 18	(\$14,166,067)
22	Year End Rate Base before Deferred Tax Proration	Sum of Lines 19 through 21	\$73,140,508
	<u>Revenue Requirement Calculation:</u>		
23	Average Rate Base before Deferred Tax Proration Adjustment	Year 1 = Line 22 × Page 12 of 20, Line 16; then = Average of (Prior Year Line 22 + Current Year Line 22/2)	\$28,707,649
24	Proration Adjustment	Page 11 of 20, Line 41, Col (j)	\$11,181
25	Average ISR Rate Base after Deferred Tax Proration	Line 23 + Line 24	\$28,718,830
26	Pre-Tax ROR	Page 20 of 20 , Line 30, Column (e)	8.41%
27	Return and Taxes	Line 25 × Line 26	\$2,415,254
28	Book Depreciation	Line 12	\$1,510,248
29	Annual Revenue Requirement	Sum of Lines 27 through 28	\$3,925,501

1/ 2.99%, Composite Book Depreciation Rate of Distribution Plant approved per RIPUC Docket No. 4770, effective on Sep 1, 2018

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2020 Incremental Capital Investments

0.14400

Line No.		Fiscal Year 2020 (a)	(b)	(c)	(d)	(e)
Capital Repairs Deduction						
1	Plant Additions	\$105,296,046	Page 9 of 20, Line 1			
2	Capital Repairs Deduction Rate	68.90%	Per Tax Department			
3	Capital Repairs Deduction	\$72,548,976	Line 1 × Line 2			
Bonus Depreciation						
4	Plant Additions	\$105,296,046	Line 1			
5	Less Capital Repairs Deduction	\$72,548,976	Line 3			
6	Plant Additions Net of Capital Repairs Deduction	\$32,747,070	Line 4 - Line 5			
7	Percent of Plant Eligible for Bonus Depreciation	100.00%	Per Tax Department			
8	Plant Eligible for Bonus Depreciation	\$32,747,070	Line 6 × Line 7			
9	Bonus Depreciation Rate 30%	4.32%	14.4% × 30%			
10	Bonus Depreciation Rate 0%	0.00%				
11	Total Bonus Depreciation Rate	4.32%	Line 9 + Line 10			
12	Bonus Depreciation	\$1,414,673	Line 8 × Line 11			
Remaining Tax Depreciation						
13	Plant Additions	\$105,296,046	Line 1			
14	Less Capital Repairs Deduction	\$72,548,976	Line 3			
15	Less Bonus Depreciation	\$1,414,673	Line 12			
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$31,332,397	Line 13 - Line 14 - Line 15			
17	20 YR MACRS Tax Depreciation Rates	3.75%	IRS Publication 946			
18	Remaining Tax Depreciation	\$1,174,965	Line 16 × Line 17			
19	FY20 tax (gain)/loss on retirements		Per Tax Department			
20	Cost of Removal	\$1,359,460	Page 9 of 20, Line 7			
21	Total Tax Depreciation and Repairs Deduction	\$7,055,630				
		\$83,553,704	Sum of Lines 3, 12, 18, 19 & 20			

- 1/ FY 2020 estimated capital repair deduction is based on FY 2018 estimate
2/ FY 2020 estimated tax loss on retirements is based on FY 2018 estimate

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Net Deferred Tax Reserve Proration on FY 2020 Incremental Capital Investments**

Line No.	Deferred Tax Subject to Proration	(a) FY20
1	Book Depreciation	Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a) \$1,571,147
2	Bonus Depreciation	\$0
3	Remaining MACRS Tax Depreciation	Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a) (\$1,349,676)
4	FY20 tax (gain)/loss on retirements	Year 1 = Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a); then = 0 (\$1,359,460)
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4 (\$1,137,989)
6	Effective Tax Rate	21%
7	Deferred Tax Reserve	Line 5 × Line 6 (\$238,978)
	Deferred Tax Not Subject to Proration	
8	Capital Repairs Deduction	Year 1 = Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a); then = 0 (\$79,736,483)
9	Cost of Removal	Year 1 = Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a); then = 0 (\$4,804,530)
10	Book/Tax Depreciation Timing Difference at 3/31/2020	
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10 (\$84,541,013)
12	Effective Tax Rate	21%
13	Deferred Tax Reserve	Line 11 × Line 12 (\$17,753,613)
14	Total Deferred Tax Reserve	Line 7 + Line 13 (\$17,992,590)
15	Net Operating Loss	
16	Net Deferred Tax Reserve	Line 14 + Line 15 (\$17,992,590)
	Allocation of FY 2018 Estimated Federal NOL	
17	Cumulative Book/Tax Timer Subject to Proration	Line 5 (\$1,137,989)
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11 (\$84,541,013)
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18 (\$85,679,002)
20	Total FY 2020 Federal NOL	Year 1 = Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (a); then = 0 (\$9,513,316)
21	Allocated FY 2020 Federal NOL Not Subject to Proration	(Line 18 ÷ Line 19) × Line 20 (\$9,386,960)
22	Allocated FY 2020 Federal NOL Subject to Proration	(Line 17 ÷ Line 19) × Line 20 (\$126,356)
23	Effective Tax Rate	21%
24	Deferred Tax Benefit subject to proration	Line 22 × Line 23 (\$26,535)
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24 (\$265,512)
		(h) (i) (j)
	Proration Calculation	Number of Days in Month Proration Percentage FY20
26	April	30 91.80% (\$10,772)
27	May	31 83.33% (\$9,779)
28	June	30 75.14% (\$8,817)
29	July	31 66.67% (\$7,823)
30	August	31 58.20% (\$6,829)
31	September	30 50.00% (\$14,774)
32	October	31 41.53% (\$12,272)
33	November	30 33.33% (\$9,850)
34	December	31 24.86% (\$7,347)
35	January	31 16.39% (\$4,844)
36	February	29 8.47% (\$2,503)
37	March	31 0.00% \$0
38	Total	366 (\$95,609)
39	Deferred Tax Without Proration	Line 25 (\$265,512)
40	Average Deferred Tax without Proration	Per RIPUC Docket No. 4996, FY2021 Gas ISR Plan Filing, revised Section 3, Attachment 1R, Page 10 of 22 (\$106,789)
41	Proration Adjustment	Line 38 - Line 40 \$11,181

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) divided by 365
(j) Docket no. 4916, R.S. 3, Att. 1R, page 10 Col (j)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
ISR Additions April through August 2020

Line No.	Month No.	Month	FY 2020 ISR Additions (a)	In Rates (b)	Not In Rates (c) = (a) - (b)	Weight for Days (d)	Weighted Average (e) = (d) × (c)	Weight for Investment (f) = (e) ÷ Total(c)
1								
2	1	Apr-19	\$12,009,983	\$7,764,750	\$4,245,233	0.958	\$4,068,348	4.03%
3	2	May-19	\$12,009,983	\$7,764,750	\$4,245,233	0.875	\$3,714,579	4.03%
4	3	Jun-19	\$12,009,983	\$7,764,750	\$4,245,233	0.792	\$3,360,809	4.03%
5	4	Jul-19	\$12,009,983	\$7,764,750	\$4,245,233	0.708	\$3,007,040	4.03%
6	5	Aug-19	\$12,009,983	\$7,764,750	\$4,245,233	0.625	\$2,653,271	4.03%
7	6	Sep-19	\$12,009,983	\$0	\$12,009,983	0.542	\$6,505,407	11.41%
8	7	Oct-19	\$12,009,983	\$0	\$12,009,983	0.458	\$5,504,576	11.41%
9	8	Nov-19	\$12,009,983	\$0	\$12,009,983	0.375	\$4,503,744	11.41%
10	9	Dec-19	\$12,009,983	\$0	\$12,009,983	0.292	\$3,502,912	11.41%
11	10	Jan-20	\$12,009,983	\$0	\$12,009,983	0.208	\$2,502,080	11.41%
12	11	Feb-20	\$12,009,983	\$0	\$12,009,983	0.125	\$1,501,248	11.41%
13	12	Mar-20	\$12,009,983	\$0	\$12,009,983	0.042	\$500,416	11.41%
14		Total	\$144,119,796	\$38,823,750	\$105,296,046		\$41,324,429	100.00%
15	Total Additions September 2019 through March 2020				\$84,069,881			
16	FY 2020 Weighted Average Incremental Rate Base Percentage						39.25%	

Column (a)=Page 13 of 20 , Line 1 ,Col (c)
Column (b)=Page 13 of 20 , Line 2 ,Col (c)
Column (d) = (12.5 - Month No.) ÷ 12
Line 14 = Page 13 of 20 Line 1 Col (c)
Line 15 = Sum of Lines 7(c) through 13(c)
Line 16 = Line 14(e)/Line 14(c)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
FY 2018 - FY 2020 Incremental Capital Investment Summary**

Line No.			Actual Fiscal Year 2018 (a)	Actual Fiscal Year 2019 (b)	Plan Fiscal Year 2020 (c)
<u>Capital Investment</u>					
1	ISR-eligible Capital Investment	Col (a)=Docket No. 4678 FY18 Reconciliation Filing; Col (b)=Docket No. 4781 FY19 Reconciliation Filing; Col (c)=Actual per Company's Book	\$97,809,718	\$92,263,000	\$144,119,796
2	ISR-eligible Capital Additions included in Rate Base per RIPUC Docket No. 4770	Docket No. 4770 Schedule MAL-11-Gas Page 5, Col (a)=Lines 1(a) + 1(b); Col(b)=Lines 1(c) + 1(d); Col(c)=Line 1(e)	\$93,177,000	\$93,177,000	\$38,823,750
3	Incremental ISR Capital Investment	Line 1 - Line 2	\$4,632,718	(\$914,000)	\$105,296,046
<u>Cost of Removal</u>					
4	ISR-eligible Cost of Removal	Col (a) Docket No. 4678 FY 2018 ISR Reconciliation Filing; Col (b) Docket No. 4781 FY 2019 ISR Reconciliation Filing; Col (c) Actual per Company's Book	\$8,603,224	\$11,583,085	\$10,161,508
5	ISR-eligible Cost of Removal in Rate Base per RIPUC Docket No. 4770	Schedule 6-GAS, Docket No. 4770: Col(a)=[P1]L23+L42×7÷12+Docket 4678 Page 2, Line 7x3÷12; Col(b)=[P1]L42×5÷12+[P2]L18×7÷12; Col (c)=[P2]L18×5÷12+L39×7÷12;	\$6,662,056	\$5,956,522	\$3,105,878
6	Incremental Cost of Removal	Line 4 - Line 5	\$1,941,168	\$5,626,564	\$7,055,630
<u>Retirements</u>					
7	ISR-eligible Retirements	Col (a) Docket No. 4678 FY 2018 ISR Reconciliation Filing; Col (b) Docket No. 4781 FY 2019 ISR Reconciliation Filing; Col (c) Actual per Company's Book	\$24,056,661	\$6,531,844	\$8,395,321
8	ISR-eligible Retirements per RIPUC Docket No. 4770	Schedule 6-GAS, Docket No. 4770: Col(a)=[P1]L24+L43×7÷12+ Docket 4678 Page 2, Line 2x3÷12; Col(b)=[P1]L43×5÷12+[P2]L19×7÷12 Col (c)=[P2]L19×5÷12+L40×7÷12	\$11,997,233	\$7,899,865	\$4,119,186
9	Incremental Retirements	Line 7 - Line 8	\$12,059,428	(\$1,368,021)	\$4,276,135
<u>(NOL)/ NOL Utilization</u>					
10	ISR (NOL)/NOL Utilization Per ISR	Page 19 of 20, Line 9	(\$6,051,855)	\$1,091,119	\$0
11	ISR NOL Utilization Per Docket 4770	Schedule 11-Gas Page 11, Docket No. 4770: Col (a)= L40×5÷12; Col (b)= L40×5÷12+L48×7÷12; Col (c)= P11,L48×5÷12+P12,L39×7÷12	\$0	\$804,769	\$3,063,059
12	Incremental (NOL)/NOL Utilization	Line 10 - Line 11	(\$6,051,855)	\$286,350	(\$3,063,059)

Note: The FY20 non-growth ISR capital investment of \$154,281,3040 is the sum of Line 1 and Line 4.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Reconciliation Filing
Attachment MAL-1
Page 14 of 20

The Narragansett Electric Company d/b/a National Grid ISR Depreciation Expense per Rate Case RIPUC Docket No. 4770								
Account No.	Account Title	Test Year June 30, 2017 (a)	1/ ARO Adjustment (b)	Adjustments June 30, 2017 (c)	Adjusted Balance (d) = (a) + (b) + (c)	Proposed Rate (e)	Depreciation Expense (f) = (d) x (e)	
Intangible Plant								
1 302.00	Franchises And Consents	\$213,499	\$0	\$0	\$213,499	0.00%	\$0	
2 303.00	Misc. Intangible Plant	\$25,427	\$0	\$0	\$25,427	0.00%	\$0	
3 303.01	Misc. Int Cap Software	\$19,833,570	\$0	\$9,991,374	\$29,824,944	0.00%	\$0	
4								
5	Total Intangible Plant	\$20,072,496	\$0	\$9,991,374	\$30,063,870		\$0	
6								
Production Plant								
9 304.00	Production Land Land Rights	\$364,912	\$0	\$0	\$364,912	0.00%	\$0	
10 305.00	Prod. Structures & Improvements	\$2,693,397	\$0	\$0	\$2,693,397	15.05%	\$405,356	
11 307.00	Production Other Power	\$46,159	\$0	\$0	\$46,159	7.16%	\$3,305	
12 311.00	Production LNG Equipme	\$3,167,445	\$0	\$0	\$3,167,445	11.40%	\$361,089	
13 320.00	Prod. Other Equipment	\$1,106,368	\$0	\$0	\$1,106,368	6.69%	\$74,016	
14								
15	Total Production Plant	\$7,378,281	\$0	\$0	\$7,378,281		\$843,766	
16								
Storage Plant								
19 360.00	Stor Land & Land Rights	\$261,151	\$0	\$0	\$261,151	0.00%	\$0	
20 361.03	Storage Structures Improvements	\$3,385,049	\$0	\$0	\$3,385,049	0.99%	\$33,512	
21 362.04	Storage Gas Holders	\$4,606,338	\$0	\$0	\$4,606,338	0.04%	\$1,843	
22 363.00	Stor. Purification Equipment	\$13,891,210	\$0	\$0	\$13,891,210	3.37%	\$468,134	
23								
24	Total Storage Plant	\$22,143,748	\$0	\$0	\$22,143,748		\$503,488	
25								
Distribution Plant								
28 374.00	Dist. Land & Land Rights	\$956,717	\$0	\$0	\$956,717	0.00%	\$0	
29 375.00	Gas Dist Station Structure	\$10,642,632	\$0	\$0	\$10,642,632	1.15%	\$122,390	
30 376.00	Distribution Mains	\$46,080,760	\$0	\$0	\$46,080,760	3.61%	\$1,663,515	
31 376.03	Dist. River Crossing Main	\$695,165	\$0	\$0	\$695,165	3.61%	\$25,095	
32 376.04	Mains - Steel And Other - SI	\$4,190	\$0	\$0	\$4,190	0.00%	\$0	
33 376.06	Dist. District Regulator	\$14,213,837	\$0	\$0	\$14,213,837	3.61%	\$513,120	
34 376.11	Gas Mains Steel	\$57,759,572	\$0	\$0	\$57,759,572	3.31%	\$1,908,954	
35 376.12	Gas Mains Plastic	\$382,797,443	\$0	\$0	\$382,797,443	2.70%	\$10,316,391	
36 376.13	Gas Mains Cast Iron	\$5,556,209	\$0	\$0	\$5,556,209	8.39%	\$465,888	
37 376.14	Gas Mains Valves	\$222,104	\$0	\$0	\$222,104	3.61%	\$8,018	
38 376.15	Propane Lines	\$0	\$0	\$0	\$0	3.61%	\$0	
39 376.16	Dist. Cathodic Protect	\$1,569,576	\$0	\$0	\$1,569,576	3.61%	\$56,662	
40 376.17	Dist. Joint Seals	\$63,067,055	\$0	\$0	\$63,067,055	4.63%	\$2,920,005	
41 377.00	T&D Compressor Sta Equipment	\$248,656	\$0	\$0	\$248,656	1.07%	\$2,661	
42 377.62	1/ 5360-Tanks ARO	\$299	(\$299)	\$0	\$0	0.00%	\$0	
43 378.10	Gas Measur & Reg Sta Equipment	\$19,586,255	\$0	\$0	\$19,586,255	2.08%	\$407,394	
44 378.55	Gas M&Reg Sta Eqp RTU	\$372,772	\$0	\$0	\$372,772	6.35%	\$23,671	
45 379.00	Dist. Measur. Reg. Gs	\$11,033,164	\$0	\$0	\$11,033,164	2.22%	\$244,936	
46 379.01	Dist. Meas. Reg. Gs Eq	\$1,399,586	\$0	\$0	\$1,399,586	0.00%	\$0	
47 380.00	Gas Services All Sizes	\$331,205,854	\$0	\$0	\$331,205,854	3.05%	\$10,101,779	
48 381.10	Sml Meter& Reg Bare Co	\$26,829,565	\$0	\$0	\$26,829,565	1.76%	\$472,200	
49 381.30	Lrg Meter& Reg Bare Co	\$15,779,214	\$0	\$0	\$15,779,214	1.76%	\$277,714	
50 381.40	Meters	\$9,332,227	\$0	\$0	\$9,332,227	0.96%	\$89,589	
51 382.00	Meter Installations	\$675,201	\$0	\$0	\$675,201	3.66%	\$24,712	
52 382.20	Sml Meter& Reg Installation	\$43,145,998	\$0	\$0	\$43,145,998	3.66%	\$1,579,144	
53 382.30	Lrg Meter&Reg Installation	\$2,524,025	\$0	\$0	\$2,524,025	3.66%	\$92,379	
54 383.00	Dist. House Regulators	\$937,222	\$0	\$0	\$937,222	0.67%	\$6,279	
55 384.00	T&D Gas Reg Installs	\$1,216,551	\$0	\$0	\$1,216,551	1.56%	\$18,978	
56 385.00	Industrial Measuring And Regulating Station Equipment	\$540,187	\$0	\$0	\$540,187	4.18%	\$22,580	
57 385.01	Industrial Measuring And Regulating Station Equipment	\$255,921	\$0	\$0	\$255,921	0.00%	\$0	
58 386.00	Other Property On Customer Premises	\$271,765	\$0	\$0	\$271,765	0.23%	\$625	
59 386.02	Dist. Consumer Prem Equipment	\$110,131	\$0	\$0	\$110,131	0.00%	\$0	
60 387.00	Dist. Other Equipment	\$930,079	\$0	\$0	\$930,079	2.15%	\$19,997	
61 388.00	1/ ARO	\$5,736,827	(\$5,736,827)	\$0	\$0	0.00%	\$0	
62								
63	Total Distribution Plant	\$1,055,696,761	(\$5,737,126)	\$0	\$1,049,959,635	2.99%	\$31,384,677	
64								
General Plant								
67 389.01	General Plant Land Lan	\$285,357	\$0	\$0	\$285,357	0.00%	\$0	
68 390.00	Structures And Improvements	\$7,094,532	\$0	\$0	\$7,094,532	3.12%	\$221,349	
69 391.01	Gas Office Furniture & Fixture	\$274,719	\$0	\$0	\$274,719	6.67%	\$18,324	
70 394.00	General Plant Tools Shop (Fully Dep)	\$26,487	\$0	\$0	\$26,487	0.00%	\$0	
71 394.00	General Plant Tools Shop	\$5,513,613	\$0	\$0	\$5,513,613	5.00%	\$275,681	
72 395.00	General Plant Laboratory	\$221,565	\$0	\$0	\$221,565	6.67%	\$14,778	
73 397.30	Communication Radio Site Specific	\$387,650	\$0	\$0	\$387,650	5.00%	\$19,383	
74 397.42	Communication Equip Tel Site	\$63,481	\$0	\$0	\$63,481	20.00%	\$12,696	
75 398.10	Miscellaneous Equipment (Fully Dep)	\$1,341,386	\$0	\$0	\$1,341,386	0.00%	\$0	
76 398.10	Miscellaneous Equipment	\$2,789,499	\$0	\$0	\$2,789,499	6.67%	\$186,060	
77 399.10	1/ ARO	\$342,146	(\$342,146)	\$0	\$0	0.00%	\$0	
78								
79	Total General Plant	\$18,340,436	(\$342,146)	\$0	\$17,998,289	4.16%	\$748,271	
80								
81	Grand Total - All Categories	\$1,123,631,722	(\$6,079,273)	\$9,991,374	\$1,127,543,823	3.05%	\$33,480,202	
82						2.97%		
Other Utility Plant Assets								
84		Line 63		Total Distribution Plant	\$1,049,959,635	2.99%	\$31,384,677	
85		Line 73 + Line 74		Communication Equipment	\$451,132	7.11%	\$32,079	
86				Total ISR Tangible Plant	\$1,050,410,767	2.99%	\$31,416,756	
Non ISR Assets					\$77,133,057			

Lines 1 through 81 - per RIPUC Docket No. 4770 Compliance filing dated August 16, 2018 , Compliance Attachment 2, Schedule 6-GAS, Pages 3 & 4

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Reconciliation Filing
Attachment MAL-1
Page 15 of 20

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID RIPUC Docket Nos. 4770/4780 Compliance Attachment 2 Schedule 6-GAS Page 1 of 5					
The Narragansett Electric Company d/b/a National Grid Depreciation Expense - Gas For the Test Year Ended June 30, 2017 and the Rate Year Ending August 31, 2019				The Narragansett Electric Company d/b/a National Grid Gas ISR Depreciation Expense	
Line No	Description	Reference	Amount	Less non-ISR eligible Plant	ISR Amount
			(a)	(b)	(c)
1	Total Company Rate Year Depreciation	Sum of Page 2, Line 16 and Line 17	\$39,136,909		
2	Total Company Test Year Depreciation	Per Company Books	\$33,311,851		
3	Less: Reserve adjustments	Page 4, Line 29, Col (b) + Col (c)	(\$15,649)		
4	Adjusted Total Company Test Year Depreciation Expense	Line 2 + Line 3	\$33,296,202		
5	Depreciation Expense Adjustment	Line 1 - Line 4	\$5,840,707		
6					
7					
8	Test Year Depreciation Expense 12 Months Ended 06/30/17:		Per Book Amount		
9	Total Gas Utility Plant 06/30/17	Page 4, Line 27, Col (d) Sum of Page 3, Line 5, Col (d) and Page 4, Line 25, Col (e)	\$1,405,994,678	(\$77,133,057)	\$1,328,861,622
10	Less Non Depreciable Plant		(\$308,514,725)		(\$308,514,725)
11	Depreciable Utility Plant 06/30/17	Line 9 + Line 10	\$1,097,479,953	(\$77,133,057)	\$1,020,346,897
12					
13	Plus: Added Plant 2 Mos Ended 08/31/17	Schedule 11-GAS, Page 3, Line 4	\$19,592,266		\$19,592,266
14	Less: Retired Plant 2 Months Ended 08/31/17	1/ Line 13 x Retirement Rate	(\$1,345,989)		(\$1,345,989)
15	Depreciable Utility Plant 08/31/17	Line 11 + Line 13 + Line 14	\$1,115,726,231	(\$77,133,057)	\$1,020,346,897
16					
17	Average Depreciable Plant for Year Ended 08/31/17	(Line 11 + Line 15)/2	\$1,106,603,092		\$1,106,603,092
18					
19	Composite Book Rate %	As Approved in RIPUC Docket No. 4323	3.38%		
20					
21	Book Depreciation Reserve 06/30/17	Page 5, Line 72, Col (d)	\$357,576,825		\$357,576,825
22	Plus: Book Depreciation Expense	Line 17 x Line 19	\$6,233,864		\$6,233,864
23	Less: Net Cost of Removal/(Salvage)	2/ Line 13 x Cost of Removal Rate	(\$1,014,879)		(\$1,014,879)
24	Less: Retired Plant	Line 14	(\$1,345,989)		(\$1,345,989)
25	Book Depreciation Reserve 08/31/17	Sum of Line 21 through Line 24	\$361,449,821		
26					
27	Depreciation Expense 12 Months Ended 08/31/18				
28	Total Utility Plant 08/31/17	Line 9 + Line 13 + Line 14	\$1,424,240,956	(\$77,133,057)	\$1,347,107,900
29	Less Non Depreciable Plant	Line 10	(\$308,514,725)		(\$308,514,725)
30	Depreciable Utility Plant 08/31/17	Line 28 + Line 29	\$1,115,726,231		\$1,038,593,175
31					
32	Plus: Plant Added in 12 Months Ended 08/31/18	Schedule 11-GAS, Page 3, Line 11	\$115,710,016		\$115,710,016
33	Less: Plant Retired in 12 Months Ended 08/31/18	Line 32 x Retirement rate	(\$7,949,278)		(\$7,949,278)
34	Depreciable Utility Plant 08/31/18	Sum of Line 30 through Line 33	\$1,223,486,969		\$1,146,353,912
35					
36	Average Depreciable Plant for 12 Months Ended 08/31/18	(Line 30 + Line 34)/2	\$1,169,606,600		\$1,092,473,543
37					
38	Composite Book Rate %	As Approved in RIPUC Docket No. 4323	3.38%		3.38%
39					
40	Book Depreciation Reserve 08/31/17	Line 25	\$361,449,821		
41	Plus: Book Depreciation 08/31/18	Line 36 x Line 38	\$39,532,703		\$36,925,606
42	Less: Net Cost of Removal/(Salvage)	Line 32 x Cost of Removal Rate	(\$5,993,779)		
43	Less: Retired Plant	Line 33	(\$7,949,278)		
44	Book Depreciation Reserve 08/31/18	Sum of Line 40 through Line 43	\$387,039,467		
1/	3 year average retirement over plant addition in service FY 15 ~ FY17	6.87%	Retirements		
2/	3 year average Cost of Removal over plant addition in service FY 15 ~ FY17	5.18%	COR		

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Reconciliation Filing
Attachment MAL-1
Page 16 of 20

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID RIPUC Docket Nos. 4770/4780 Compliance Attachment 2 Schedule 6-GAS Page 2 of 5					
The Narragansett Electric Company d/b/a National Grid Depreciation Expense - Gas For the Test Year Ended June 30, 2017 and the Rate Year Ending August 31, 2021					
Line No	Description	Reference	Amount (a)	Less non-ISR eligible	
				Plant (b)	ISR Amount (c)
1	Rate Year Depreciation Expense 12 Months Ended 08/31/19:				
2	Total Utility Plant 08/31/18	Page 1, Line 28 + Line 32 + Line 33	\$1,532,001,694	(\$77,133,057)	\$1,454,868,637
3	Less Non-Depreciable Plant	Page 1, Line 10	(\$308,514,725)		(\$308,514,725)
4	Depreciable Utility Plant 08/31/18	Line 2 + Line 3	\$1,223,486,969		\$1,146,353,912
5					
6	Plus: Added Plant 12 Months Ended 08/31/19	Schedule 11-GAS, Page 3, Line 35	\$114,477,000	(\$1,348,000)	\$113,129,000
7	Less: Depreciable Retired Plant	1/ Line 6 x Retirement rate	(\$7,864,570)	\$92,608	(\$7,771,962)
8					
9	Depreciable Utility Plant 08/31/19	Sum of Line 4 through Line 7	\$1,330,099,399	(\$78,388,449)	\$1,251,710,950
10					
11	Average Depreciable Plant for Rate Year Ended 08/31/19	(Line 4 + Line 9)/2	\$1,276,793,184		\$1,199,032,431
12					
13	Proposed Composite Rate %	Page 4, Line 17, Col (e)	3.05%		2.99%
14					
15	Book Depreciation Reserve 08/31/18	Page 1, Line 44	\$387,039,467		\$0
16	Plus: Book Depreciation Expense	Line 11 x Line 13	\$38,950,409		\$35,851,070
17	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-GAS, Part VI, Page 6	\$186,500		\$186,500
18	Less: Net Cost of Removal/(Salvage)	2/ Line 6 x Cost of Removal Rate	(\$5,929,909)		\$0
19	Less: Retired Plant	Line 7	(\$7,864,570)		\$0
20	Book Depreciation Reserve 08/31/15	Sum of Line 15 through Line 1 ⁴	\$412,381,898		\$36,037,570
21					
22	Rate Year Depreciation Expense 12 Months Ended 08/31/20:				
23	Total Utility Plant 08/31/19	Line 2 + Line 6 + Line 7	\$1,638,614,124	(\$78,388,449)	\$1,560,225,675
24	Less Non-Depreciable Plant	Page 1, Line 10	(\$308,514,725)		(\$308,514,725)
25	Depreciable Utility Plant 08/31/15	Line 23 + Line 24	\$1,330,099,399		\$1,251,710,950
26					
27	Plus: Added Plant 12 Months Ended 08/31/20	Schedule 11-GAS, Page 5, Line 11(i)	\$21,017,630	(\$750,000)	\$20,267,630
28	Less: Depreciable Retired Plant	1/ Line 27 x Retirement rate	(\$1,443,911)	\$51,525	(\$1,392,386)
29					\$0
30	Depreciable Utility Plant 08/31/20	Sum of Line 25 through Line 28	\$1,349,673,118	(\$79,086,924)	\$1,270,586,194
31					
32	Average Depreciable Plant for Rate Year Ended 08/31/20	(Line 25 + Line 30)/2	\$1,339,886,258		\$1,261,148,572
33					
34	Proposed Composite Rate %	Page 4, Line 17, Col (e)	3.05%		2.99%
35					
36	Book Depreciation Reserve 08/31/20	Line 20	\$412,381,898		\$0
37	Plus: Book Depreciation Expense	Line 32 x Line 34	\$40,875,154		\$37,708,342
38	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-GAS, Part VI, Page 6	\$186,500		\$186,500
39	Less: Net Cost of Removal/(Salvage)	2/ Line 27 x Cost of Removal Rate	(\$1,088,713)		\$0
40	Less: Retired Plant	Line 28	(\$1,443,911)		\$0
41	Book Depreciation Reserve 08/31/20	Sum of Line 36 through Line 4 ¹	\$450,910,927		\$37,894,842
42					
43	Rate Year Depreciation Expense 12 Months Ended 08/31/21:				
44	Total Utility Plant 08/31/20	Line 23 + Line 27 + Line 28	\$1,658,187,843	(\$79,086,924)	\$1,579,100,919
45	Less Non-Depreciable Plant	Page 1, Line 10	(\$308,514,725)		(\$308,514,725)
46	Depreciable Utility Plant 08/31/20	Line 44 + Line 45	\$1,349,673,118		\$1,270,586,194
47					
48	Plus: Added Plant 12 Months Ended 08/31/21	Schedule 11-GAS, Page 5, Line 11(i)	\$21,838,436	(\$750,000)	\$21,088,436
49	Less: Depreciable Retired Plant	1/ Line 48 x Retirement rate	(\$1,500,301)	\$51,525	(\$1,448,776)
50					
51	Depreciable Utility Plant 08/31/21	Sum of Line 46 through Line 49	\$1,370,011,253	(\$79,785,399)	\$1,290,225,854
52					
53	Average Depreciable Plant for Rate Year Ended 08/31/21	(Line 46 + Line 51)/2	\$1,359,842,185		\$1,280,406,024
54					
55	Proposed Composite Rate %	Page 4, Line 17, Col (e)	3.05%		2.99%
56					
57	Book Depreciation Reserve 08/31/20	Line 41	\$450,910,927		\$0
58	Plus: Book Depreciation Expense	Line 53 x Line 55	\$41,483,938		\$38,284,140
59	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-GAS, Part VI, Page 6	\$186,500		\$186,500
60	Less: Net Cost of Removal/(Salvage)	2/ Line 48 x Cost of Removal Rate	(\$1,131,231)		\$0
61	Less: Retired Plant	Line 49	(\$1,500,301)		\$0
62	Book Depreciation Reserve 08/31/21	Sum of Line 57 through Line 61	\$489,949,834		\$38,470,640
63					
64	1/ 3 year average retirement over plant addition in service FY 15 ~ FY17	0.0687 Retirements			
65	2/ 3 year average Cost of Removal over plant addition in service FY 15 ~ FY17	0.0518 COR			
66					
67	Book Depreciation RY2	Line 37 (a) + Line 38 (b)			\$41,061,654
68	Less: General Plant Depreciation (assuming add=retirement)	Page 10, Line 79(f)			(\$748,271)
69	Plus: Comm Equipment Depreciation	Page 10, Line 73 + Line 74			\$32,079
70	Total				\$40,345,462
71	7 Months				x7/12
72	FY 2020 Depreciation Expense				\$23,534,853

The Narragansett Electric Company
d/b/a National Grid
FY 2020 ISR Property Tax Recovery Adjustment
(000s)

Line	(a) <u>End of FY 2018</u>	(b) <u>ISR Additions</u>	(c) <u>Non-ISR Add's</u>	(d) <u>Total Add's</u>	(e) <u>Blk Depr (L)</u>	(f) <u>Retirements</u>	(g) <u>COR</u>	(h) <u>End of FY 2019</u>
1	\$1,195,705	\$92,263	\$24,845	\$117,108		(\$6,844)		\$1,305,969
2	\$414,713					(\$6,844)	(\$6,123)	\$442,604
3	\$780,992				\$40,858			\$863,364
4	\$22,678							\$23,283
5	2.90%							2.70%
	<u>End of FY 2019</u>	<u>ISR Additions</u>	<u>Non-ISR Add's</u>	<u>Total Add's</u>	<u>Blk Depr (L)</u>	<u>Retirements</u>	<u>COR</u>	<u>End of FY 2020</u>
6	\$1,305,969	\$144,120	\$22,074	\$166,193		(\$8,567)		\$1,463,595
7	\$442,604				\$41,588	(\$8,567)	(\$10,162)	\$465,463
8	\$863,364							\$998,132
9	\$23,283							\$25,959
10	2.70%							2.60%

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
-----	-----	-----	-----	-----	-----	-----	-----

Cumulative Incr. ISR Prop. Tax for FY2018

11	Incremental ISR Additions	\$97,810				\$92,263	
12	Book Depreciation: base allowance on ISR eligible plant	(\$24,356)				(\$24,356)	
13	Book Depreciation: current year ISR additions	(\$1,246)				(\$1,449)	
14	COR	\$8,603				\$11,583	
15	Net Plant Additions	\$80,811				\$78,041	
16	RY Effective Tax Rate	3.06%				3.06%	

17	ISR Year Effective Tax Rate	2.90%					
18	RY Effective Tax Rate	3.06%					
19	RY Effective Tax Rate 5 mos for FY 2019	-0.15%				-0.36%	
20	RY Net Plant times 5 m/7 month	-0.15%				-0.15%	
21	FY 2014 Net Adds time 7 month	\$6,343	\$184		\$458,057	(\$684)	
22	FY 2015 Net Adds time 7 month	\$42,913	\$1,246		\$5,950	\$67	
23	FY 2016 Net Adds times ISR Year Effective Tax	\$59,527	\$1,729		\$39,920	\$449	
24	FY 2017 Net Adds times ISR Year Effective Tax	\$58,883	\$1,710		\$55,693	\$626	
25	FY 2018 Net Adds times ISR Year Effective Tax	\$80,810	\$2,347		\$56,076	\$630	
26	FY 2019 Net Adds times ISR Year Effective Tax rate				\$77,664	\$873	
					\$78,041	\$877	

27	Total ISR Property Tax Recovery	\$6,521				\$2,837	
----	---------------------------------	---------	--	--	--	---------	--

The Narragansett Electric Company
d/b/a National Grid
FY 2020 ISR Property Tax Recovery Adjustment
FY 2020 ISR Property Tax Recovery Adjustment (cont)

	(a) Cumulative Incr. ISR Prop. Tax for FY2019 7 months	(b)	(c)	(d)	(e)	(f)	(g)
					Cumulative Incr. ISR Prop. Tax for FY2020		
28	Incremental ISR Additions						
29	Book Depreciation: base allowance on ISR eligible plant	(\$914)			\$105,296		
30	Book Depreciation: current year ISR additions	\$0			\$0		
31	COR	(\$7)			(\$1,510)		
		\$5,627			\$7,056		
32	Net Plant Additions	\$4,705			\$110,841		
33							
34	RY Effective Tax Rate	2.92%			2.96%		
35	Property Tax Recovery on Growth and non-ISR 7 mos	1.70%					
36	ISR Year Effective Tax Rate	2.70%			2.60%		
37	RY Effective Tax Rate	2.92%			2.96%		
38	RY Effective Tax Rate 7 mos for FY 2019						
39	RY Net Plant times Rat 7 month	\$919,892	* -0.13%	(\$1,203)	\$908,586		(\$3,246)
40	Growth and non-ISR Incremental times rate difference			\$0	(\$20,407)		\$73
41	FY 2018 Net Incremental times rate difference	\$6,934	1.57%	\$109	\$7,156		\$186
42	FY 2019 Net Incremental times rate difference	\$4,705	1.57%	\$74	\$4,692		\$122
43	FY 2020 Net Incremental times rate difference				\$110,841		\$2,882
44	FY 2021 Net Adds times rate difference						
45	Total ISR Property Tax Recovery			(\$1,020)			\$17

Line Notes	Line Notes
1(a) - 5(h) 6(a) - 10(a) 6(b) 6(c) 6(d) 6(f) 6(h)	Docket No. 4781 Attachment MAL-2, Page 10 of 13, 1(a) to 5(h) Per Line 1(b) - 5(h) Page 13 of 20, Line 1, Col (c)÷1000 Per Company's Book Line 6(b) + Line 6(c) Per Company's Book Line 6(a) + (d) + (f) Page 16 of 20, (Line 16 + Line 17, Col (a))×5÷12 + Page 16 of 20, (Line 37 + Line 38, Col (a))×7÷12 + (Page 3 of 20, Line 3, Col (a) + Col (a)×0.5×3.05%÷1000 =6(f)
7(e)	Page 6 of 20, Line 3, Col (a)÷1000 * 3.05% + Page 9 of 20, Line 3, Col (a)×0.5×3.05%÷1000 =6(f)
7(f)	
7(g)	Page 13 of 20, Line 4, Col (c)÷1000
7(h)	Line 7(a) + (e) + (f) + (g)
8(h)	Line 6(h) - 7(h)
9(h)	Per Company's Book
10(h)	Line 9(h) ÷ 8(h)
11(a) - 27(h)	Docket No. 4781 Attachment MAL-1, Page 29 of 35, 82(e) to 107(k)
28(a)-45 (c)	Docket No. 4781 Attachment MAL-2, Page 10 of 13, 31(a) to 50 (c)
28(f)	Page 9 of 20, Line 4(a)÷1000
29(f)	FY20 depreciation is reflected in the NBV at 39(e)
30(f)	- Page 9 of 20, Line 12(a)÷1000
31(f)	Page 9 of 20, Line 7(a)÷1000
32(f)	Sum of Lines 28(f) through 31(f)
34(f)	=Rate Case, Docket 4770, Compliance, Revised Rebuttal. Att. 1, Sch 1 - G, P2, L15, Col (e) ÷ 39(e)
36(e)	=10(h)
37(e)	=34(f)
37(f)	36(e)-37(e)
38(f)	=37(f)
39(e)	=Rate Case, Docket 4770, Compliance, Revised Rebuttal. Att. 1: 39(a) × 5÷12 + (Sch 6-G, P2, L30 - L41 + P3, L5(d) - P5, L4(d) - Sch 5-G, P1, L1(e) - L1(g)) × 7÷12000 39(e) ×38(f)
39(g)	= - Rate Case, Docket 4770, Compliance, Revised Rebuttal. Att. 1: Sch 11-G, P5, L3(e)+L3(g)+L7(e)+L7(g) 40(e) ×38(f)
40(e)	Line 41(a) - Page 3 of 20, Line 12(c)÷1000
41(e)	=41(e) ×38(e)
42(e)	Line 42(a) - Page 6 of 20, Line 12(b)÷1000
43(e)	=42(e) ×38(e)
43(g)	=32(f)
43(g)	=43(e) ×38(e)
45(g)	sum of 39(g) through 44(g)

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Revenue Requirement Reconciliation
Deferred Income Tax ("DIT") Provisions and Net Operating Losses ("NOL")

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
		<u>Test Year July 2016 - June 2017</u>		<u>Jul & Aug 2017</u>	<u>12 Mths Aug 31, 2018</u>	<u>12 Mths Aug 31, 2019</u>	<u>12 Mths Aug 31, 2020</u>
1	Total Base Rate Plant DIT Provision	\$29,439,421		\$5,223,437	\$20,453,237	\$16,078,372	\$5,085,206
2	Excess DIT amortization			\$0	\$0	(\$1,470,238)	(\$1,470,238)
3	Total Base Rate Plant DIT Provision		<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>		
4	Incremental FY 18	\$2,507,039	\$2,560,766	\$1,773,289	\$24,514,347.17	\$17,043,594	\$8,195,453.84
5	Incremental FY 19	\$0	\$1,090,524	\$1,085,911	\$2,507,039	\$53,728	(\$787,477)
6	Incremental FY 20	\$0	\$0	\$17,229,126	\$1,090,524	(\$4,613)	
7	TOTAL Plant DIT Provision	\$2,507,039	\$3,651,291	\$20,088,327	\$27,021,386	\$18,187,846	\$24,632,490
8	NOL (Utilization)				\$6,051,855	(\$1,091,119)	\$0
9	Lesser of NOL or DIT Provision				\$6,051,855	(\$1,091,119)	\$0

Line Notes:

- 1(b) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-GAS, Page 2 of 23, Line 29, Col (e) - (a)
1(d) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-GAS, Page 11 of 23, Line 3 plus Line 4
1(e) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-GAS, Page 11 of 23, Line 7
1(f)-1(g) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-GAS, Page 11 of 23, Line 50
2 RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-GAS, Page 12 of 23, Line 52
3 Col (e) = Line 1 (b) /12×3 + Line 1(d)+ Line 1 (e) / 12× 7; Col (f) = Line 1 (e) /12×5 + Line 1(f) /12× 7 + Line 2 (e) /12×5 + Line 2(f) / 12× 7; Col (g) = Line 1(f) /12 × 5 + Line 1(g) /12 × 7 + Line 2(f) x 5 /12 + Line 2(g) × 7 /12)
4(a)-(c) Cumulative DIT plus Deferred Income Tax (Page 3, Line 16 + Line 18, col (a), (b), (c) respectively)
5(b)-(c) Cumulative DIT plus Deferred Income Tax (Page 6, Line 16, col (a), (b)) respectively)
6(c) Cumulative DIT plus Deferred Income Tax (Page 9, Line 16)
4(d)-6(f) Year over year change in cumulative DIT shown in Cols (a) through (d)
7 Sum of Lines 3 through 6
8 Col (d): RIPUC Docket Nos. 4781, FY2019 Gas IFA Reliability Plan Reconciliation filing, Attachment MAL-2, Page 6, Line 12(a); Col (e): based on FY19 tax return; Col (f): per Tax Department estimate
9 Lesser of Line 7 or Line 8

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Revenue Requirement Reconciliation
Calculation of Weighted Average Cost of Capital

Line No.

Weighted Average Cost of Capital as approved in RIPUC Docket No. 4323 at 35% income tax rate effective
April 1, 2013

	(a)	(b)	(c)	(d)	(e)
			Weighted		
	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
	100.00%		7.54%	2.51%	10.05%

(d) - Column (c) x 35% divided by (1 - 35%)

Weighted Average Cost of Capital as approved in RIPUC Docket No. 4323 at 21% income tax rate effective
January 1, 2018

	(a)	(b)	(c)	(d)	(e)
			Weighted		
	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	49.95%	5.70%	2.85%		2.85%
Short Term Debt	0.76%	0.80%	0.01%		0.01%
Preferred Stock	0.15%	4.50%	0.01%		0.01%
Common Equity	49.14%	9.50%	4.67%	1.24%	5.91%
	100.00%		7.54%	1.24%	8.78%

(d) - Column (c) x 21% divided by (1 - 21%)

Weighted Average Cost of Capital as approved in RIPUC Docket No. 4770 effective September 1, 2018

	(a)	(b)	(c)	(d)	(e)
			Weighted		
	Ratio	Rate	Rate	Taxes	Return
Long Term Debt	48.35%	4.98%	2.41%		2.41%
Short Term Debt	0.60%	1.76%	0.01%		0.01%
Preferred Stock	0.10%	4.50%	0.00%		0.00%
Common Equity	50.95%	9.28%	4.73%	1.26%	5.99%
	100.00%		7.15%	1.26%	8.41%

(d) - Column (c) x 21% divided by (1 - 21%)

FY18 Blended Rate $\text{Line 8(e)} \times 75\% + \text{Line 20(e)} \times 25\%$ 9.73%

FY19 Blended Rate $\text{Line 20} \times 5 \div 12 + \text{Line 30} \times 7 \div 12$ 8.56%

**THE NARRAGANSETT ELECTRIC COMPANY
d/b/a NATIONAL GRID
R.I.P.U.C. DOCKET NO. 4916
FY 2020 GAS INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN
RECONCILIATION FILING
WITNESS: MELISSA A. LITTLE
ATTACHMENTS**

Attachment MAL-2

FY 2019 Gas Infrastructure, Safety and Reliability Plan Revenue Requirement Calculation for
the five months April 1, 2018 through August 31, 2018

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation

FY 2019 Revenue Requirement Summary for the 5-months April 1, 2018 through August 31, 2018

Line No.		Fiscal Year 2019 Tax True-Up			
		As Reconciled	Actuals		Variance
		Apr~Aug FY 2019 (a)	Apr~Aug FY 2019 (b)		(c) = (b) - (a)
Operation and Maintenance Expenses					
1	FY 2019 Operation and Maintenance Expense	\$178,813	\$178,813		\$0
Capital Investment:					
2	Actual Revenue Requirement on Incremental FY 2012 Capital included in ISR Rate Base	\$383,479	\$383,479		\$0
3	Actual Revenue Requirement on Incremental FY 2013 Capital included in ISR Rate Base	\$90,065	\$90,065		\$0
4	Actual Revenue Requirement on Incremental FY 2014 Capital included in ISR Rate Base	\$1,207,453	\$1,207,453		\$0
5	Actual Revenue Requirement on FY 2015 Capital Included in ISR Rate Base	\$2,437,918	\$2,437,918		\$0
6	Actual Revenue Requirement on FY 2016 Capital Included in ISR Rate Base	\$2,846,263	\$2,846,263		\$0
7	Actual Revenue Requirement on FY 2017 Capital Included in ISR Rate Base	\$2,156,691	\$2,156,691		\$0
8	Actual Revenue Requirement on FY 2018 Capital Included in ISR Rate Base	\$3,018,968	\$3,018,968		\$0
9	Actual Revenue Requirement on FY 2019 Capital Included in ISR Rate Base	\$1,432,387	\$1,659,762		\$227,375
10	Total Capital Investment Revenue Requirement	\$13,573,223	\$13,800,598		\$227,375
11	Annual Property Tax Recovery Mechanism	\$2,836,601	\$2,836,601		\$0
12	Total Capital Investment Component of the Revenue Requirement	\$16,409,824	\$16,637,200		\$227,375
13	Total Fiscal Year Revenue Requirement	\$16,588,637	\$16,816,013		\$227,375

Column Notes

(a) As approved per RIPUC Docket No. 4781, FY2019 Reconciliation Filing, Attachment MAL-1, P 1, Column (c)

Line Notes

- 1 As approved per RIPUC Docket No. 4781, Tax update
- 2(b) Page 23 of 33, Line 35, Column (e)×5÷12
- 3(b) Page 20 of 33, Line 35, Column (e)×5÷12
- 4(b) Page 17 of 33, Line 37, Column (e)×5÷12
- 5(b) Page 14 of 33, Line 31, Column (e)×5÷12
- 6(b) Page 11 of 33, Line 31, Column (d)×5÷12
- 7(b) Page 8 of 33, Line 31, Column (c)×5÷12
- 8(b) Page 5 of 33, Line 31, Column (b)×5÷12
- 9(b) Page 2 of 33, Line 30, Column (a)×5÷12
- 10 Sum of Lines 2 through 9
- 11(b) Page 28 of 33, Line 107, Column (k) × 1,000)
- 12 Sum of Lines 10 through 11
- 13 Sum of Lines 1 and 12

The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
FY 2019 Revenue Requirement on FY 2019 Actual Incremental Gas Capital Investment

Line No.		Fiscal Year 2019 (a)
1	Depreciable Net Capital Included in ISR Rate Base	
2	Total Allowed Capital Included in ISR Rate Base in Current Year	\$92,263,000
3	Retirements	\$6,531,844
	Net Depreciable Capital Included in ISR Rate Base	\$85,731,156
4	Change in Net Capital Included in ISR Rate Base	
5	Capital Included in ISR Rate Base	\$92,263,000
6	Depreciation Expense	\$24,356,183
	Incremental Capital Amount	\$67,906,817
7	Cost of Removal	\$11,583,085
8	Net Plant Amount	\$79,489,902
9	Deferred Tax Calculation:	
	Composite Book Depreciation Rate	As Approved in R.I.P.U.C. Docket No. 4323
10	Tax Depreciation	1/
11	Cumulative Tax Depreciation	Page 3 of 33, Line 21 Line 10
12	Book Depreciation	Line 3 * Line 9 * 50%
13	Cumulative Book Depreciation	Line 12
14	Cumulative Book / Tax Timer	Line 11 - Line 13
15	Effective Tax Rate	21.00%
16	Deferred Tax Reserve	Line 14 * Line 15
17	Add: FY 2019 Federal NOL incremental utilization	Page 30 of 33, Line 13, Col.(p)
18	Net Deferred Tax Reserve before Proration Adjustment	Line 16 + Line 17
	ISR Rate Base Calculation:	
19	Cumulative Incremental Capital Included in ISR Rate Base	Line 8
20	Accumulated Depreciation	- Line 13
21	Deferred Tax Reserve	- Line 18
22	Year End Rate Base before Deferred Tax Proration	Sum of Lines 19 through 21
	Revenue Requirement Calculation:	
23	Average Rate Base before Deferred Tax Proration Adjustment	\$28,869,516
24	Proration Adjustment	Current Year Line 22 ÷ 2
25	Average ISR Rate Base after Deferred Tax Proration	Page 4 of 33, Line 41, Column (j) Line 23 + Line 24
26	Pre-Tax ROR	8.78%
27	Return and Taxes	Page 32 of 33, Line 31, Column (e) Line 25 * Line 26
28	Book Depreciation	Line 12
29	Property Taxes	2/
30	Annual Revenue Requirement	\$3,983,429
31	5 months Revenue Requirement (April 1, 2018-August 31, 2018)	Line 30, Column (a) × 5 ÷ 12

- 1/ 3.38%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4323, in effect until Aug 31, 2018
2.99%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4770, effective on Sep 1, 2018
FY 19 Composite Book Depreciation Rate = 3.38% x 5 / 12 + 2.99% x 7 / 12
- 2/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY14 and reflected in total on Page 1 of 33 at Line 11

The Narragansett Electric Company
d/b/a National Grid

FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Tax Depreciation and Repairs Deduction on FY 2019 Capital Investments

Line No.		Fiscal Year 2019 (a)	(b)	(c)	(d)	(e)
<u>Capital Repairs Deduction</u>						
1	Plant Additions	\$92,263,000				
2	Capital Repairs Deduction Rate	1/ 85.18%				
3	Capital Repairs Deduction	\$78,589,623				
<u>Bonus Depreciation</u>						
4	Plant Additions	\$92,263,000	Line 1			
5	Less Capital Repairs Deduction	\$78,589,623	Line 3			
6	Plant Additions Net of Capital Repairs Deduction	\$13,673,377	Line 4 - Line 5			
7	Percent of Plant Eligible for Bonus Depreciation	100.00%	Per Tax Department			
8	Plant Eligible for Bonus Depreciation	\$13,673,377	Line 6 * Line 7			
9	Bonus Depreciation Rate (30% Eligible)	1 × 30% × 11.65%				
10	Bonus Depreciation Rate (40% Eligible)	1 × 40% × 26.75%				
11	Total Bonus Depreciation Rate	14.20%	Line 9 + Line 10			
12	Bonus Depreciation	\$1,940,936	Line 8 * Line 11			
<u>Remaining Tax Depreciation</u>						
13	Plant Additions	\$92,263,000	Line 1			
14	Less Capital Repairs Deduction	\$78,589,623	Line 3			
15	Less Bonus Depreciation	\$1,940,936	Line 12			
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$11,732,441	Line 13 - Line 14 - Line 15			
17	20 YR MACRS Tax Depreciation Rates	3.750%	IRS Publication 946			
18	Remaining Tax Depreciation	\$439,967	Line 16 * Line 17			
19	FY19 tax (gain)/loss on retirements		Per Tax Department			
20	Cost of Removal	\$375,698	Page 2 of 29, Line 7(a)			
21	Total Tax Depreciation and Repairs Deduction	\$11,583,085				
		\$92,929,309	Sum of Lines 3, 12, 18, 19, & 20			

- 1/ Capital Repairs percentage is based on the actual results of the FY 2019 tax return.
2/ Bonus depreciation rate is based on the actual results of the FY 2019 tax return.
3/ Actual Loss for FY2019

20 Year MACRS Depreciation					
MACRS basis:					
Fiscal Year			Annual		Cumulative
2019	3.750%		\$439,967		\$92,929,309
2020	7.219%		\$846,965		\$93,776,274
2021	6.677%		\$783,375		\$94,559,649
2022	6.177%		\$724,713		\$95,284,362
2023	5.713%		\$670,274		\$95,954,636
2024	5.285%		\$620,060		\$96,574,696
2025	4.888%		\$573,482		\$97,148,177
2026	4.522%		\$530,541		\$97,678,718
2027	4.462%		\$523,502		\$98,202,220
2028	4.461%		\$523,384		\$98,725,604
2029	4.462%		\$523,502		\$99,249,106
2030	4.461%		\$523,384		\$99,772,490
2031	4.462%		\$523,502		\$100,295,991
2032	4.461%		\$523,384		\$100,819,376
2033	4.462%		\$523,502		\$101,342,877
2034	4.461%		\$523,384		\$101,866,261
2035	4.462%		\$523,502		\$102,389,763
2036	4.461%		\$523,384		\$102,913,147
2037	4.462%		\$523,502		\$103,436,649
2038	4.461%		\$523,384		\$103,960,033
2039	2.231%		\$261,751		\$104,221,783
	100.000%		\$11,732,441		\$104,221,783

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on Incremental FY 2019 Investment**

Line No.		(a) <u>FY19</u>
	Deferred Tax Subject to Proration	
1	Book Depreciation RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L1, C(b)	\$1,533,196
2	Bonus Depreciation RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L2, C(b)	\$0
3	Remaining MACRS Tax Depreciation RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 3 of 31, L18, C(a)	(\$1,077,379)
4	FY19 tax (gain)/loss on retirements RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L4, C(b)	(\$238,628)
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	\$217,189
6	Effective Tax Rate	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	\$45,610
	Deferred Tax Not Subject to Proration	
8	Capital Repairs Deduction RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L8, C(b)	(\$72,041,903)
9	Cost of Removal RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L9, C(b)	(\$5,440,400)
10	Book/Tax Depreciation Timing Difference at 3/31/2019	\$0
11	Cumulative Book / Tax Timer Line 8 + Line 9 + Line 10	(\$77,482,303)
12	Effective Tax Rate	21.00%
13	Deferred Tax Reserve Line 11 * Line 12	(\$16,271,284)
14	Total Deferred Tax Reserve Line 7 + Line 13	(\$16,225,674)
15	Net Operating Loss RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L15, C(b)	\$0
16	Net Deferred Tax Reserve Line 14 + Line 15	(\$16,225,674)
	Allocation of FY 2019 Estimated Federal NOL	
17	Cumulative Book/Tax Timer Subject to Proration Col (b) = Line 5	\$217,189
18	Cumulative Book/Tax Timer Not Subject to Proration Line 11	(\$77,482,303)
19	Total Cumulative Book/Tax Timer Line 17 + Line 18	(\$77,265,114)
20	Total FY 2019 Federal NOL (Utilization) RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L20, C(b)	\$0
21	Allocated FY 2019 Federal NOL Not Subject to Proration (Line 18 / Line 19) * Line 20	\$0
22	Allocated FY 2019 Federal NOL Subject to Proration (Line 17 / Line 19) * Line 20	\$0
23	Effective Tax Rate	21.00%
24	Deferred Tax Benefit subject to proration Line 22 * Line 23	\$0
25	Net Deferred Tax Reserve subject to proration Line 7 + Line 24	\$45,610
	Proration Calculation	
	(h) <u>Number of Days in Month</u>	(i) <u>Proration Percentage</u>
26	Apr-2018 30	91.78% \$3,488
27	May-2018 31	83.29% \$3,166
28	Jun-2018 30	75.07% \$2,853
29	Jul-2018 31	66.58% \$2,530
30	Aug-2018 31	58.08% \$2,208
31	Sep-2018 30	49.86% \$1,895
32	Oct-2018 31	41.37% \$1,572
33	Nov-2018 30	33.15% \$1,260
34	Dec-2018 31	24.66% \$937
35	Jan-2019 31	16.16% \$614
36	Feb-2019 28	8.49% \$323
37	Mar-2019 31	0.00% \$0
38	Total 365	\$20,847
39	Deferred Tax Without Proration Line 25	\$45,610
40	Average Deferred Tax without Proration Line 39 ÷ 2	\$22,805
41	Proration Adjustment Line 38 - Line 40	(\$1,958)

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j) Current Year Line 25 ÷ 12 * Current Month Col (i)

The Narragansett Electric Company

d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2018 Actual Incremental Gas Capital Investment

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 5 of 33

Line No.		Fiscal Year 2018 (a)	Fiscal Year 2019 (b)
1	Depreciable Net Capital Included in ISR Rate Base		
2	Total Allowed Capital Included in ISR Rate Base in Current Year	\$97,809,718	\$0
3	Retirements	\$24,056,661	\$0
	Net Depreciable Capital Included in ISR Rate Base	\$73,753,057	\$73,753,057
4	Change in Net Capital Included in ISR Rate Base		
5	Capital Included in ISR Rate Base	\$97,809,718	\$0
6	Depreciation Expense	\$24,356,183	\$0
	Incremental Capital Amount	\$73,453,535	\$73,453,535
7	Cost of Removal	\$8,603,224	\$8,603,224
8	Net Plant Amount	\$82,056,759	\$82,056,759
9	Deferred Tax Calculation:		
	Composite Book Depreciation Rate	3.38%	3.38%
10	Tax Depreciation	\$101,835,260	\$458,575
11	Cumulative Tax Depreciation	\$101,835,260	\$102,293,835
12	Book Depreciation	\$1,246,427	\$2,492,853
13	Cumulative Book Depreciation	\$1,246,427	\$3,739,280
14	Cumulative Book / Tax Timer	\$100,588,833	\$98,554,554
15	Effective Tax Rate	21.00%	21.00%
16	Deferred Tax Reserve	\$21,123,655	\$20,696,456
17	Less: FY 2018 Federal NOL	1/ (\$6,051,855)	(\$6,051,855)
18	Excess Deferred Tax	\$10,561,827	\$10,561,827
19	Net Deferred Tax Reserve	\$25,633,627	\$25,206,428
20	ISR Rate Base Calculation:		
21	Cumulative Incremental Capital Included in ISR Rate Base	\$82,056,759	\$82,056,759
22	Accumulated Depreciation	1/ (\$1,246,427)	(\$3,739,280)
23	Deferred Tax Reserve	(\$25,633,627)	(\$25,206,428)
	Year End Rate Base before Deferred Tax Proration	\$55,176,705	\$53,111,050
	Revenue Requirement Calculation:		
24	Average ISR Rate Base before Deferred Tax Proration Adjustment	\$27,588,352	\$54,143,878
25	Proration Adjustment	\$196,117	(\$13,229)
26	Average ISR Rate Base after Deferred Tax Proration	\$27,784,469	\$54,130,649
27	Pre-Tax ROR	9.73%	8.78%
28	Return and Taxes	\$2,704,123	\$4,752,671
29	Book Depreciation	\$1,246,427	\$2,492,853
30	Property Taxes	2/ \$0	\$0
31	Annual Revenue Requirement revised	\$3,950,550	\$7,245,524
32	Annual Revenue Requirement as filed	\$4,019,737	
33	Refund to customers	(\$69,187)	
34	5 months Revenue Requirement (April 1, 2018-August 31, 2018)		3,018,968

1/ As provided by Tax Department
2/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY14 and reflected in total on Page 1 of 33 at Line 11

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2018 Capital Investments

Line No.		Fiscal Year 2018 (a)	(b)	(c)	(d)	(e)
<u>Capital Repairs Deduction</u>						
1	Plant Additions					
2	Capital Repairs Deduction Rate	1/				
3	Capital Repairs Deduction					
<u>Bonus Depreciation</u>						
4	Plant Additions					
5	Less Capital Repairs Deduction					
6	Plant Additions Net of Capital Repairs Deduction					
7	Percent of Plant Eligible for Bonus Depreciation					
8	Plant Eligible for Bonus Depreciation					
9	Bonus depreciation 100% category					
10	Bonus depreciation 50% category					
11	Bonus depreciation 40% category					
12	Bonus depreciation 0% category					
13	Total Bonus Depreciation Rate					
14	Bonus Depreciation					
<u>Remaining Tax Depreciation</u>						
15	Plant Additions					
16	Less Capital Repairs Deduction					
17	Less Bonus Depreciation					
18	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation					
19	20 YR MACRS Tax Depreciation Rates					
20	Remaining Tax Depreciation					
21	FY18 tax (gain)/loss on retirements					
22	Cost of Removal					
23	Total Tax Depreciation and Repairs Deduction					

20 Year MACRS Depreciation						
MACRS basis:						
Fiscal Year	2018	2019	2020	2021	2022	2023
2018	3.750%	\$238,212	\$101,835,260			
2019	7.219%	\$458,575	\$102,293,835			
2020	6.677%	\$424,145	\$102,717,979			
2021	6.177%	\$392,383	\$103,110,363			
2022	5.713%	\$362,908	\$103,473,271			
2023	5.285%	\$335,721	\$103,808,992			
2024	4.888%	\$310,502	\$104,119,494			
2025	4.522%	\$287,252	\$104,406,746			
2026	4.462%	\$283,441	\$104,690,187			
2027	4.461%	\$283,377	\$104,973,564			
2028	4.462%	\$283,441	\$105,257,005			
2029	4.461%	\$283,377	\$105,540,382			
2030	4.462%	\$283,441	\$105,823,823			
2031	4.461%	\$283,377	\$106,107,201			
2032	4.462%	\$283,441	\$106,390,641			
2033	4.461%	\$283,377	\$106,674,019			
2034	4.462%	\$283,441	\$106,957,460			
2035	4.461%	\$283,377	\$107,240,837			
2036	4.462%	\$283,441	\$107,524,278			
2037	4.461%	\$283,377	\$107,807,655			
2038	2.231%	\$141,720	\$107,949,376			
	100.000%	\$6,352,328	\$107,949,376			

1/ Capital Repairs percentage is based on the actual results of the FY 2018 tax return.
2/ Actual Loss for FY2018

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 7 of 33

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2018 Capital Investment**

		(a)	(b)		
Line No.	Deferred Tax Subject to Proration	FY 18	FY 19		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L1, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L1, C(c)				
1	Book Depreciation	\$1,519,105	\$3,034,949		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L2, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L2, C(c)				
2	Bonus Depreciation	(\$13,764,576)	\$0		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L3, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L3, C(c)				
3	Remaining MACRS Tax Depreciation	(\$570,505)	(\$1,567,260)		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L4, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L4, C(c)				
4	FY19 tax (gain)/loss on retirements	(\$238,628)	\$0		
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	\$1,467,688		
6	Effective Tax Rate	35.00%	21.00%		
7	Deferred Tax Reserve	Line 5 * Line 6	\$308,215		
	Deferred Tax Not Subject to Proration				
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L8, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L8, C(c)				
8	Capital Repairs Deduction	(\$64,198,946)			
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L9, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L9, C(c)				
9	Cost of Removal	(\$8,008,000)			
10	Book/Tax Depreciation Timing Difference at 3/31/2019	\$0			
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10			
12	Effective Tax Rate	35.00%			
13	Deferred Tax Reserve	Line 11 * Line 12			
	Line 7 + Line 13				
14	Total Deferred Tax Reserve	(\$29,841,543)	\$308,215		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L15, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L15, C(c)				
15	Net Operating Loss	\$0			
16	Net Deferred Tax Reserve	Line 14 + Line 15	\$308,215		
	Allocation of FY 2019 Estimated Federal NOL				
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	\$1,467,688		
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	\$0		
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	\$1,467,688		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 2 of 25, L20, C (b); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L20, C(c)				
20	Total FY 2019 Federal NOL (Utilization)	\$0			
21	Allocated FY 2019 Federal NOL Not Subject to Proration	(Line 18 / Line 19) * Line 20	\$0		
22	Allocated FY 2019 Federal NOL Subject to Proration	(Line 17 / Line 19) * Line 20	\$0		
23	Effective Tax Rate	35.00%			
24	Deferred Tax Benefit subject to proration	Line 22 * Line 23	\$0		
	Line 7 + Line 24				
25	Net Deferred Tax Reserve subject to proration	(\$4,569,111)	\$308,215		
	(h)	(i)			
	Proration Calculation	Number of Days in Month	Proration Percentage		
			(j) (k)		
26	Apr-2018	30	91.78%	(\$349,464)	\$23,573
27	May-2018	31	83.29%	(\$317,126)	\$21,392
28	Jun-2018	30	75.07%	(\$285,830)	\$19,281
29	Jul-2018	31	66.58%	(\$253,492)	\$17,100
30	Aug-2018	31	58.08%	(\$221,153)	\$14,918
31	Sep-2018	30	49.86%	(\$189,858)	\$12,807
32	Oct-2018	31	41.37%	(\$157,520)	\$10,626
33	Nov-2018	30	33.15%	(\$126,224)	\$8,515
34	Dec-2018	31	24.66%	(\$93,886)	\$6,333
35	Jan-2019	31	16.16%	(\$61,547)	\$4,152
36	Feb-2019	28	8.49%	(\$32,338)	\$2,181
37	Mar-2019	31	0.00%	\$0	\$0
38	Total	365		(\$2,088,439)	\$140,878
	Line 25				
39	Deferred Tax Without Proration	Line 25	(\$4,569,111)	\$308,215	
40	Average Deferred Tax without Proration	Line 39 ÷ 2	(\$2,284,556)	\$154,107	
41	Proration Adjustment	Line 38 - Line 40	\$196,117	(\$13,229)	

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2017 Actual Incremental Gas Capital Investment

Line No.		Fiscal Year 2017 (a)	Fiscal Year 2018 (b)	Fiscal Year 2019 (c)
1	Depreciable Net Capital Included in ISR Rate Base			
2	Total Allowed Capital Included in ISR Rate Base in Current Year	\$79,960,614	\$0	\$0
3	Retirements	\$8,094,426	\$0	\$0
	Net Depreciable Capital Included in ISR Rate Base	\$71,866,188	\$71,866,188	\$71,866,188
4	Change in Net Capital Included in ISR Rate Base			
5	Capital Included in ISR Rate Base	\$79,960,614	\$0	\$0
6	Depreciation Expense	\$24,356,183	\$0	\$0
	Incremental Capital Amount	\$55,604,431	\$55,604,431	\$55,604,431
7	Cost of Removal	\$6,100,390	\$6,100,390	\$6,100,390
8	Net Plant Amount	\$61,704,821	\$61,704,821	\$61,704,821
9	Deferred Tax Calculation:			
	Composite Book Depreciation Rate	3.38%	3.38%	3.38%
10	Tax Depreciation	\$76,203,904	\$774,265	\$716,133
11	Cumulative Tax Depreciation	\$76,203,904	\$76,978,169	\$77,694,302
12	Book Depreciation	\$1,214,539	\$2,429,077	\$2,429,077
13	Cumulative Book Depreciation	\$1,214,539	\$3,643,616	\$6,072,693
14	Cumulative Book / Tax Timer	\$74,989,365	\$73,334,553	\$71,621,609
15	Effective Tax Rate	35.00%	21.00%	21.000%
16	Deferred Tax Reserve	\$26,246,278	\$15,400,256	\$15,040,538
17	Less: FY 2017 Federal NOL	\$0	\$0	\$0
18	Excess Deferred Tax	\$0	\$10,324,756	\$10,324,756
19	Net Deferred Tax Reserve	\$26,246,278	\$25,725,012	\$25,365,294
	ISR Rate Base Calculation:			
20	Cumulative Incremental Capital Included in ISR Rate Base	\$61,704,821	\$61,704,821	\$61,704,821
21	Accumulated Depreciation	(\$1,214,539)	(\$3,643,616)	(\$6,072,693)
22	Deferred Tax Reserve	(\$26,246,278)	(\$25,725,012)	(\$25,365,294)
23	Year End Rate Base before Deferred Tax Proration	\$34,244,004	\$32,336,193	\$30,266,834
	Revenue Requirement Calculation:			
24	Average ISR Rate Base before Deferred Tax Proration Adjustment	\$17,122,002	\$33,290,099	\$31,301,513
25	Proration Adjustment		(\$25,412)	(\$14,703)
26	Average ISR Rate Base after Deferred Tax Proration	\$17,122,002	\$33,264,687	\$31,286,810
27	Pre-Tax ROR	10.05%	9.73%	8.78%
28	Return and Taxes	\$1,720,761	\$3,237,486	\$2,746,982
29	Book Depreciation	\$1,214,539	\$2,429,077	\$2,429,077
30	Property Taxes	\$0	\$0	\$0
31	Annual Revenue Requirement	\$2,935,300	\$5,666,563	\$5,176,059
32	5 months Revenue Requirement (April 1, 2018-August 31, 2018)			\$2,156,691

1/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY14 and reflected in total on Page 1 of 33 at Line 11

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2017 Capital Investments

Line No.		Fiscal Year 2017 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$79,960,614				
2	Capital Repairs Deduction Rate	1/ 73.82%				
3	Capital Repairs Deduction	\$59,026,925				
	<u>Bonus Depreciation</u>					
4	Plant Additions		Line 1			
5	Less Capital Repairs Deduction	\$79,960,614	Line 3			
6	Plant Additions Net of Capital Repairs Deduction	\$59,026,925	Line 4 - Line 5			
7	Percent of Plant Eligible for Bonus Depreciation	\$20,933,689	Per Tax Department			
8	Plant Eligible for Bonus Depreciation	97.53%	Line 6 * Line 7			
9	Bonus Depreciation Rate (April 2016 - December 2016)	\$20,416,627	1 * 75% * 50%			
10	Bonus Depreciation Rate (January 2017 - March 2017)	37.50%	1 * 25% * 50%			
11	Total Bonus Depreciation Rate	12.50%	Line 9 + Line 10			
12	Bonus Depreciation	50.00%	Line 8 * Line 11			
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions		Line 1			
14	Less Capital Repairs Deduction	\$79,960,614	Line 3			
15	Less Bonus Depreciation	\$59,026,925	Line 12			
	Remaining Plant Additions Subject to 20 YR MACRS Tax	\$10,208,313				
16	Depreciation		Line 13 - Line 14 - Line 15			
17	20 YR MACRS Tax Depreciation Rates	\$10,725,376	IRS Publication 946			
18	Remaining Tax Depreciation	3.750%	Line 16 * Line 17			
19	FY17 tax (gain)/loss on retirements	\$402,202				
20	Cost of Removal		Per Tax Department			
		\$466,074	Page 8 of 33, Line 7			
21	Total Tax Depreciation and Repairs Deduction	\$6,100,390	Sum of Lines 3, 12, 18, 19 & 20			

1/ Capital Repairs percentage is based on the actual results of the FY 2017 tax return.

2/ FY 2017 actual tax loss on retirements

20 Year MACRS Depreciation					
MACRS basis:	Fiscal Year	Annual	Cumulative		
	2017	3.750%	\$402,202	\$76,203,904	
	2018	7.219%	\$774,265	\$76,978,169	
	2019	6.677%	\$716,133	\$77,694,302	
	2020	6.177%	\$662,506	\$78,356,809	
	2021	5.713%	\$612,741	\$78,969,549	
	2022	5.285%	\$566,836	\$79,536,386	
	2023	4.888%	\$524,256	\$80,060,642	
	2024	4.522%	\$485,002	\$80,545,643	
	2025	4.462%	\$478,566	\$81,024,210	
	2026	4.461%	\$478,459	\$81,502,669	
	2027	4.462%	\$478,566	\$81,981,235	
	2028	4.461%	\$478,459	\$82,459,694	
	2029	4.462%	\$478,566	\$82,938,260	
	2030	4.461%	\$478,459	\$83,416,719	
	2031	4.462%	\$478,566	\$83,895,286	
	2032	4.461%	\$478,459	\$84,373,745	
	2033	4.462%	\$478,566	\$84,852,311	
	2034	4.461%	\$478,459	\$85,330,770	
	2035	4.462%	\$478,566	\$85,809,336	
	2036	4.461%	\$478,459	\$86,287,795	
	2037	2.231%	\$239,283	\$86,527,078	
		100.000%	\$10,725,376	\$86,527,078	

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 10 of 33

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2017 Capital Investment**

		(a)	(b)
Line No.		<u>FY 18</u>	<u>FY 19</u>
	Deferred Tax Subject to Proration		
	Book Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L1, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L1, C(d)	
1		\$2,581,784	\$2,429,077
	Bonus Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L2, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L2, C(d)	
2		\$0	\$0
	Remaining MACRS Tax Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L3, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L3, C(d)	
3		(\$890,237)	(\$797,909)
	FY19 tax (gain)/loss on retirements	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L4, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L4, C(d)	
4		\$0	\$0
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	\$1,691,547
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve	Line 5 * Line 6	\$592,041
	Deferred Tax Not Subject to Proration		
	Capital Repairs Deduction	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L8, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L8, C(d)	
8			
	Cost of Removal	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L9, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L9, C(d)	
9			
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	\$0
12	Effective Tax Rate		\$0
13	Deferred Tax Reserve	Line 11 * Line 12	\$0
14	Total Deferred Tax Reserve	Line 7 + Line 13	\$592,041
	Net Operating Loss	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L15, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L15, C(d)	
15			
16	Net Deferred Tax Reserve	Line 14 + Line 15	\$592,041
	Allocation of FY 2019 Estimated Federal NOL		
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	\$1,691,547
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	\$1,631,168
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	\$1,691,547
	Total FY 2019 Federal NOL (Utilization)	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L20, C (c); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L20, C(d)	
20		(Line 18 / Line 19) * Line 20	\$0
21	Allocated FY 2019 Federal NOL Not Subject to Proration	(Line 17 / Line 19) * Line 20	\$0
22	Allocated FY 2019 Federal NOL Subject to Proration		
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration	Line 22 * Line 23	\$0
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	\$592,041
		(h)	(i)
	Proration Calculation	<u>Number of Days in Month</u>	<u>Proration Percentage</u>
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	
			(j) (k)
			\$45,282 \$26,199
			\$41,091 \$23,775
			\$37,036 \$21,429
			\$32,846 \$19,004
			\$28,656 \$16,580
			\$24,601 \$14,234
			\$20,411 \$11,809
			\$16,355 \$9,463
			\$12,165 \$7,039
			\$7,975 \$4,614
			\$4,190 \$2,424
			\$0 \$0
			\$270,609 \$156,570
39	Deferred Tax Without Proration	Line 25	\$592,041
40	Average Deferred Tax without Proration	Line 39 ÷ 2	\$296,021
41	Proration Adjustment	Line 38 - Line 40	(\$25,412)

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2016 Actual Incremental Gas Capital Investment**

Line No.		Fiscal Year 2016 (a)	Fiscal Year 2017 (b)	Fiscal Year 2018 (c)	Fiscal Year 2019 (d)
1	Depreciable Net Capital Included in ISR Rate Base				
1a	Total Allowed Capital Included in ISR Rate Base in Current Year	\$90,072,473	\$0	\$0	\$0
1b	Work Order Write Off Adjustment	\$597,976	\$0	\$0	\$0
2	New Service Installation and Service Relocations, Growth (per informal Request Division 1-2)	\$151,092			
	Per Company's books				
1/		\$3,177,067	\$0	\$0	\$0
3	Net Depreciable Capital Included in ISR Rate Base	\$86,146,338	\$86,146,338	\$86,146,338	\$86,146,338
4	Change in Net Capital Included in ISR Rate Base				
5	Capital Included in ISR Rate Base				
6	Depreciation Expense	\$89,323,405	\$0	\$0	\$0
7	Incremental Capital Amount	\$24,356,183	\$0	\$0	\$0
7a	Cost of Removal	\$64,967,222	\$64,967,222	\$64,967,222	\$64,967,222
7b	Work Order Write Off Adjustment	\$3,796,440	\$3,796,440	\$3,796,440	\$3,796,440
	New Service Installation and Service Relocations, Growth (per informal Request Division 1-2)	\$94,829	\$0	\$0	\$0
	Per Company's books	\$17,740			
8	Net Plant Amount	\$68,651,094	\$68,651,094	\$68,651,094	\$68,651,094
9	Deferred Tax Calculation:				
	Composite Book Depreciation Rate	3.38%	3.38%	3.38%	3.38%
10	Tax Depreciation	\$82,938,193	\$786,495	\$727,445	\$672,971
11	Cumulative Tax Depreciation	\$82,938,193	\$83,724,688	\$84,452,133	\$85,125,105
12	Book Depreciation	\$1,455,873	\$2,911,746	\$2,911,746	\$2,911,746
13	Cumulative Book Depreciation	\$1,455,873	\$4,367,619	\$7,279,366	\$10,191,112
14	Cumulative Book / Tax Timer	\$81,482,320	\$79,357,069	\$77,172,768	\$74,933,993
15	Effective Tax Rate	35.00%	35.00%	21.000%	21.000%
16	Deferred Tax Reserve	\$28,518,812	\$27,774,974	\$16,206,281	\$15,736,138
17	Less: FY 2016 Federal NOL	(\$11,594,940)	(\$11,594,940)	(\$11,594,940)	(\$11,594,940)
18	Excess Deferred Tax	\$0	\$0	\$10,880,638	\$10,880,638
19	Net Deferred Tax Reserve	\$16,923,872	\$16,180,034	\$15,491,979	\$15,021,836
20	ISR Rate Base Calculation:				
21	Average Incremental Capital Included in ISR Rate Base	\$68,651,094	\$68,651,094	\$68,651,094	\$68,651,094
22	Accumulated Depreciation	(\$1,455,873)	(\$4,367,619)	(\$7,279,366)	(\$10,191,112)
23	Deferred Tax Reserve	(\$16,923,872)	(\$16,180,034)	(\$15,491,979)	(\$15,021,836)
	Year End Rate Base before Deferred Tax Proration	\$50,271,340	\$48,103,440	\$45,879,749	\$43,438,145
	Revenue Requirement Calculation:				
24	Average ISR Rate Base before Deferred Tax Proration Adjustment	\$25,135,674	\$49,187,394	\$46,991,595	\$44,658,947
25	Proration Adjustment				
26	Average ISR Rate Base after Deferred Tax Proration	\$25,135,674	\$49,187,394	\$46,961,188	\$44,638,767
27	Pre-Tax ROR	10.05%	10.05%	9.73%	8.78%
28	Return and Taxes	\$2,526,135	\$4,943,333	\$4,570,498	\$3,919,284
29	Book Depreciation	\$1,455,873	\$2,911,746	\$2,911,746	\$2,911,746
30	Property Taxes	\$0	\$0	\$0	\$0
31	Annual Revenue Requirement	\$3,982,008	\$7,855,079	\$7,482,244	\$6,831,030
32	5 months Revenue Requirement (April 1, 2018-August 31, 2018)				
	Line 31, Column (d) x 5 = 12				\$2,846,263

1/ Actual FY 2016 retirements per Company's books
2/ Actual FY 2016 Cost of Removal per Company's books
3/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY 14 and reflected in total on Page 1 of 33 at Line 11

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2016 Capital Investments

Line No.		Fiscal Year 2016 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$89,474,497				
2	Capital Repairs Deduction Rate	1/ 75.72%				
3	Capital Repairs Deduction	\$67,750,089				
	<u>Bonus Depreciation</u>					
4	Plant Additions					
5	Less Capital Repairs Deduction	\$89,474,497				
6	Plant Additions Net of Capital Repairs Deduction	\$67,750,089				
7	Percent of Plant Eligible for Bonus Depreciation	\$21,724,408				
8	Plant Eligible for Bonus Depreciation	99.70%				
9	Bonus Depreciation Rate (April 2015- December 2015)	\$21,659,235				
10	Bonus Depreciation Rate (January 2016 - March 2016)	37.50%				
11	Total Bonus Depreciation Rate	12.50%				
12	Bonus Depreciation	50.00%				
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions	\$89,474,497				
14	Less Capital Repairs Deduction	\$67,750,089				
15	Less Bonus Depreciation	\$10,829,617				
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$10,894,791				
17	20 YR MACRS Tax Depreciation Rates	3.750%				
18	Remaining Tax Depreciation	\$408,555				
19	FY16 tax (gain)/loss on retirements					
20	Cost of Removal	\$248,321				
		\$3,701,611				
21	Total Tax Depreciation and Repairs Deduction	\$82,938,193				

1/ Capital Repairs percentage is based on the actual results of the FY 2016 tax return.

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2016 Capital Investment**

		(a)	(b)
Line No.	Deferred Tax Subject to Proration	FY 18	FY 19
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L1, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L1, C(e)		
1	Book Depreciation	\$2,916,853	\$2,911,746
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L2, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L2, C(e)		
2	Bonus Depreciation	\$0	\$0
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L3, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L3, C(e)		
3	Remaining MACRS Tax Depreciation	(\$892,846)	(\$672,971)
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L4, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L4, C(e)		
4	FY19 tax (gain)/loss on retirements	\$0	\$0
5	Cumulative Book / Tax Timer	\$2,024,007	\$2,238,775
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve	\$708,402	\$470,143
	Line 5 * Line 6		
	Deferred Tax Not Subject to Proration		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L8, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L8, C(e)		
8	Capital Repairs Deduction		
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L9, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L9, C(e)		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	
12	Effective Tax Rate		
13	Deferred Tax Reserve	Line 11 * Line 12	
14	Total Deferred Tax Reserve	Line 7 + Line 13	\$708,402 \$470,143
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L15, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L15, C(e)		
15	Net Operating Loss		
16	Net Deferred Tax Reserve	Line 14 + Line 15	\$708,402 \$470,143
	Allocation of FY 2019 Estimated Federal NOL		
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	
	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L20, C (d); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26a of 31, L20, C(e)		
20	Total FY 2019 Federal NOL (Utilization)	(Line 18 / Line 19) * Line 20	
21	Allocated FY 2019 Federal NOL Not Subject to Proration	(Line 17 / Line 19) * Line 20	
22	Allocated FY 2019 Federal NOL Subject to Proration		
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration	Line 22 * Line 23	
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	\$708,402 \$470,143
	(h)	(i)	
	Proration Calculation	Number of Days in Month	Proration Percentage
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	\$323,795 \$214,892
39	Deferred Tax Without Proration	Line 25	\$708,402 \$470,143
40	Average Deferred Tax without Proration	Line 39 ÷ 2	\$354,201 \$235,071
41	Proration Adjustment	Line 38 - Line 40	(\$30,406) (\$20,180)

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2015 Actual Incremental Gas Capital Investment**

Line	No.		Fiscal Year 2015 (a)	Fiscal Year 2016 (b)	Fiscal Year 2017 (c)	Fiscal Year 2018 (d)	Fiscal Year 2019 (e)
1		Depreciable Net Capital Included in ISR Rate Base					
1a		Total Allowed Capital Included in ISR Rate Base in Current Year	\$74,915,000	\$0	\$0	\$0	\$0
1b		Work Order Write Off Adjustment	\$323,217	\$0	\$0	\$0	\$0
2		New Service Installation and Service Relocations, Growth (per informal Request Division 1-2)	\$87,115				
2		Retirements	1/ \$5,566,546	\$0	\$0	\$0	\$0
3		Net Depreciable Capital Included in ISR Rate Base	\$68,938,122	\$68,938,122	\$68,938,122	\$68,938,122	\$68,938,122
4		Change in Net Capital Included in ISR Rate Base					
5		Capital Included in ISR Rate Base	\$74,504,668	\$0	\$0	\$0	\$0
6		Depreciation Expense	\$24,356,183	\$0	\$0	\$0	\$0
7		Incremental Capital Amount	\$50,148,485	\$50,148,485	\$50,148,485	\$50,148,485	\$50,148,485
7a		Cost of Removal	\$2,425,000	\$2,425,000	\$2,425,000	\$2,425,000	\$2,425,000
7b		Work Order Write Off Adjustment	\$253,782	\$0	\$0	\$0	\$0
7b		New Service Installation and Service Relocations, Growth (per informal Request Division 1-2)	\$6,782				
8		Net Plant Amount	\$52,312,921	\$52,312,921	\$52,312,921	\$52,312,921	\$52,312,921
9		Deferred Tax Calculation:					
9		Composite Book Depreciation Rate	3.38%	3.38%	3.38%	3.38%	3.38%
10		Tax Depreciation	\$68,843,570	\$979,151	\$905,637	\$837,819	\$774,884
11		Cumulative Tax Depreciation	\$68,843,570	\$69,822,721	\$70,728,358	\$71,566,177	\$72,341,061
12		Book Depreciation	\$1,165,054	\$2,330,109	\$2,330,109	\$2,330,109	\$2,330,109
13		Cumulative Book Depreciation	\$1,165,054	\$3,495,163	\$5,825,271	\$8,155,380	\$10,485,488
14		Cumulative Book / Tax Timer	\$67,678,516	\$66,327,558	\$64,903,087	\$63,410,797	\$61,855,573
15		Effective Tax Rate	35.00%	35.00%	35.00%	21.00%	21.00%
16		Deferred Tax Reserve	\$23,687,481	\$23,714,645	\$22,716,080	\$13,316,267	\$12,989,670
17		Less: FY 2015 NOL	(\$19,205,538)	(\$19,205,538)	(\$19,205,538)	(\$19,205,538)	(\$19,205,538)
18		Excess Deferred Tax	\$4,481,943	\$4,509,108	\$3,510,543	(\$3,040,471)	(\$2,713,874)
19		Net Deferred Tax Reserve	\$4,481,943	\$4,509,108	\$3,510,543	\$3,040,471	\$2,713,874
20		ISR Rate Base Calculation:					
21		Cumulative Incremental Capital Included in ISR Rate Base	\$52,312,921	\$52,312,921	\$52,312,921	\$52,312,921	\$52,312,921
22		Accumulated Depreciation	(\$1,165,054)	(\$3,495,163)	(\$5,825,271)	(\$8,155,380)	(\$10,485,488)
23		Deferred Tax Reserve	(\$4,481,943)	(\$4,509,108)	(\$3,510,543)	(\$3,040,471)	(\$2,713,874)
23		Year End Rate Base before Deferred Tax Proration	\$46,665,924	\$44,808,651	\$42,977,108	\$41,117,070	\$39,113,559
24		Revenue Requirement Calculation:					
24		Average ISR Rate Base before Deferred Tax Proration Adjustment	\$23,332,962	\$45,737,288	\$43,892,879	\$42,047,089	\$40,115,314
25		Proration Adjustment	\$0	\$0	\$0	(\$22,463)	(\$14,018)
26		Average ISR Rate Base after Deferred Tax Proration	\$23,332,962	\$45,737,288	\$43,892,879	\$42,024,626	\$40,101,296
27		Pre-Tax ROR	10.05%	10.05%	10.05%	9.73%	8.78%
28		Return and Taxes	\$2,344,963	\$4,596,597	\$4,411,234	\$4,090,047	\$3,520,894
29		Book Depreciation	\$1,165,054	\$2,330,109	\$2,330,109	\$2,330,109	\$2,330,109
30		Property taxes	\$0	\$0	\$0	\$0	\$0
31		Annual Revenue Requirement	\$3,510,017	\$6,926,706	\$6,741,343	\$6,420,155	\$5,851,002
32		5 months Revenue Requirement (April 1, 2018-August 31, 2018)					\$2,457,918

1/ Actual FY 2015 retirements per Company's books

2/ Actual FY 2015 Cost of Removal per Company's books

3/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY 14 and reflected in total on Page 1 of 33 at Line 11

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2015 Capital Investments

Line No.		Fiscal Year 2015				
		(a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$74,591,783				
2	Capital Repairs Deduction Rate	1/ 63.81%				
3	Capital Repairs Deduction	\$47,597,001				
	<u>Bonus Depreciation</u>					
4	Plant Additions		Line 1			
5	Less Capital Repairs Deduction		Line 3			
6	Plant Additions Net of Capital Repairs Deduction		Line 4 - Line 5			
7	Percent of Plant Eligible for Bonus Depreciation		Per Tax Department			
8	Plant Eligible for Bonus Depreciation	99.51%	Line 6 * Line 7			
9	Bonus Depreciation Rate (April 2014 - December 2014)	\$26,862,508	1 * 75% * 50%			
10	Bonus Depreciation Rate (January 2015 - March 2015)	37.50%	1 * 25% * 50%			
11	Total Bonus Depreciation Rate	12.50%	Line 9 + Line 10			
12	Bonus Depreciation	50.00%	Line 8 * Line 11			
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions		Line 1			
14	Less Capital Repairs Deduction		Line 3			
15	Less Bonus Depreciation		Line 12			
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation		Line 13 - Line 14 - Line 15			
17	20 YR MACRS Tax Depreciation Rates		Per IRS Pub. 946			
18	Remaining Tax Depreciation	3.750%	Line 16 * Line 17			
19	§481(a) FY09- FY14 adjustment for tax (gain)/loss on retirements	\$508,632				
20	FY15 tax (gain)/loss on retirements		Per Tax Department			
21	Cost of Removal	\$4,311,849	Per Tax Department			
22	Total Tax Depreciation and Repairs Deduction	\$823,616				
			Per Page 14 of 33, Line 7 minus Line 7a			
			Sum of Lines 3, 12, 18, 19, 20 & 21			
		\$2,171,218				
		\$68,843,570				

1/ Capital Repairs percentage is based on the actual results of the FY 2015 tax return. Since growth is not included in the ISR, the percentage was derived by taking property qualifying for the repairs deduction as a percentage of the total annual plant additions in those categories that are considered as potentially qualifying for Capital Repairs deduction.

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2015 Capital Investment**

		(a)	(b)
Line No.	Deferred Tax Subject to Proration	FY 18	FY 19
1	Book Depreciation	\$2,333,053	\$2,330,109
2	Bonus Depreciation	\$0	\$0
3	Remaining MACRS Tax Depreciation	(\$837,819)	(\$774,884)
4	FY19 tax (gain)/loss on retirements	\$0	\$0
5	Cumulative Book / Tax Timer	\$1,495,234	\$1,555,224
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve	\$523,332	\$326,597
	Deferred Tax Not Subject to Proration		
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer		
12	Effective Tax Rate		
13	Deferred Tax Reserve		
14	Total Deferred Tax Reserve	\$523,332	\$326,597
15	Net Operating Loss		
16	Net Deferred Tax Reserve	\$523,332	\$326,597
17	Cumulative Book/Tax Timer Subject to Proration	\$1,495,234	\$1,555,224
18	Cumulative Book/Tax Timer Not Subject to Proration		
19	Total Cumulative Book/Tax Timer	\$1,495,234	\$1,555,224
20	Total FY 2019 Federal NOL (Utilization)		
21	Allocated FY 2019 Federal NOL Not Subject to Proration	\$0	\$0
22	Allocated FY 2019 Federal NOL Subject to Proration	\$0	\$0
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration		
25	Net Deferred Tax Reserve subject to proration	\$523,332	\$326,597
	(h)	(i)	
	Proration Calculation		
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	
39	Deferred Tax Without Proration	Line 25	\$523,332
40	Average Deferred Tax without Proration	Line 39 ÷ 2	\$261,666
41	Proration Adjustment	Line 38 - Line 40	(\$22,463)

Column Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2014 Actual Incremental Gas Capital Investment

Line No.		Fiscal Year 2014 (a)	Cumulative FY 15-FY 16 (b)	Fiscal Year 2017 (c)	Fiscal Year 2018 (d)	Fiscal Year 2019 (e)
Depreciable Net Capital Included in Rate Base						
1	Total Allowed Capital Included in Rate Base in Current Year Retirements	\$21,360,998		\$0	\$0	\$0
2		1,615,155		\$0	\$0	\$0
3	Net Depreciable Capital Included in Rate Base	\$19,745,842		\$19,745,842	\$19,745,842	\$19,745,842
4	Change in Net Capital Included in Rate Base					
	Capital Included in Rate Base	\$21,360,998		\$0	\$0	\$0
5	Depreciation expense	\$4,060,176		\$0	\$0	\$0
6	Incremental Capital Amount	\$17,300,822		\$17,300,822	\$17,300,822	\$17,300,822
7	Cost of Removal	(\$1,319,752)		(\$1,319,752)	(\$1,319,752)	(\$1,319,752)
8	Net Plant Amount	\$15,981,069	\$15,981,069	\$15,981,069	\$15,981,069	\$15,981,069
Deferred Tax Calculation:						
9	Composite Book Depreciation Rate	3.38%		3.38%	3.38%	3.38%
10	Tax Depreciation	\$17,439,322		\$166,983	\$154,439	\$142,869
11	Cumulative Tax Depreciation	\$17,439,322		\$17,981,955	\$18,136,394	\$18,279,263
12	Book Depreciation	\$333,705		\$667,409	\$667,409	\$667,409
13	Cumulative Book Depreciation	\$333,705		\$2,335,933	\$3,003,343	\$3,670,752
14	Effective Book / Tax Timer	\$17,105,617		\$16,146,448	\$15,133,051	\$14,608,511
15	Effective Tax Rate	35.00%		35.00%	21.00%	21.00%
16	Deferred Tax Reserve	\$5,986,966		\$5,651,257	\$3,177,941	\$3,067,787
17	Less FY 2014 Federal NOL	(\$5,986,966)		(\$5,476,108)	(\$3,003,343)	(\$3,670,752)
18	Excess Deferred Tax				\$2,136,581	\$2,136,581
19	Net Deferred Tax Reserve before Proration Adjustment	\$0	\$0	\$0	\$0	\$0
20	Rate Base Calculation:					
21	Cumulative Incremental Capital Included in Rate Base	\$15,981,069		\$15,981,069	\$15,981,069	\$15,981,069
22	Accumulated Depreciation	(\$333,705)		(\$2,335,933)	(\$3,003,343)	(\$3,670,752)
23	Deferred Tax Reserve	\$0	\$0	\$0	\$0	\$0
	Year End Rate Base	\$15,647,365	\$14,312,546	\$13,645,136	\$12,977,727	\$12,310,317
Revenue Requirement Calculation:						
24	Average ISR Rate Base before Deferred Tax Proration Adjustment	\$4,914,753		\$13,978,841	\$13,311,432	\$12,644,022
25	Proration Adjustment				(\$7,846)	(\$4,728)
26	Average ISR Rate Base after Deferred Tax Proration	\$4,914,753	\$0	\$13,978,841	\$13,303,585	\$12,639,294
27	Pre-Tax ROR	10.05%		10.05%	9.73%	8.78%
28	Return and Taxes	\$493,933	\$0	\$1,404,874	\$1,294,771	\$1,109,730
29	Book Depreciation	\$333,705		\$667,409	\$667,409	\$667,409
30	Property Taxes	\$0	\$0	\$0	\$0	\$0
31	Annual Revenue Requirement on Incremental FY14 Investment	\$827,637	\$2,072,283	\$1,962,181	\$1,777,139	
32	Remaining FY14 NOI attributable to embedded rate base in RIPUC Docket 4323					
33	Average Rate Base	\$12,037,252		\$12,548,111	\$12,709,696	\$12,819,850
34	Pre-Tax ROR	\$7,021,730		\$12,460,556	\$12,628,903	\$12,764,773
35	Return and Taxes	10.05%		10.05%	9.73%	8.78%
36	Annual Revenue Requirement adjustment to base rates related to NOI	\$705,684	\$1,252,284	\$1,229,108	\$1,120,747	
37	Total Annual Revenue Requirement	\$1,533,321	\$3,324,567	\$3,191,289	\$2,897,887	
41	5 months Revenue Requirement (April 1, 2018-August 31, 2018)					\$1,207,453

1/ Actual Incremental Retirements
2/ Depreciation expense has been prorated for two months (February - March 2014).
3/ Actual Incremental Cost of Removal
4/ 31.41% per Page 32 of 35
5/ Property taxes calculated on Page 27 of 33 through Page 29 of 33 for all vintage years commencing with FY14 and reflected in total on Page 1 of 33 at Line 11
6/ 58.35% per Docket No. 4474

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2014 Capital Investments

Line No.		Fiscal Year 2014 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$21,360,998				
2	Capital Repairs Deduction Rate	74.94%				
3	Capital Repairs Deduction	\$16,007,932				
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$21,360,998				
5	Less Capital Repairs Deduction	\$16,007,932				
6	Plant Additions Net of Capital Repairs Deduction	\$5,353,066				
7	Percent of Plant Eligible for Bonus Depreciation	99.00%				
8	Plant Eligible for Bonus Depreciation	\$5,299,535				
9	Bonus Depreciation Rate (April 2013 - December 2013)	37.50%				
10	Bonus Depreciation Rate (January 2014 - March 2014)	12.50%				
11	Total Bonus Depreciation Rate	50.00%				
12	Bonus Depreciation	\$2,649,768				
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions	\$21,360,998				
14	Less Capital Repairs Deduction	\$16,007,932				
15	Less Bonus Depreciation	\$2,649,768				
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$2,703,298				
17	20 YR MACRS Tax Depreciation Rates	3.750%				
18	Remaining Tax Depreciation	\$101,374				
19	Cost of Removal	(\$1,319,752)				
20	Total Tax Depreciation and Repairs Deduction	\$17,439,322				

1/ Capital Repairs percentage is based on the actual results of the FY 2014 tax return. Since growth is not included in the ISR, the percentage was derived by taking property qualifying for the repairs deduction as a percentage of the total annual plant additions in those categories that are considered as potentially qualifying for Capital Repairs deduction.

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2014 Incremental Capital Investment**

		(a)	(b)
Line No.	Deferred Tax Subject to Proration	FY 18	FY 19
1	Book Depreciation	\$679,280	\$667,409
2	Bonus Depreciation	\$0	\$0
3	Remaining MACRS Tax Depreciation	(\$156,979)	(\$142,869)
4	FY19 tax (gain)/loss on retirements	\$0	\$0
5	Cumulative Book / Tax Timer	\$522,301	\$524,540
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve	\$182,805	\$110,153
	Deferred Tax Not Subject to Proration		
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer		
12	Effective Tax Rate		
13	Deferred Tax Reserve		
14	Total Deferred Tax Reserve	\$182,805	\$110,153
15	Net Operating Loss		
16	Net Deferred Tax Reserve	\$182,805	\$110,153
17	Allocation of FY 2019 Estimated Federal NOL		
18	Cumulative Book/Tax Timer Subject to Proration		
19	Cumulative Book/Tax Timer Not Subject to Proration		
20	Total Cumulative Book/Tax Timer		
21	Total FY 2019 Federal NOL (Utilization)		
22	Allocated FY 2019 Federal NOL Not Subject to Proration		
23	Allocated FY 2019 Federal NOL Subject to Proration		
24	Effective Tax Rate		
25	Deferred Tax Benefit subject to proration		
26	Net Deferred Tax Reserve subject to proration	\$182,805	\$110,153
		(h)	(i)
	Proration Calculation	Number of Days in Month	Proration Percentage
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	
39	Deferred Tax Without Proration	Line 25	\$182,805
40	Average Deferred Tax without Proration	Line 39 ÷ 2	\$91,403
41	Proration Adjustment	Line 38 - Line 40	(\$7,846)
			\$50,349
			\$55,077
			(\$4,728)

lumn Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Computation of Revenue Requirement on FY2013 Actual Incremental Capital Investment**

Line No.		Fiscal Year 2013 (a)	Cumulative FY04-FY16 (b)	Fiscal Year 2017 (c)	Fiscal Year 2018 (d)	Fiscal Year 2019 (e)
1	Denegable Net Capital Included in Rate Base					
2	Total Allowed Capital Included in Rate Base in Current Year					
3	Retirements					
4	Net Depreciable Capital Included in Rate Base					
5	Change in Net Capital Included in Rate Base					
6	Capital Included in Rate Base					
7	Cost of Removal					
8	Net Plant Amount					
9	Deferred Tax Calculation:					
10	Composite Book Depreciation Rate					
11	Tax Depreciation					
12	Cumulative Tax Depreciation					
13	Book Depreciation					
14	Cumulative Book Depreciation					
15	Effective Tax Rate					
16	Deferred Tax Reserve					
17	Less: FY 2013 Federal NOL					
18	Excess Deferred Tax					
19	Net Deferred Tax Reserve before Promotion Adjustment					
20	Rate Base Calculation:					
21	Cumulative Incremental Capital Included in Rate Base					
22	Deferred Tax Reserve					
23	Year End Rate Base before Deferred Tax Promotion					
24	Revenue Requirement Calculation:					
25	Average ISR Rate Base before Deferred Tax Promotion Adjustment					
26	Promotion Adjustment					
27	Pre-tax ISR Rate Base after Deferred Tax Promotion					
28	Return and Taxes					
29	Book Depreciation					
30	Property Taxes					
31	Annual Revenue Requirement on Incremental FY 2013 Investment					
32	Remaining FY13 NOL attributable to embedded rate base in RIPUC Docket 4323					
33	Average Rate Base					
34	Pre-tax ROR					
35	Return and Taxes					
36	Annual Revenue Requirement adjustment to base rates related to NOL					
37	Total Annual Revenue Requirement					
38	5 months Revenue Requirement (April 1, 2018-August 31, 2018)					
39	Actual Incremental Retirements					
40	Actual Incremental Cost of Removal					
41	FY 2019 effective rate of 2.7% per Page 28 of 33 at Line 81(b)					
42	\$0 in Year 1, then Prior Year Line 6 - Line 11 * Page 28 of 33, Line 81, Column (b)					
43	Property Tax Rate Calculation based on 2011 actual net plant in service and property tax expense applicable to distribution					
44	Plant in Service					
45	Completed Construction Not Classified					
46	Total Plant in Service					
47	Less: Intangible Plant					
48	Distributions-Plant in Service					
49	Accumulated Depreciation					
50	Accumulated Depreciation -Intangible Plant					
51	Distribution-Related Net Plant in Service					
52	Distribution-Related Rate Year Property Tax Expense					
53	Distribution-Related Property Tax Rate					

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2013 Capital Investments

Line No.		Fiscal Year 2013 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	(\$1,197,129)				
2	Capital Repairs Deduction Rate	1/ 67.95%				
3	Capital Repairs Deduction	(\$813,449)				
	<u>Bonus Depreciation</u>					
4	Plant Additions	(\$1,197,129)				
5	Less Capital Repairs Deduction	(\$813,449)				
6	Plant Additions Net of Capital Repairs Deduction	(\$383,680)				
7	Percent of Plant Eligible for 100% Bonus Depreciation	2/ 5.67%				
8	Plant Eligible for 100% Bonus Depreciation	(\$21,763)				
9	Bonus Depreciation Rate (April 2012 - December 2012)	1 * 75% * 100%				
10	Bonus Depreciation Rate (January 2013 - March 2013)	1 * 25% * 100%				
11	Total Bonus Depreciation Rate	100.00%				
12	100% Bonus Depreciation	(\$21,763)				
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions Net of Capital Repairs Deduction and 100% Bonus Depreciation	(\$361,917)				
14	Plant Eligible for 50% Bonus Depreciation	100.00%				
15	Bonus Depreciation Rate (April 2012 - December 2012)	1 * 75% * 50%				
16	Bonus Depreciation Rate (January 2013 - March 2013)	1 * 25% * 50%				
17	Total Bonus Depreciation Rate	12.50%				
18	50% Bonus Depreciation	50.00%				
	<u>Remaining Tax Depreciation</u>	(\$180,958)				
19	Plant Additions	(\$1,197,129)				
20	Less Capital Repairs Deduction	(\$813,449)				
21	Less Bonus Depreciation	(\$202,721)				
22	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	(\$180,958)				
23	20 YR MACRS Tax Depreciation Rates	3.750%				
24	Remaining Tax Depreciation	(\$6,786)				
25	Cost of Removal	(\$1,701,046)				
26	Total Tax Depreciation and Repairs Deduction	(\$2,724,002)				

1/ Capital Repairs percentage is based on the actual results of the FY 2013 tax return.

2/ Long period production assets qualifying for 100% bonus depreciation in FY 2013 totaled \$3.2 million, taken over total FY13 ISR-eligible capital investment of \$56.4 million equals 5.67%.

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2013 Incremental Capital Investment**

		(a)	(b)
Line No.		<u>FY 18</u>	<u>FY 19</u>
	Deferred Tax Subject to Proration		
1	Book Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L1, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L1, C(h)	(\$150,012) (\$151,220)
2	Bonus Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L2, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L2, C(h)	\$0 \$0
3	Remaining MACRS Tax Depreciation	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L3, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L3, C(h)	\$9,278 \$8,845
4	FY19 tax (gain)/loss on retirements	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L4, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L4, C(h)	\$0 \$0
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	(\$140,734) (\$142,375)
6	Effective Tax Rate		35.00% 21.00%
7	Deferred Tax Reserve	Line 5 * Line 6	(\$49,257) (\$29,899)
	Deferred Tax Not Subject to Proration		
8	Capital Repairs Deduction	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L8, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L8, C(h)	
9	Cost of Removal	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L9, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L9, C(h)	
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	
12	Effective Tax Rate		
13	Deferred Tax Reserve	Line 11 * Line 12	
14	Total Deferred Tax Reserve	Line 7 + Line 13	(\$49,257) (\$29,899)
15	Net Operating Loss	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L15, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L15, C(h)	
16	Net Deferred Tax Reserve	Line 14 + Line 15	(\$49,257) (\$29,899)
	Allocation of FY 2019 Estimated Federal NOL		
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	
20	Total FY 2019 Federal NOL (Utilization)	C (a) = RIPUC Docket No. 4678, Reconciliation Filing, Attachment MAL-1, P 21 of 25, L20, C (g); C (b) = RIPUC Docket No. 4781, Section 3, Attachment 1-Supp2, P 26b of 31, L20, C(h)	
21	Allocated FY 2019 Federal NOL Not Subject to Proration	(Line 18 / Line 19) * Line 20	
22	Allocated FY 2019 Federal NOL Subject to Proration	(Line 17 / Line 19) * Line 20	
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration	Line 22 * Line 23	
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	(\$49,257) (\$29,899)
		(h)	(i)
	Proration Calculation	<u>Number of Days in Month</u>	<u>Proration Percentage</u>
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	
			(j) (k)
			(\$3,767) (\$2,287)
			(\$3,419) (\$2,075)
			(\$3,081) (\$1,870)
			(\$2,733) (\$1,659)
			(\$2,384) (\$1,447)
			(\$2,047) (\$1,242)
			(\$1,698) (\$1,031)
			(\$1,361) (\$826)
			(\$1,012) (\$614)
			(\$664) (\$403)
			(\$349) (\$212)
			\$0 \$0
			(\$22,514) (\$13,666)
39	Deferred Tax Without Proration	Line 25	(\$49,257) (\$29,899)
40	Average Deferred Tax without Proration	Line 39 ÷ 2	(\$24,628) (\$14,949)
41	Proration Adjustment	Line 38 - Line 40	\$2,114 \$1,283

lumn Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 23 of 33

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2019 Revenue Requirement on FY 2012 Actual Incremental Gas Capital Investment

Line No.		Fiscal Year 2012 (a)	Cumulative FY13-FY16 (b)	Fiscal Year 2017 (c)	Fiscal Year 2018 (d)	Fiscal Year 2019 (e)
1	Depreciable Net Capital Included in Rate Base					
2	Total Allowed Capital Included in Rate Base in Current Year	\$6,721,626		\$0	\$0	\$0
	Retirements	2,292,446		\$0	\$0	\$0
3	Net Depreciable Capital Included in Rate Base	\$4,429,180		\$4,429,180	\$4,429,180	\$4,429,180
4	Change in Net Capital Included in Rate Base					
	Capital Included in Rate Base	\$6,721,626		\$6,721,626	\$6,721,626	\$6,721,626
5	Cost of Removal	(\$3,180,470)		(\$3,180,470)	(\$3,180,470)	(\$3,180,470)
6	Net Plant Amount	\$3,541,156	\$3,541,156	\$3,541,156	\$3,541,156	\$3,541,156
7	Deferred Tax Calculation:					
	Composite Book Depreciation Rate	3.38%		3.38%	3.38%	3.38%
8	Tax Depreciation					
9	Cumulative Tax Depreciation	\$3,001,202		\$29,648	\$27,421	\$25,368
	Year 1 = Page 24 of 33, Line 20; then = Page 24 of 33, Column (d), Line 9, Line 10, Line 11	\$3,001,202	\$3,145,859	\$3,175,507	\$3,202,929	\$3,228,297
	Year 1 = Line 8; then = Prior Year Line 9 + Current Year Line 8					
10	Book Depreciation	\$74,853		\$149,706	\$149,706	\$149,706
11	Cumulative Book Depreciation	\$74,853	\$673,678	\$823,385	\$973,091	\$1,122,797
	Year 1 = Line 3 * Line 7 * 50%; then = Line 3 * Line 7					
	Year 1 = Line 10; then = Prior Year Line 11 + Current Year Line 10					
12	Cumulative Book / Tax Timer	\$2,926,349	\$2,472,181	\$2,352,123	\$2,229,838	\$2,105,500
13	Effective Tax Rate	35.00%	35.000%	35.000%	35.000%	35.000%
14	Deferred Tax Reserve	\$1,024,222	\$865,263	\$823,243	\$468,266	\$442,155
15	Less: FY 2012 Federal NOL	(\$1,024,222)	(\$865,263)	(\$823,243)	(\$784,723)	(\$758,612)
16	Excess Deferred Tax					
17	Net Deferred Tax Reserve	\$0	\$0	\$0	\$316,457	\$316,457
	Sum of Line 14 through Line 16					\$0
18	Rate Base Calculation:					
19	Cumulative Incremental Capital Included in Rate Base	\$3,541,156	\$3,541,156	\$3,541,156	\$3,541,156	\$3,541,156
20	Accumulated Depreciation	(\$74,853)	(\$673,678)	(\$823,385)	(\$973,091)	(\$1,122,797)
21	Deferred Tax Reserve	\$0	\$0	\$0	\$0	\$0
	Year End Rate Base	\$3,466,303	\$2,867,477	\$2,717,771	\$2,568,065	\$2,418,359
	Sum of Lines 18 through 20					
	Revenue Requirement Calculation:					
22	Average ISR Rate Base before Deferred Tax Proration Adjustment	\$1,733,151.27		\$2,792,624	\$2,642,918	\$2,493,212
	Year 1 = Current Year Line 21 * 2, then Average of (Prior + Current Year Line 21)					
	(a)-(c) = N/A, (d)=Page 25 of 33, Line 41, Column (f); (e)=Page 25 of 33, Line 41, Column (k)				(\$1,880)	(\$1,121)
23	Proration Adjustment					
24	Average ISR Rate Base after Deferred Tax Proration	\$1,733,151		\$2,792,624	\$2,641,039	\$2,492,091
25	Pre-Tax ROR	11.41%		10.05%	9.73%	8.78%
26	Return and Taxes	\$197,753		\$280,659	\$257,039	\$218,806
27	Book Depreciation	\$74,853		\$149,706	\$149,706	\$149,706
28	Property Taxes	\$0		\$88,355	\$78,917	\$69,255
	\$0 in Year 1, then Prior Year (Line 6 - Line 11) * Property Tax Rate					
29	Annual Revenue Requirement	\$272,606	\$518,720	\$485,662	\$437,766	\$437,766
	Sum of Lines 26 through 28					
30	Remaining FY12 NOL attributable to embedded rate base in RIPUC Docket 4323	\$5,243,839		\$5,444,818	\$5,483,338	\$5,509,449
	Per Page 30 of 33, Line 13 less Line 15					
31	Average Rate Base	\$2,621,920		\$5,423,808	\$5,464,078	\$5,496,394
32	Pre-Tax ROR	11.41%		10.05%	9.73%	8.78%
33	Return and Taxes	\$299,161		\$545,093	\$531,791	\$482,583
	(a) = blended rate; (c) = Page 32 of 33, Column (e), Line 19, Line 34, Line 31					
	(a) = blended rate; (c) = Page 32 of 33, Column (e), Line 31 * Line 32					
34	Annual Revenue Requirement adjustment to base rates related to NOL	\$299,161	\$545,093	\$531,791	\$482,583	\$482,583
	Line 33					
35	Total Annual Revenue Requirement	\$571,767	\$1,063,813	\$1,017,454	\$920,350	\$920,350
	Line 29 + Line 34					
36	5 months Revenue Requirement (April 1, 2018-August 31, 2018)					\$383,479
	Line 35, Column (e) * 5 ÷ 12					

1/ Actual Incremental Retirements
2/ Actual Incremental Cost of Removal
3/ FY 2019 effective property tax rate of 2.7% per Page 28 of 33 at Line 81(b).

The Narragansett Electric Company
d/b/a National Grid

FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Tax Depreciation and Repairs Deduction on FY 2012 Capital Investments

Line No.		Fiscal Year 2012 (a)	(b)	(c)	(d)	(e)
<u>Capital Repairs Deduction</u>						
1	Plant Additions	\$6,721,626	Per Page 23 of 33, Line 1 Per Tax Department Line 1 * Line 2	20 Year MACRS Depreciation		
2	Capital Repairs Deduction Rate	67.43%				
3	Capital Repairs Deduction	<u>\$4,532,392</u>		MACRS basis:		
<u>Bonus Depreciation</u>						
4	Plant Additions	\$6,721,626	Fiscal Year		Annual	Cummulative
5	Less Capital Repairs Deduction	\$4,532,392	2012	3.750%	\$21,037	\$3,001,202
6	Plant Additions Net of Capital Repairs Deduction	\$2,189,234	2013	7.219%	\$40,498	\$3,041,700
7	Percent of Plant Eligible for Bonus Depreciation	<u>85.00%</u>	2014	6.677%	\$37,457	\$3,079,157
8	Plant Eligible for Bonus Depreciation		2015	6.177%	\$34,652	\$3,113,810
9	Bonus Depreciation Rate (April 2011 - December 2011)		2016	5.713%	\$32,049	\$3,145,859
10	Bonus Depreciation Rate (January 2012 - March 2012)	75.00%	2017	5.285%	\$29,648	\$3,175,507
11	Total Bonus Depreciation Rate	12.50%	2018	4.888%	\$27,421	\$3,202,929
12	Bonus Depreciation	<u>87.50%</u>	2019	4.522%	\$25,368	\$3,228,297
<u>Remaining Tax Depreciation</u>						
13	Plant Additions	\$6,721,626	2020	4.462%	\$25,031	\$3,253,328
14	Less Capital Repairs Deduction	\$4,532,392	2021	4.461%	\$25,026	\$3,278,354
15	Less Bonus Depreciation	<u>\$1,628,243</u>	2022	4.462%	\$25,031	\$3,303,385
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$560,991	2023	4.461%	\$25,026	\$3,328,411
17	20 YR MACRS Tax Depreciation Rates	3.750%	2024	4.462%	\$25,031	\$3,353,442
18	Remaining Tax Depreciation	<u>\$21,037</u>	2025	4.461%	\$25,026	\$3,378,468
19	Cost of Removal	(\$3,180,470)	2026	4.462%	\$25,031	\$3,403,500
20	Total Tax Depreciation and Repairs Deduction	<u>\$3,001,202</u>	2027	4.461%	\$25,026	\$3,428,525
			2028	4.462%	\$25,031	\$3,453,557
			2029	4.461%	\$25,026	\$3,478,583
			2030	4.462%	\$25,031	\$3,503,614
			2031	4.461%	\$25,026	\$3,528,640
			2032	2.231%	\$12,516	\$3,541,156
			00.000% \$560,991 \$3,541,156			

FY 2020 Gas Infrastructure, Safety, and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 24 of 33

- 1/ Capital Repairs percentage is based on the actual results of the FY 2012 tax return. Since growth is not included in the ISR, the percentage was derived by taking property qualifying for the repairs deduction as a percentage of the total annual plant additions in those categories that are considered as potentially qualifying for Capital Repairs deduction.
- 2/ Since not all property additions qualify for bonus depreciation and because a project must be started after the beginning of the bonus period, January 1, 2008, an estimate of 85% is used rather than 100%.

**The Narragansett Electric Company
d/b/a National Grid
FY 2019 Gas ISR Plan Revenue Requirement
Calculation of Net Deferred Tax Reserve Proration on FY 2012 Incremental Capital Investment**

		(a)	(b)
Line No.		FY 18	FY 19
	Deferred Tax Subject to Proration		
1	Book Depreciation	\$152,921	\$149,706
2	Bonus Depreciation	\$0	\$0
3	Remaining MACRS Tax Depreciation	(\$27,809)	(\$25,368)
4	FY19 tax (gain)/loss on retirements	\$0	\$0
5	Cumulative Book / Tax Timer	\$125,112	\$124,338
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve	\$43,789	\$26,111
	Deferred Tax Not Subject to Proration		
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2019		
11	Cumulative Book / Tax Timer		
12	Effective Tax Rate		
13	Deferred Tax Reserve		
14	Total Deferred Tax Reserve	\$43,789	\$26,111
15	Net Operating Loss		
16	Net Deferred Tax Reserve	\$43,789	\$26,111
17	Cumulative Book/Tax Timer Subject to Proration		
18	Cumulative Book/Tax Timer Not Subject to Proration		
19	Total Cumulative Book/Tax Timer		
20	Total FY 2019 Federal NOL (Utilization)		
21	Allocated FY 2019 Federal NOL Not Subject to Proration		
22	Allocated FY 2019 Federal NOL Subject to Proration		
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration		
25	Net Deferred Tax Reserve subject to proration	\$43,789	\$26,111
		(h)	(i)
	Proration Calculation	Number of Days in Month	Proration Percentage
26	Apr-2018	30	91.78%
27	May-2018	31	83.29%
28	Jun-2018	30	75.07%
29	Jul-2018	31	66.58%
30	Aug-2018	31	58.08%
31	Sep-2018	30	49.86%
32	Oct-2018	31	41.37%
33	Nov-2018	30	33.15%
34	Dec-2018	31	24.66%
35	Jan-2019	31	16.16%
36	Feb-2019	28	8.49%
37	Mar-2019	31	0.00%
38	Total	365	
39	Deferred Tax Without Proration	Line 25	\$43,789
40	Average Deferred Tax without Proration	Line 39 ÷ 2	\$21,895
41	Proration Adjustment	Line 38 - Line 40	(\$1,880)

lumn Notes:

- (i) Sum of remaining days in the year (Col (h)) ÷ 365
(j)&(k) Current Year Line 25 ÷ 12 * Current Month Col (i)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
FY 2012 - FY 2014 Incremental Capital Investment Summary

Line No.		Actual Fiscal Year 2012 (a)	Actual Fiscal Year 2013 (b)	Actual Fiscal Year 2014 (c)
<u>Capital Investment</u>				
1	ISR-eligible Capital Investment			
	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation Filing less audit adjustment of \$203,902; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation Filing less audit adjustment of \$44,855; Col (c) Docket No. 4380 FY 2014 ISR Reconciliation Filing less audit adjustment of \$266,685	\$ 54,477,445	\$56,416,101	\$70,137,361
1a	Work Order Write Off Adjustment			
1b	Growth (per Informal Request Division 1-2)			
	Per Company's books	\$0	\$393,288	\$771,673
	Per Company's books	\$95,103	\$35,750	\$351,197
2	ISR-eligible Capital Additions included in Rate Base per R.I.P.U.C. Docket No. 4323			
	Docket No. 4323 Schedule MDL-3-Gas Page 51, Line Notes 1(a), 2(b) and 3(e)	\$47,660,716	\$57,184,191	\$47,653,493
3	Incremental ISR Capital Investment	\$6,721,626	(\$1,197,129)	\$21,360,998
<u>Cost of Removal</u>				
4	ISR-eligible Cost of Removal			
	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation Filing; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation Filing; Col (c) Actual FY 2014 ISR Gas Cost of Removal per Company's Books	\$2,583,612	\$3,152,565	\$2,707,824
4a	Work Order Write Off Adjustment			
4b	Growth (per Informal Request Division 1-2)			
	Per Company's books	\$0	\$141,414	105,654.38
	Per Company's books	\$8,994	\$10,801	4,092
5	ISR-eligible Cost of Removal in Rate Base per R.I.P.U.C. Docket No. 4323			
	Docket No. 4323, Workpaper MDL-19-GAS, Page 3	\$5,755,088	\$4,701,396	\$3,917,830
6	Incremental Cost of Removal	(\$3,180,470)	(\$1,701,046)	(\$1,319,752)
<u>Retirements</u>				
7	ISR-eligible Retirements			
	Col (a) Docket No. 4219 FY 2012 ISR Reconciliation filing; Col (b) Docket No. 4306 FY 2013 ISR Reconciliation filing; Col (c) Actual FY 2014 ISR Gas Retirements	\$5,366,562	5,775,791	\$5,274,944
8	ISR-eligible Retirements per R.I.P.U.C. Docket No. 4323			
	Col (a) Docket No. 4219 Supplemental Testimony 2-17-2011; Col (b) Docket No. 4306 FY 2013 ISR Proposal Filing; Col (c)= Line 2(c) * 7.68% Retirement rate per Docket No. 4323 (Workpaper MDL-19-GAS p 4)	\$3,074,116	\$2,498,949	\$3,659,788
9	Incremental Retirements	\$2,292,446	\$3,276,842	\$1,615,155
	Line 7 - Line 8			

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Actual FY 2019 Property Tax Recovery Adjustment
(\$000s)

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	<u>RY End</u>	<u>ISR Additions</u>	<u>Non-ISR Add's</u>	<u>Total Add's</u>	<u>Bk Depr</u>	<u>Retirements</u>	<u>COR</u>	<u>End of FY16 As filed</u>
1								
2	Plant In Service	\$805,721	\$11,502	\$994	\$12,496			\$817,337
3						(\$879)		
4	Accumulated Depr	\$347,664						
5	Net Plant	\$458,057			\$4,690	(\$879)	(\$434)	\$351,041
6								\$466,296
7	Property Tax Expense	\$13,995						\$15,624
8								
9	Effective Prop tax Rate	3.06%						3.35%
10								
11								
12								
13								
14	Plant In Service	\$817,569	\$74,505	\$22,014	\$96,519	(\$7,969)		\$906,119
15						(\$7,969)		
16	Accumulated Depr	\$351,041					(\$2,164)	\$370,926
17	Net Plant	\$466,528			\$30,019	(\$7,969)		\$535,192
18								
19	Property Tax Expense	\$15,624						\$16,221
20								
21	Effective Prop tax Rate	3.35%						3.03%
22								
23								
24								
25								
26								
27	Plant In Service	\$906,119	\$89,323	\$27,286	\$116,610	(\$3,178)		\$1,019,550
28						(\$3,178)		
29	Accumulated Depr	\$370,926				(\$3,178)	(\$5,684)	\$397,497
30	Net Plant	\$535,192			\$33,433	(\$3,178)		\$622,053
31								
32	Property Tax Expense	\$16,221						\$19,316
33								
34	Effective Prop tax Rate	3.03%						3.11%
35								
36								
37								
38	Property Tax Recovery Calculation							
39		(a)	(b)	(c)	(d)	(e)	(f)	(g)
40		<u>Cumulative Incremental ISR Property Tax for FY14</u>					<u>Cumulative Incremental ISR Property Tax for FY16</u>	
41	ISR Additions							
42	Book Depreciation: base allowance on ISR eligible plant	\$11,502				\$74,505		\$89,323
43	Book Depreciation: current year ISR additions	(\$4,000)				(\$24,356)		(\$24,356)
44	COR	(\$631)				(\$1,165)		(\$1,456)
45		\$434				\$2,164		\$3,684
46	Net Plant Additions	\$7,245				\$51,148		\$67,195
47								
48	Rate Year Effective Tax Rate	3.06%				3.06%		3.06%
49	Property Tax Recovery on 2 mos FY14 vintage investment			\$221			\$229	\$218
50	Property Tax Recovery on FY15 vintage investment						\$1,563	\$1,494
51	Property Tax Recovery on FY16 vintage investment							\$2,053
52								
53	ISR Year Effective Tax Rate	3.35%				3.03%		3.11%
54	RY Effective Tax Rate & differential	3.06%	0.29%			3.06%		3.06%
55	RY Effective Tax Rate differential for 2 months FY 2018		0.05%					0.05%
56	RY Net Plant times Tax Rate differential	\$458,057 * 0.05%		\$225		\$458,057 * -0.03%	(\$116)	\$229
57	2 mos FY14 Net Adds times ISR Year Effective Tax rate	\$7,245 * 0.29%		\$21		\$7,487 * -0.03%	(\$2)	\$4
58	FY15 Net Adds times ISR Year Effective Tax rate					\$51,148 * -0.03%	(\$13)	\$24
59	FY16 Net Adds times ISR Year Effective Tax rate							\$34
60	Total Property Tax related to rate differential			\$246			(\$131)	\$290
61								
62	Total ISR Property Tax Recovery			\$468			\$1,661	\$4,055
63	As Approved in RIPUC Docket No. 4540			\$475			\$1,687	\$4,071
64	True up made in FY17 Reconciliation Docket No. 4590			(\$2)			(\$12)	(\$10)
65	Adjusted Property Tax			\$473			\$1,675	\$4,061
66	True up made in FY18 Re Docket No. 4678			(\$5)			(\$14)	(\$6)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Actual FY 2019 Property Tax Recovery Adjustment (continued) 1
(\$000s)

	(a) End of FY16	(b) ISR Additions	(c) Non-ISR Add's	(d) Total Add's	(e) Bk Depr.	(f) Retirements	(g) COR	(h) End of FY17
67	Plant In Service	\$1,019,550	\$81,161	\$22,407	\$103,568	(\$20,507)		\$1,102,611
68	Accumulated Depr	\$397,497			\$36,753	(\$20,507)	(\$6,100)	\$407,643
69	Net Plant	\$622,053						\$694,968
70	Property Tax Expense	\$19,316						\$21,414
71	Effective Prop tax Rate	3.11%						3.08%
	(a) End of FY17	(b) ISR Additions	(c) Non-ISR Add's	(d) Total Add's	(e) Bk Depr.	(f) Retirements	(g) COR	(h) End of FY18
72	Plant In Service	\$1,102,611	\$97,810	\$19,341	\$117,151	(\$24,057)		\$1,195,705
73	Accumulated Depr	\$407,643			\$39,730	(\$24,057)	(\$8,603)	\$414,713
74	Net Plant	\$694,968						\$780,992
75	Property Tax Expense	\$21,414						\$22,678
76	Effective Prop tax Rate	3.08%						2.90%
	(a) End of FY18	(b) ISR Additions	(c) Non-ISR Add's	(d) Total Add's	(e) Bk Depr.	(f) Retirements	(g) COR	(h) End of FY19
77	Plant In Service	\$1,195,705	\$92,263	\$24,845	\$117,108	(\$6,844)		\$1,305,969
78	Accumulated Depr	\$414,713			\$40,858	(\$6,844)	(\$6,123)	\$442,604
79	Net Plant	\$780,992						\$863,364
80	Property Tax Expense	\$22,678						\$23,283
81	Effective Prop tax Rate	2.90%						2.70%
Property Tax Recovery Calculation								
	(a) Cumulative Incremental ISR Property Tax for FY17	(b)	(c)	(d)	(e) Cumulative Incremental ISR Property Tax for FY18	(f)	(g)	(h) Cumulative Increrm. ISR Prop. Tax for FY2019 1st 5 month
82	ISR Additions	\$81,161			\$97,810			\$92,263
83	Book Depreciation: base allowance on ISR eligible plant	(\$24,356)			(\$24,356)			(\$24,356)
84	Book Depreciation: current year ISR additions	(\$1,215)			(\$1,246)			(\$1,449)
85	COR	\$6,100			\$8,603			\$11,583
86	Net Plant Additions	\$61,691			\$80,810			\$78,041
87	Rate Year Effective Tax Rate	3.06%			3.06%			3.06%
88	Property Tax Recovery on 2 mos FY14 vintage investment		\$206					1.27%
89	Property Tax Recovery on FY15 vintage investment		\$1,403					
90	Property Tax Recovery on FY16 investment		\$1,936					
91	Property Tax Recovery on FY17 investment		\$1,885					
92	Property Tax Recovery on FY18 investment							
93	Property Tax Recovery on FY19 investment							
94	ISR Year Effective Tax Rate	3.08%			2.90%			2.70%
95	FY Effective Tax Rate & differential	3.06%			3.06%			3.06%
96	FY Effective Tax Rate: 5 mos for FY 2019							
97	FY Effective Tax Rate: 5 mos for FY 2019							
98	FY Effective Tax Rate: 5 mos for FY 2019							
99	FY Effective Tax Rate: 5 mos for FY 2019							
100	FY Effective Tax Rate: 5 mos for FY 2019							
101	FY Effective Tax Rate: 5 mos for FY 2019							
102	FY Effective Tax Rate: 5 mos for FY 2019							
103	FY Effective Tax Rate: 5 mos for FY 2019							
104	FY Effective Tax Rate: 5 mos for FY 2019							
105	FY Effective Tax Rate: 5 mos for FY 2019							
106	FY Effective Tax Rate: 5 mos for FY 2019							
107	Total Property Tax Recovery		\$5,594					\$2,837
108	Total Property Tax Recovery approved in Docket 4678		\$5,614					
109	True up required in this filing		(\$20)					

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4916
FY 2020 Gas Infrastructure, Safety,
and Reliability Plan Reconciliation Filing
Attachment MAL-2
Page 29 of 33

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Actual FY 2019 Property Tax Recovery Adjustment (continued) 2
(\$000s)

Cumulative Incomm. ISR Prop. Tax for				
	FY 2019	7 months		
110	Incremental ISR Additions	(\$914)		
111	Book Depreciation: base allowance on ISR eligible plant	\$0		
112	Book Depreciation: current year ISR additions	(\$7)		
113	COR	\$5,627		
114	Net Plant Additions	\$4,705		
115	RY Effective Tax Rate	2.92%		\$118
116	ISR Property Tax Recovery on FY 2018 Net Incremental	1.70%		\$80
117	ISR Property Tax Recovery on FY 2019 Net Incremental			
118	ISR Property Tax Recovery on FY 2020 Net Incremental			
119	ISR Property Tax Recovery on FY 2021 vintage investment			
120	ISR Year Effective Tax Rate	2.70%		
121	RY Effective Tax Rate	2.92%	-0.22%	
122	RY Net Plant times Rate Difference	7 month	-0.13% 7 mos	
123	FY 2018 Net Incremental times 7 mo rate difference	\$ 919,892	* -0.13%	(\$1,203)
124	FY 2019 Net Incremental times 7 mo rate difference	\$6,934	* -0.13%	(\$9)
125	FY 2020 Net Incremental times 7 mo rate difference	\$4,705	* -0.13%	(\$6)
126	FY 2021 Net incremental times rate difference			
127	FY 2021 Net Adds times rate difference			
128	Total Property Tax due to rate differential			(\$1,218)
129	Total ISR Property Tax Recovery			(\$1,020)
Line Notes				
10(a) - 9(a)	Per Rate Year cost of service per Compliance filing Attachment 6 at Docket No. 4323.			Line 82(j)
10(b) - 9(b)	Per Docket 4678 FY 2018 Gas ISR Plan Rec filing at Page 17 of 25			Page 2 of 33, Line 5(a) / 1000
11(a) - 22(b)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			Page 2 of 33, Line 12(a) / 1000
27(a) - 35(b)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			Page 2 of 33 Line 7(a) / 1000
41(a) - 62(c)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			Sum of Line 82(j) - 85(j)
41(e) - 62(g)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			87(j)
41(f) - 62(k)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			89(j)
63(e) - 65(k)	As Approved in RIFUC Docket No. 4540			Line 9(a) * (5 months) 12)
64(e) - 65(k)	True-up made in Docket 4540 FY17 Reconciliation filing			Line 9(a)
65(e) - 65(k)	Line 63 + Line 64			Line 90(j) * Line 100(f) - 105(f)
66(k)	Line 62 - Line 65			96(a)
67(f)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25 except column (f)			Line 71(b)
67(b), 69(b), 71(b)	Sign error correction on Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			Line 81(b)
72(a) - 76(a)	Recalculated based on correct 67(f)			Line 9(a)
72(b) - 76(a)	Per Line 67(b) - 71(b)			Line 96(a) - 97(a)
72(b) - 73(b)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			Line 97(f) / (512 Months)
74(b)	Line 72(a) + Line 72(d) + 72(e) - (g)			98(j)
75(b)	Line 72(b) - 73(b)			99(a) - 103(b)
76(b)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			99(c) - 104(f)
77(b)	Page 2 of 33, Line 1(a)			99(g) - 104(g)
77(c)	Per Company's books			Line 99(c) - 104(c) * 97(f)
77(d)	Line 77(b) + Line 77(c)			Line 5(a)
77(f)	Per Company's books			Line 100(e)
77(h)	Line 77(a) + (d) + (f)			Line 101(e) - ((Line 14(d) + 14(f)) * 3.38%)
78(c)	(Docket 4323 RY depr allowance of \$28,130k + (Line 1(d) + Line 1(f)) * composite depr rate of 3.38% + (Line 14(d) + Line 14(f)) * 3.38% - (Line 27(f) * 3.38%) - (Line 67(d) + Line 67(f)) * 3.38% + Line 72(d) - 72(f) * 3.38% - 50%) * 5 - 12 = (Docket 4770 RY depr allowance of \$39,137 + Att. MAL-2, Page 11, Line 31(b) * comp depr rate of 3.05% * 50%) * 7 = 12			Line 102(e)
78(f)	Per Company's books			Line 103(e)
78(g)	Per Company's books			Line 104(e) - ((Line 67(d) + 67(f)) * 3.38%)
78(h)	Line 78(a) + (e) + (f) + (g)			Line 87(j)
79(b)	Line 77(b) - 78(b)			Line 98(j) - 105(j)
80(b)	Per Company's books			99(k) - 105(k)
81(b)	Per Docket 4678 FY 2018 Gas ISR Plan Reconciliation filing at Page 17 of 25			100(k) * (g), (k)
82(a) - 95(a)				Line 106(g) + Sum of Line 90(c) - 95(c)
				Line 106(k) + Sum of Line 90(c) - 95(c)
				108(c) * (g), (k)
				109(c) * (g), (k)
				110(a) + 129(c)
				Line 107(e) 108(c), 107(g) / 108 (g)
				As approved in Docket 4678 FY 2018 Gas ISR Plan Reconciliation at Page 17 of 25
				FY2019 ISR Rec. Docket 4781, Attachment MAL-2, Page 13 of 15, Line 31(a) - Line 50(c)

The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Deferred Income Tax ("DIT") Provisions and Net Operating Losses ("NOL")

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1 Total Base Rate Plant DIT Provision									CY 2011	CY 2012	Jan-2013	Feb 13 - Jan 14				
									\$ 16,572,023	\$ 19,058,494	\$ 1,700,343	\$ 13,893,167				
2 Total Base Rate Plant DIT Provision																
3 Incremental FY 12	\$1,121,846	\$1,080,717	\$1,038,476	\$906,443	\$865,263	\$823,243	\$784,723	\$758,612	\$17,193,641	\$18,309,741	\$11,577,639	\$0	\$0	\$0	\$0	\$0
4 Incremental FY 13	\$0	(\$734,732)	(\$690,174)	(\$829,884)	(\$780,869)	(\$731,561)	(\$686,939)	(\$657,040)	\$1,121,846	(\$41,129)	(\$42,241)	(\$132,033)	(\$41,180)	(\$42,020)	(\$38,520)	(\$26,111)
5 Incremental FY 14	\$0	\$0	\$6,444,262	\$5,821,675	\$5,651,257	\$5,476,108	\$5,314,522	\$5,204,369	\$0	(\$734,732)	\$44,558	(\$139,710)	\$49,015	\$49,309	\$44,622	\$29,899
6 FY 2015	\$0	\$0	\$0	\$23,687,481	\$23,214,645	\$22,716,080	\$22,246,009	\$21,919,412	\$0	\$0	\$6,444,262	(\$622,587)	(\$170,419)	(\$175,149)	(\$161,586)	(\$110,153)
7 FY 2016	\$0	\$0	\$0	\$0	\$28,518,812	\$27,774,974	\$27,086,919	\$26,616,776	\$0	\$0	\$0	\$23,687,481	(\$472,835)	(\$498,565)	(\$470,071)	(\$326,597)
8 FY 2017	\$0	\$0	\$0	\$0	\$0	\$26,246,278	\$25,725,012	\$25,365,294	\$0	\$0	\$0	\$0	\$28,518,812	(\$743,838)	(\$688,055)	(\$470,143)
9 FY 2018	\$0	\$0	\$0	\$0	\$0	\$0	\$31,685,482	\$31,258,284	\$0	\$0	\$0	\$0	\$0	\$26,246,278	(\$521,266)	(\$359,718)
10 FY 2019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,210,895	\$0	\$0	\$0	\$0	\$0	\$0	\$31,685,482	(\$427,199)
11 TOTAL Plant DIT Provision	\$ 1,121,846	\$ 345,985	\$ 6,792,564	\$ 29,585,715	\$ 57,469,108	\$ 82,305,122	\$ 112,155,729	\$ 129,676,602	\$ 18,315,487	\$ 17,533,880	\$ 18,024,218	\$ 22,793,151	\$ 27,883,393	\$ 24,836,014	\$ 29,850,607	\$ 17,520,873
12 NOL (Utilization)									\$ 6,268,061	\$ 6,136,520	\$ 23,775,494	\$ 19,205,538	\$ 11,594,940	\$ -	\$ 6,051,855	\$ (1,091,119)
13 Lesser of NOL or DIT Provision									\$ 6,268,061	\$ 6,136,520	\$ 18,024,218	\$ 19,205,538	\$ 11,594,940	\$ -	\$ 6,051,855	\$ (1,091,119)

Line Notes:

- 1(h) Per Dkt 4323 Compliance filing Attachment 6, Page 59 of 65, Line 18(e) less Line 18(a)
1(i)-1(k) Per Dkt 4323 Compliance filing Attachment 6, Page 64 of 65, Lines 32, 38, and 44
2 Col (i) = Line 1(i) * 75% + Line 1(j) * 25%; Col (j) = Line 1(i) * 75% + Line 1(k) + Line 1(l) * 2/12ths; Col (k) = Line 1(i) * 10/12ths
3(a)-10(b) Cumulative DIT and Excess DIT per vintage year ISR revenue requirement calculations (Page 10, Line 14; Page 8, Line 14; Page 6, Line 16; Page 4, Line 16+Line 18; Page 2, Line 16 + Line 18)
3(i)-10(p) Year over year change in cumulative DIT shown in Col (a) through (h)
11 Sum of Lines 2 through 9
12 Actual NOL or NOL utilization per tax returns
13 Lesser of Line 11 or Line 12

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Weighted ISR Additions FY 2014**

<u>Line</u> <u>No.</u>	<u>Month</u> <u>No.</u>	<u>Month</u>	<u>FY 2014 ISR</u> <u>Additions</u> (a)	<u>In</u> <u>Rates</u> (b)	<u>Not In</u> <u>Rates</u> (c) = (a) - (b)	<u>Weight</u> (d)	<u>Weighted</u> <u>Average</u> (e) = (d) * (c)
1				\$57,184,191			
2	1	Apr-13	\$5,751,208	4,765,349	\$985,858	0.958	\$944,781
3	2	May-13	5,751,208	4,765,349	985,858	0.875	862,626
4	3	Jun-13	5,751,208	4,765,349	985,858	0.792	780,471
5	4	Jul-13	5,751,208	4,765,349	985,858	0.708	698,316
6	5	Aug-13	5,751,208	4,765,349	985,858	0.625	616,161
7	6	Sep-13	5,751,208	4,765,349	985,858	0.542	534,007
8	7	Oct-13	5,751,208	4,765,349	985,858	0.458	451,852
9	8	Nov-13	5,751,208	4,765,349	985,858	0.375	369,697
10	9	Dec-13	5,751,208	4,765,349	985,858	0.292	287,542
11	10	Jan-14	5,751,208	4,765,349	985,858	0.208	205,387
12	11	Feb-14	5,751,208	-	5,751,208	0.125	718,901
13	12	Mar-14	5,751,208	-	5,751,208	0.042	239,634
14	Total FY 2014		<u>\$69,014,490</u>	<u>\$47,653,493</u>	<u>\$21,360,998</u>		<u>\$6,709,374</u>
15	Total Additions February & March 2014				\$11,502,415		
16	FY 2014 Weighted Average Incremental Rate Base Percentage						31.41%

Column (a) = Page 26 of 33, Line 1(c)

Column (b) = Page 26 of 33, Line 2(c)

Column (d) = (12.5 - Month No.) ÷ 12

Line 15 = Line 12(c) + Line 13(c)

Line 16 = Line 14(e)/Line 14(c)

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Weighted Average Cost of Capital**

Line No.

1	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 3943					
2		(a)	(b)	(c)	(d)	(e)
3		Ratio	Rate	Weighted Rate	Taxes	Return
4	Long Term Debt	40.63%	7.99%	3.25%		3.25%
5	Short Term Debt	11.66%	3.91%	0.45%		0.45%
6	Preferred Stock	0.00%	0.00%	0.00%		0.00%
7	Common Equity	47.71%	10.50%	5.01%	2.70%	7.71%
8		100.00%		8.71%	2.70%	11.41%

9
10 (d) - Column (c) x 35% divided by (1 - 35%)
11

12	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323 at 35% income tax rate					
13		(a)	(b)	(c)	(d)	(e)
14		Ratio	Rate	Weighted Rate	Taxes	Return
15	Long Term Debt	49.95%	5.70%	2.85%		2.85%
16	Short Term Debt	0.76%	0.80%	0.01%		0.01%
17	Preferred Stock	0.15%	4.50%	0.01%		0.01%
18	Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
19		100.00%		7.54%	2.51%	10.05%

20
21 (d) - Column (c) x 35% divided by (1 - 35%)
22
23

24	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323 at 21% income tax rate					
25		(a)	(b)	(c)	(d)	(e)
26		Ratio	Rate	Weighted Rate	Taxes	Return
27	Long Term Debt	49.95%	5.70%	2.85%		2.85%
28	Short Term Debt	0.76%	0.80%	0.01%		0.01%
29	Preferred Stock	0.15%	4.50%	0.01%		0.01%
30	Common Equity	49.14%	9.50%	4.67%	1.24%	5.91%
31		100.00%		7.54%	1.24%	8.78%

32 (d) - Column (c) x 21% divided by (1 - 21%)
33

FY18 Blended Rate

34 Line 19(e) x 75% + Line 31(e) x 25% 9.73%

**The Narragansett Electric Company
d/b/a National Grid
FY 2020 Gas ISR Plan Revenue Requirement Reconciliation
Calculation of Excess Deferred Taxes at 12/31/17**

		(a)	(b)	(c) = (b) - (a)	(d)	(e) = (a) + (d)	(g)
		Cumulative Book/Tax Difference at FY17	Book/Tax Difference at FY18	Difference	Prorated Change as of 12/31/17	Cumulative Timing Difference through 12/31/17	Excess Deferred Taxes at 12/31/17
<u>Line No</u>		35%					
1							
2	Vintage Year						
3	2012	\$2,352,123	\$2,229,838	(\$122,285)	(\$91,714)	\$2,260,409	\$316,457
4	2013	(\$2,090,173)	(\$1,948,517)	\$141,657	\$106,242	(\$1,983,931)	(\$277,750)
5	2014	\$15,646,021	\$15,133,051	(\$512,970)	(\$384,728)	\$15,261,294	\$2,136,581
6	2015	\$64,903,087	\$63,410,797	(\$1,492,289)	(\$1,119,217)	\$63,783,870	\$8,929,742
7	2016	\$79,357,069	\$77,172,768	(\$2,184,301)	(\$1,638,226)	\$77,718,843	\$10,880,638
8	2017	\$74,989,365	\$73,334,553	(\$1,654,812)	(\$1,241,109)	\$73,748,256	\$10,324,756
9	2018	0	\$100,588,833	\$100,588,833	\$75,441,625	\$75,441,625	\$10,561,827