

National Grid

The Narragansett Electric Company

FY 2020 Electric Infrastructure,  
Safety and Reliability Plan

**Annual Reconciliation**

August 3, 2020

Docket No. 4915

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 4915 - Fiscal Year 2020 Electric Infrastructure, Safety, and Reliability Plan Reconciliation Filing**

Dear Ms. Massaro:

On behalf of National Grid,<sup>1</sup> relating to the Company's Fiscal Year ("FY") 2020 Electric Infrastructure, Safety, and Reliability ("ISR") Plan, I have enclosed ten (10) copies of the Company's Electric ISR Reconciliation Filing. Pursuant to the approved ISR Plan and the ISR Provision, RIPUC No. 2199, after the end of the ISR Plan year, which runs from April 1 through March 31, the Company must file annually, by August 1 of each year, the proposed CapEx Reconciling Factors and Operation and Maintenance ("O&M") Reconciling Factor that will become effective for the 12 months beginning October 1. The CapEx Reconciling Factors recover or refund the difference between the reconciliation of actual billed revenue generated from the CapEx Factors and the actual revenue requirement based on actual cumulative ISR capital investment for the applicable plan year. Similarly, the annual O&M Reconciling Factor recovers or refunds the difference between the reconciliation of actual billed revenue from the O&M Factor and actual Inspection and Maintenance ("I&M") program expense and actual Vegetation Management ("VM") program expense for the ISR Plan year. Additionally, on August 1, the Company must report on the prior fiscal year's ISR Plan activities and include descriptions of deviations from the original plans approved by the Rhode Island Public Utilities Commission ("PUC").

This filing provides the actual discretionary and non-discretionary capital investment spending and the actual VM and I&M expenses for the period April 1, 2019 to March 31, 2020. As explained in this filing, the actual capital plant-in-service is compared to the budgeted amounts for these categories, as approved by the PUC in Docket No. 4915. The plant-in-service investment and O&M expenses for VM and I&M are then used in the calculation of the revenue requirement for the annual reconciliation of investment and expenses for the fiscal year. This revenue requirement is then compared to actual revenue billed, and any difference forms the basis for the proposed

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

Luly E. Massaro, Commission Clerk  
Docket 4915 – FY2020 Electric ISR Plan Reconciliation Filing  
August 3, 2020  
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Electric ISR Plan reconciliation factors for effect October 1, 2020. This filing also includes details on the Company's actual discretionary and non-discretionary capital investment spending by category during FY 2020. Finally, this filing includes a summary of the Company's Reliability Performance through December 31, 2019.

The pre-filed direct testimonies of Patricia Easterly, Melissa A. Little, and Adam S. Crary are enclosed with this filing. Ms. Easterly presents the Company's FY 2020 Electric ISR Plan Reconciliation Filing related to the FY 2020 Electric ISR Plan, which the PUC approved in this docket. Ms. Little's testimony describes the calculation of the revenue requirement based on the capital plant-in-service and the total annual actual VM and I&M expenses for the fiscal year. Ms. Little's testimony also includes a description of the revenue requirement model and attachments that support the final revenue requirement. As explained in Ms. Little's testimony, for the FY 2020 Electric ISR reconciliation, the Company has an updated revenue requirement of \$22,371,835. The revenue requirement is based on actual FY 2020 O&M programs, the actual capital investment levels for each of FY 2018 through FY 2020 incremental to the level of investment assumed in base distribution rates under Docket No. 4770, and actual tax deductibility percentages for FY 2019 capital additions.

Mr. Crary describes the reconciliation of the final FY 2020 revenue requirement against revenue billed in support of that revenue requirement, the proposed factors resulting from the reconciliation, and the bill impacts of those proposed factors. The reconciliation reflects CapEx revenue billed through the CapEx Factors and O&M revenue billed through the O&M Factor during the period of April 1, 2019 through March 31, 2020. The impact of the proposed CapEx Reconciling Factors and the proposed O&M Reconciling Factor on a typical residential customer receiving Standard Offer Service and using 500 kWhs per month is an increase of \$ \$0.17, or 0.2%, from \$110.51 to \$110.68 per month.

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

Very truly yours,



Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4915 Service List  
Leo Wold, Esq.  
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

Cvi wuv'5. '4242  
Date

**Docket No. 4915 - National Grid's Electric ISR Plan FY 2020**  
**Docket No. 4857 - Performance Incentives Pursuant to R.I.G.L. §39-1 27.7.1(e)(3)**

**Service List as of 8/15/2019**

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**Testimony of  
Patricia C. Easterly**

**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: PATRICIA C. EASTERLY**

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**PRE-FILED DIRECT TESTIMONY**

**OF**

**PATRICIA C. EASTERLY**

**August 3, 2020**

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1    **I.    Introduction and Qualifications**

2    **Q.    Ms. Easterly, please state your name and business address.**

3    A.    My name is Patricia C. Easterly. My business address is 40 Sylvan Road, Waltham,  
4        Massachusetts 02451.

6    **Q.    Ms. Easterly, by whom are you employed and in what position?**

7    A.    I am employed by National Grid USA Service Company, Inc. (NGSC) as Director – New  
8        England Electric Performance and Strategy. In my position, I am responsible for  
9        regulatory compliance for The Narragansett Electric Company d/b/a National Grid (the  
10       Company) related to electric distribution operations, and, in particular, for capital  
11       expenditures, in Rhode Island.

13   **Q.    Ms. Easterly, please describe your educational background and professional  
14        experience.**

15   A.    In 1983, I earned a Bachelor of Arts degree in Finance from Simmons College. In October  
16        1983, I joined Peat, Marwick, and Mitchell in St. Louis, Missouri as a staff auditor,  
17        progressing to senior auditor and becoming a Certified Public Accountant in the State of  
18        Missouri. In November 1987, I joined Edison Brothers Stores in St. Louis as Assistant  
19        Controller. In June 1988, I joined NGSC as a financial analyst in the Accounting division.  
20        Since that time, I have held various positions within National Grid, including Manager of  
21        Accounting, Director of Internal Audit, Transmission Finance Director, Distribution Finance

1 Director, Director Rhode Island – New Energy Solutions Planning, Budget and Performance,  
2 and Director for Finance Performance Management program. In September of 2018, I  
3 assumed my current position as Director – New England Electric Performance and Strategy.  
4

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

7 A. Yes. I have previously testified before the PUC in support of the Company’s Rhode Island  
8 Storm Contingency Fund, and the FY 2021 Electric Infrastructure, Safety and Reliability  
9 (ISR) Plan in Docket No. 4995, FY 2020 Electric ISR Plan in Docket No. 4915. and the  
10 FY 2019 Electric ISR Annual Reconciliation in Docket No. 4783. .  
11

12 **II. Purpose of Testimony**

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

14 A. The purpose of my testimony is to present the Company’s FY 2020 Annual  
15 Reconciliation filing related to the FY 2020 Electric ISR Plan approved by the PUC in  
16 this docket. This filing provides the actual plant-in-service for discretionary and non-  
17 discretionary capital investment and associated cost of removal (COR), the actual  
18 vegetation management (VM) operation and maintenance (O&M) expenses, and the  
19 actual inspection and maintenance (I&M) O&M expenses for the period April 1, 2019 to  
20 March 31, 2020. As described in Ms. Melissa Little’s testimony in this filing, this plant-  
21 in-service investment and the O&M expenses for VM and I&M is used to calculate the

1 FY 2020 Electric ISR Plan revenue requirement. As explained in Mr. Adam S. Crary's  
2 testimony in this filing, the revenue requirement is then reconciled against the actual  
3 revenue billed during FY 2020. Specific details by category for the FY 2020 Electric  
4 ISR Plan plant-in-service additions, associated COR, and actual capital spending are  
5 included in Attachment PCE-1, which is attached to this testimony.

6  
7 **III. Plant-In-Service**

8 **Q. Please provide an overview of the plant-in-service for FY 2020.**

9 A. As shown in Table 2 of Attachment PCE-1, in FY 2020, the Company's plant-in-service  
10 investment was \$104.9 million. This amount was approximately \$2.1 million over the  
11 planned amount of \$102.8 million. Non-Discretionary plant additions totaling \$47.8  
12 million were placed in service, which was \$14.1 million over the planned amount of  
13 \$33.6 million. This variance was due to more customer-driven work, storm related plant,  
14 and transformer costs. Discretionary plant additions totaling \$57.1 million were placed in  
15 service, which was approximately \$12.0 million under the planned amount of \$69.2  
16 million. Lower System Capacity and Performance were driven by lower Aquidneck  
17 Island project additions than targeted offset by higher Chase Hill and Quonset substation  
18 additions. Asset Condition plant additions were lower than target primarily due to  
19 Underground Cable projects. As shown in Table 3 of Attachment PCE-1, in FY 2020, the  
20 associated cost of removal (COR) was \$14.4 million which was over-budget by  
21 approximately \$0.4 million from the FY 2020 forecast of \$14.0 million. These totals

1           resulted in a net Electric ISR Plan investment of \$119.3 million, which was  
2           approximately \$2.5 million over the Company’s combined plant-in-service and COR  
3           planned amount of \$116.8 million. Details on these variances are included in Section I of  
4           Attachment PCE-1.

5  
6   **IV. Capital Spending**

7   **Q.   Please summarize the Company’s actual capital spending for FY 2020 for the**  
8   **Electric ISR Plan.**

9   A.   As shown in Table 4 of Attachment PCE-1, for FY 2020, the Company spent \$103.7  
10   million for capital investment under the Electric ISR Plan. This amount was \$1.9 million  
11   over the annual approved budget of \$101.8 million. The significant drivers related to non-  
12   discretionary capital spending were storm related capital spending, new business-  
13   commercial and public requirements spending and two transformer failures. This is  
14   offset by decreases in Distributed Generation projects.

15  
16   For FY 2020, capital spending in the Discretionary sub-category (excluding Southeast  
17   Substation) was \$53.6 million, which was \$1.5 million under the annual approved budget  
18   of \$55.0 million. This was driven primarily by underspending of \$4.2 million on the  
19   Dyer Street Substation project, offset by increased spending on the Aquidneck Island  
20   project. Capital spending on the Southeast Substation project, which was managed as a

1 separate Discretionary sub-category, was \$4.4 million, which was \$1.8 million under the  
2 annual approved budget of \$6.3 million.

3  
4 The key drivers and variances by category are discussed in more detail in Section III of  
5 Attachment PCE-1.

6  
7 **V. O&M Spending**

8 **Q. Please summarize the Company's actual O&M spending for the FY 2020 Electric**  
9 **ISR Plan.**

10 A. As shown in Table 10 of Attachment PCE-1, for FY 2020, the Company's VM O&M  
11 spending was \$10.5 million, which was slightly over-budget by \$0.1 million. In addition,  
12 as shown in Table 11, the Company's Other O&M spending for costs related to the I&M  
13 program and VVO was \$1.0 million, which was \$0.1 million under the O&M approved  
14 budget of \$1.1 million. Detailed information regarding the work completed are discussed  
15 in Attachment PCE-1 in Section IV and Section V, respectively.

16  
17 **VI. Reliability Performance**

18 **Q. Please summarize the results of the Company's reliability performance for CY 2019.**

19 A. Section VI of Attachment PCE-1 includes the Company's Reliability Performance for  
20 calendar year 2019 (CY 2019). The Company met both its System Average Interruption  
21 Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI)

1 performance metrics in CY 2019, with SAIFI of 1.02 against a target of 1.05, and SAIDI  
2 of 68.2 minutes, against a target of 71.9 minutes. The Company's annual service quality  
3 targets are measured excluding major event days.<sup>1</sup>

4

5 **VII. Conclusion**

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

7 **A. Yes.**

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<sup>1</sup> A Major Event Day (MED) is defined as a day on which the daily system SAIDI exceeds a MED threshold value (minutes for CY 2019). For purposes of calculating daily system SAIDI, any interruption that spans multiple calendar days is accrued to the day on which the interruption began. Statistically, days having a daily system SAIDI greater than the MED are days on which the energy delivery system experiences stress beyond that normally expected, such as during severe weather.



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: PATRICIA C. EASTERLY  
ATTACHMENTS**

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Attachment PCE-1

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

**FY 2020 Electric Infrastructure, Safety and Reliability Plan  
Annual Reconciliation Filing**

**EXECUTIVE SUMMARY**

In accordance with its tariff, RIPUC No. 2199, Sheets 1-5, The Narragansett Electric Company d/b/a National Grid (the Company) submits this Annual Reconciliation Filing for the FY 2020 Electric Infrastructure, Safety and Reliability Plan approved by the Rhode Island Public Utilities Commission (PUC) in Docket No. 4915. This filing provides the actual capital investment, vegetation management (VM) and other operation and maintenance (O&M) spending for the period April 1, 2019 to March 31, 2020. In addition, actual Plant-In-Service Additions and Cost of Removal are compared to the forecasted amounts for the discretionary and non-discretionary categories. Finally, this filing includes a summary of the Company’s reliability performance through December 31, 2019. Table 1 summarizes the FY 2020 program.

**Table 1  
FY 2020 ISR Activity**

FY 2020 <i>in millions \$</i>	Target / Budget	Actuals	Variance Over / (Under)
Plant in Service Additions - Non-discretionary	\$33.6	\$47.8	\$14.1
Plant in Service Additions - Discretionary	\$69.2	\$57.1	(\$12.0)
<b>Plant in Service Additions</b>	<b>\$102.8</b>	<b>\$104.9</b>	<b>\$2.1</b>
Cost of Removal Spending - Non-discretionary	\$6.1	\$5.4	(\$0.8)
Cost of Removal Spending - Discretionary	\$7.9	\$9.0	\$1.2
<b>Cost of Removal Spending</b>	<b>\$14.0</b>	<b>\$14.4</b>	<b>\$0.4</b>
Capital Spending - Non-discretionary	\$40.5	\$45.7	\$5.2
Capital Spending - Discretionary	\$61.3	\$58.0	(\$3.3)
<b>Capital Spending</b>	<b>\$101.8</b>	<b>\$103.7</b>	<b>\$1.9</b>
Vegetation Management Spending	\$10.4	\$10.5	\$0.1
I&M and Other O&M Spending	\$1.1	\$1.0	(\$0.1)
<b>O&amp;M Spending</b>	<b>\$11.5</b>	<b>\$11.5</b>	<b>\$0.0</b>

This filing includes testimony from Ms. Little and Mr. Crary. Ms. Little’s testimony describes the calculation of the revenue requirement based on the capital plant-in-service and the total annual actual VM and O&M expenses for the fiscal year. Ms. Little’s testimony also includes a

description of the revenue requirement model and attachments that support the final revenue requirement. As shown in Ms. Little’s testimony, for the FY 2020 filing, the Company has an updated revenue requirement of approximately \$22.4 million.

Mr. Crary’s testimony provides a description of the reconciliation of the final actual FY 2020 revenue requirement against revenue billed in support of that revenue requirement, the proposed factors resulting from the reconciliation, and the bill impacts of those proposed factors. The impact of the proposed CapEx Reconciling Factor and the proposed O&M Reconciling Factor on a typical residential customer receiving Standard Offer Service and using 500 kWhs per month is an increase of \$0.17, or approximately 0.2% from \$110.51 to \$110.68.

**I. FY 2020 Capital for Plant Investment Placed in Service**

As shown in Table 2 below, in FY 2020, \$104.9 million of plant additions were placed in service, which was \$2.1 million over the annual forecasted amount of \$102.8 million. Non-discretionary plant additions totaling \$47.8 million were placed in service, which was \$14.1 million over the planned amount of \$33.6 million. This increase was due to more customer-driven work, storm related plant, and increases in transformer costs. Discretionary plant additions totaling \$57.1 million were placed in service, which was \$12.0 million under the planned amount of \$69.2 million. Lower System Capacity & Performance plant additions were driven by lower Aquidneck Island Newport and Jepson project additions than targeted offset by higher Chase Hill and Quonset Substation additions. Asset Condition plant additions were lower than target driven primarily by underground cable work.

**Table 2  
Plant Additions by Category**

	Target	Actuals	Variance Over / (Under)
Customer Request/Public Requirement	\$20,052,882	\$29,730,147	\$9,677,265
Damage Failure	\$13,568,416	\$18,035,246	\$4,466,830
<i>Non-Discretionary Sub-total</i>	<i>\$33,621,298</i>	<i>\$47,765,393</i>	<i>\$14,144,095</i>
Asset Condition	\$28,007,686	\$23,869,680	(\$4,138,006)
Non-Infrastructure	\$553,020	\$193,501	(\$359,519)
System Capacity & Performance	\$40,614,996	\$33,080,820	(\$7,534,176)
<i>Discretionary Sub-total</i>	<i>\$69,175,702</i>	<i>\$57,144,002</i>	<i>(\$12,031,701)</i>
<b>Total Capital Investment in System</b>	<b>\$102,797,000</b>	<b>\$104,909,394</b>	<b>\$2,112,394</b>

The variances shown in Table 2 reflect the timing of when plant investment is placed into service. In general, once equipment is energized and placed into service to support electric load, capital costs are transferred from FERC Account 107 (Construction Work in Progress or CWIP) to FERC Account 106 (Plant-In-Service), which is when the underlying capital work becomes used and useful in the service of customers. This can differ by the type of plant and facility. For example, electric distribution line equipment is normally placed in service closer to the time it is installed because it is typically energized at that time and begins to support electric load, and therefore, is used and useful in the service of customers. Because electric distribution line equipment is typically energized as it is installed, a relatively significant amount of plant is placed into service as work progresses. By contrast, substation construction typically involves multi-year projects. The assets must pass testing, the work must be commissioned, and the assets must be energized before they can be placed in service. Because substation construction is typically completed in one or more phases as part of a multi-year process, the assets will only be placed in service to serve customers once all work in a particular phase is completed.

Table 3 provides the total Cost of Removal (COR) for FY 2020, which was \$14.4 million, \$0.4 million over the forecast of \$14.0 million. Non-discretionary COR spending was \$5.4 million, which was \$0.8 million under the planned amount of \$6.1 million. COR associated with Discretionary projects totaled \$9.0 million, which was \$1.2 million over the annual planned amount of \$7.9 million.

**Table 3**  
**COR by Category**

	Target	Actuals	Variance Over / (Under)
Customer Request/Public Requirement	\$3,418,000	\$3,089,403	(\$328,597)
Damage Failure	\$2,726,000	\$2,278,401	(\$447,599)
<i>Non-Discretionary Sub-total</i>	<i>\$6,144,000</i>	<i>\$5,367,803</i>	<i>(\$776,197)</i>
Asset Condition	\$6,216,000	\$7,786,402	\$1,570,402
Non-Infrastructure	\$5,000	\$11,786	\$6,786
System Capacity & Performance	\$1,635,000	\$1,221,491	(\$413,509)
<i>Discretionary Sub-total</i>	<i>\$7,856,000</i>	<i>\$9,019,678</i>	<i>\$1,163,678</i>
<b>Total Capital Investment in System</b>	<b>\$14,000,000</b>	<b>\$14,387,482</b>	<b>\$387,482</b>

## II. FY 2020 Capital Spending Summary

As shown in Table 4 below, capital spending for FY 2020 totaled \$103.7 million, which was \$1.9 million over the FY 2020 budget of \$101.8 million.

**Table 4**  
**Capital Spending by Category**

	Budget	Actuals	Variance Over / (Under)
Customer Request/Public Requirement	\$27,025,000	\$28,667,287	\$1,642,287
Damage Failure	\$13,505,000	\$17,028,480	\$3,523,480
<i>Non-Discretionary Sub-total</i>	<i>\$40,530,000</i>	<i>\$45,695,767</i>	<i>\$5,165,767</i>
Asset Condition	\$33,425,000	\$28,450,068	(\$4,974,932)
Non-Infrastructure	\$550,000	\$145,367	(\$404,633)
System Capacity & Performance	\$21,045,000	\$24,957,836	\$3,912,836
<i>Discretionary Sub-total (without Southeast Substation Project)</i>	<i>\$55,020,000</i>	<i>\$53,553,271</i>	<i>(\$1,466,729)</i>
Southeast Substation Project	\$6,250,000	\$4,427,043	(\$1,822,957)
<i>Discretionary Sub-total</i>	<i>\$61,270,000</i>	<i>\$57,980,314</i>	<i>(\$3,289,686)</i>
<b>Total Capital Investment in System</b>	<b>\$101,800,000</b>	<b>\$103,676,080</b>	<b>\$1,876,080</b>

## III. FY 2020 Capital Spending by Key Driver Category

### 1. Non-Discretionary Spending

#### *a. Customer Request/Public Requirement - \$1.6 million over-budget*

Capital spending for FY 2020 in the Customer Request/Public Requirement category was approximately \$28.7 million, which was \$1.6 million over the FY 2020 budget of \$27.0 million. The major drivers of this variance are:

- Capital spending on New Business-Commercial projects and Public Requirements blankets totaled \$13.0 million, which was \$3.5 million over the budget of \$9.5 million. Net spending on Distributed Generation (DG) projects was \$3.1 million under-budget. The timing of project spending and receipt of CIACs results in Budget to Actual variances.
- Capital spending on transformer purchases was \$5.2 million, which was \$1.6 million over the budgeted spending of \$3.5 million. This is driven by increased purchases of capacitors and regulators and associated impact from capital overheads.

Detailed budget and actual spending by budget classification for the Customer Request/Public Requirement category is shown in Table 5 below.

**Table 5**  
**Customer Request/Public Requirement Capital Spending**

Category	Budget Classification	Budget	Actuals	Variance Over / (Under)
<b>Customer Request/Public Requirement</b>	Third-party Attachments	\$165,000	\$185,919	\$20,919
	Distributed Generation	\$4,675,000	\$1,605,188	(\$3,069,812)
	Land and Land Rights	\$430,000	\$350,135	(\$79,865)
	Meters – Distribution	\$3,030,000	\$2,529,581	(\$500,419)
	New Business – Commercial	\$7,140,000	\$8,665,612	\$1,525,612
	New Business – Residential	\$5,570,000	\$5,186,420	(\$383,581)
	Outdoor Lighting – Capital	\$150,000	\$667,278	\$517,278
	Public & Regulatory Requirement	\$2,350,000	\$4,320,481	\$1,970,481
	Transformers & Related Equipment	\$3,515,000	\$5,156,674	\$1,641,674
		<b>Customer Request/Public Requirement Spending</b>	<b>\$27,025,000</b>	<b>\$28,667,287</b>

***b. Damage/Failure - \$3.5 million over-budget***

Capital spending in the Damage/Failure category was \$17.0 million, which was approximately \$3.5 million over the FY 2020 budget of \$13.5 million. This variance was driven primarily by the following:

- Costs related to two failed transformers that were \$1.2 million over budgeted substation failure budget, partially offset by \$0.3 million of favorability in other spending.
- Capital spending related to storms was \$4.3 million, which was \$2.6 million over the budget of \$1.7 million.

Detailed budget and actual spending for the Damage/Failure category is shown in Table 6 below.

**Table 6**  
**Damage/Failure Capital Spending**

Category	Budget Classification	Budget	Actuals	Variance Over / (Under)
Damage/Failure	Damage/Failure	\$11,855,000	\$12,764,010	\$909,010
	Major Storms	\$1,650,000	\$4,264,470	\$2,614,470
	<b>Damage/Failure Spending</b>	<b>\$13,505,000</b>	<b>\$17,028,480</b>	<b>\$3,523,480</b>

**2. Discretionary Spending**

***a. Asset Condition (without Southeast Substation) - \$5.0 million under-budget***

Capital spending in the Asset Condition category (absent the Southeast Substation project) was \$28.5 million, which was \$5.0 million under the FY 2020 budget of \$33.4 million. The following projects and programs drove the under-spending:

- Capital spending on Dyer Street substation was \$0.7 million, \$4.2 million under the FY 2020 budget of \$4.9 million. The Company has paused work on this project so that options can be reassessed as current cost estimates are higher than previous estimates.
- Capital spending on the Providence Area Study projects was \$1.6 million, \$1.3 million under the FY 2020 budget of \$2.9 million primarily due to project delays.
- Capital spending on the Lee, Cottage and Front Street projects was \$4.8 million, \$1.5 million over the FY 2020 budget of \$3.3 million. The overage is due to additional costs on Cottage and Front Street projects associated with working in a thickly settled, urban area.
- Capital spending on the South Street Substation project was \$0.8 million less than the budget of \$1.8 million due to work occurring in FY 2019 that was expected to occur in the FY 2020 when the budget was developed.
- Capital spending on the Pawtucket 1 breaker replacement project was \$1.1 million under the FY 2020 budget due to less expensive manufacturing costs associated with the Pawtucket breakers.

***b. Asset Condition – Southeast Substation – \$1.8 million under-budget***

Capital spending on the Southeast Substation Replacement project was \$4.4 million, which was \$1.8 million under the budget of \$6.3 million, which was primarily due to project delays. The Company expects the FY 2020 delays to be caught up in FY 2021.

Detailed budget and actual spending by budget classification for the Asset Condition category is shown in Table 7 below.

**Table 7  
Asset Condition Capital Spending**

Category	Budget Classification	Budget	Actuals	Variance Over / (Under)
Asset Condition	Asset Replacement	\$31,375,000	\$26,502,921	(\$4,872,079)
	Asset Replacement – Southeast	\$6,250,000	\$4,427,043	(\$1,822,957)
	Asset Replacement - I&M	\$1,700,000	\$1,894,490	\$194,490
	Safety & Other	\$350,000	\$52,656	(\$297,344)
	<b>Asset Condition Spending</b>	<b>\$39,675,000</b>	<b>\$32,877,111</b>	<b>(\$6,797,889)</b>

***c. Non-Infrastructure - \$0.4 million under-budget***

Capital spending for the Non-Infrastructure category was \$0.2 million, which was \$0.4 million under the FY 2020 budget of \$0.6 million.

Detailed budget and actual spending for the Non-Infrastructure category is shown in Table 8 below.

**Table 8  
Non-Infrastructure Capital Spending**

Category	Budget Classification	Budget	Actuals	Variance Over / (Under)
Non-Infrastructure	Corporate/Admin/General/Other	\$0	(\$243,905)	(\$243,905)
	General Equipment	\$300,000	\$161,446	(\$138,554)
	Telecommunications	\$250,000	\$227,826	(\$22,174)
	<b>Non-Infrastructure Spending</b>	<b>\$550,000</b>	<b>\$145,367</b>	<b>(\$404,633)</b>

***d. System Capacity & Performance - \$3.9 million over-budget***

Capital spending for FY 2020 for the System Capacity and Performance category was \$25.0 million, which was \$3.9 million over the FY 2020 budget of \$21.1 million. This variance was driven primarily by the following projects:

- Capital spending on the Aquidneck Island project was \$17.7 million, \$3.6 million over the budget of \$14.1 million. The factors impacting costs were limitations placed on work hours and soil conditions.
- Capital spending on Quonset and Chase Hill substations was \$1.9 million. Budgets were not set for these projects in FY 2020 as project delays pushed completion of work from FY 2019 into FY 2020 after budgets were set.

Detailed budget and actual spending for the System Capacity & Performance category is shown in Table 9 below.

**Table 9  
System Capacity & Performance Capital Spending**

Category	Budget Classification	Budget	Actuals	Variance Over / (Under)
System Capacity & Performance	Load Relief	\$17,690,000	\$21,411,765.68	\$3,721,766
	Reliability	\$3,355,000	\$3,546,070	\$191,070
	<b>System Capacity &amp; Performance Spending</b>	<b>\$21,045,000</b>	<b>\$24,957,836</b>	<b>\$3,912,836</b>

For additional information on specific large project variances, please see Attachment E to the Company's FY 2020 Electric Infrastructure, Safety, and Reliability Plan revised quarterly report for the fourth quarter period ending March 31, 2020 (Docket 4915) filed with the PUC on May 20, 2020. A copy of this report is attached as Attachment 1.

**IV. FY 2020 Vegetation Management (VM)**

For FY 2020, the Company completed 1,208 miles of distribution cycle pruning at a cost of \$10.5 million. The Company completed 100% of its work plan for FY 2020. Table 10 below provides the spending components in the VM category.

**Table 10**  
**Vegetation Management O&M Spending**

	Budget	Actuals	Variance Over / (Under)
Cycle Pruning (Base)	\$5,600,000	\$5,539,967	(\$60,033)
Hazard Tree	\$2,250,000	\$2,230,150	(\$19,850)
Sub-T (on & off road)	\$500,000	\$615,840	\$115,840
Police/Flagman Details	\$825,000	\$745,997	(\$79,003)
Core Crew (all other activities)	\$1,225,000	\$1,384,744	\$159,744
<b>Total VM O&amp;M Spending</b>	<b>\$10,400,000</b>	<b>\$10,516,698</b>	<b>\$116,698</b>

**V. FY 2020 Other Operations and Maintenance (O&M)**

For FY 2020, the Company completed 100% of its annual goal of 56,613 overhead structures inspected with an associated spend of \$0.5 million Table 11 below provides the total FY 2020 spending for all components in the Other O&M category.

**Table 11**  
**Other O&M Spending**

	Budget	Actuals	Variance Over / (Under)
Opex Related to Capex	\$256,000	\$251,264	(\$4,736)
Repair & Inspections Related Costs	\$515,000	\$523,520	\$8,520
System Planning & Protection Coordination Study	\$25,000	\$103,546	\$78,546
VVO/CRV Program	\$311,000	\$121,262	(\$189,738)
<b>Total I&amp;M O&amp;M Spending</b>	<b>\$1,107,000</b>	<b>\$999,592</b>	<b>(\$107,408)</b>

For additional information of the Company's I&M program, deficiencies and repairs made, please see the Company's FY 2020 Electric Infrastructure, Safety, and Reliability Plan revised quarterly report for the fourth quarter period ending March 31, 2020 (Docket 4915) filed with the PUC on May 20, 2020. A copy of this report is attached as Attachment 1.

## **VI. Reliability Performance**

The Company met both its System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) performance metrics in CY 2019, with SAIFI of 1.02 against a target of 1.05, and SAIDI of 68.2 minutes, against a target of 71.9 minutes. For additional information on reliability and major event days, please refer to the 2019 Service Quality Report filed under Docket 3628 on May 1, 2020. A copy is attached to this report as Attachment 2.



Attachment 1

Revised Quarterly Report for the Fourth Quarter Period Ending March 1, 2020

May 20, 2020

**VIA ELECTRONIC MAIL**

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

**RE: Docket 4915 – FY2020 Electric Infrastructure, Safety, and Reliability Plan Revised Quarterly Update – Fourth Quarter Ending March 31, 2020**

Dear Ms. Massaro:

On behalf of National Grid,<sup>1</sup> I have enclosed a revised electronic version<sup>2</sup> of the Company's fiscal year (FY) 2020 Electric Infrastructure, Safety, and Reliability (ISR) Plan quarterly update for the fourth quarter ending March 31, 2020.

The Company revised the third bullet on page 2 of the enclosed quarterly report to correct the FY 2020 Distributed Generation budget from \$1.6 million to \$4.7 million. The remainder of the report remains unchanged from the Company's May 15, 2020 filing.

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

Very truly yours,



Jennifer Brooks Hutchinson

Enclosures

cc: Docket 4915 Service List  
Christy Hetherington, Esq.  
John Bell, Division  
Greg Booth, Division

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

<sup>2</sup> Per practice during the COVID-19 emergency period, the Company is providing a PDF version of the above-referenced quarterly update. The Company will provide the Commission Clerk with a hard copy and, if needed, additional hard copies of this quarterly update at a later date.

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

May 20, 2020  
Date

**Docket No. 4915 - National Grid's Electric ISR Plan FY 2020**  
**Docket No. 4857 - Performance Incentives Pursuant to R.I.G.L. §39-1 27.7.1(e)(3)**

**Service List as of 8/15/2019**

<b>Name/Address</b>	<b>E-mail Distribution</b>	<b>Phone</b>
Jennifer Hutchinson, Esq. <b>National Grid</b> 280 Melrose St. Providence, RI 02907	<a href="mailto:jennifer.hutchinson@nationalgrid.com">jennifer.hutchinson@nationalgrid.com</a> ; <a href="mailto:celia.obrien@nationalgrid.com">celia.obrien@nationalgrid.com</a> ; <a href="mailto:Joanne.scanlon@nationalgrid.com">Joanne.scanlon@nationalgrid.com</a> ;	401-784-7288
National Grid Melissa Little Dennis Antonino Ryan Moe Adam Crary William Richer Patricia Easterly	<a href="mailto:Melissa.Little@nationalgrid.com">Melissa.Little@nationalgrid.com</a> ; <a href="mailto:Ryan.Moe@nationalgrid.com">Ryan.Moe@nationalgrid.com</a> ; <a href="mailto:dennis.antonino@nationalgrid.com">dennis.antonino@nationalgrid.com</a> ; <a href="mailto:Adam.Crary@nationalgrid.com">Adam.Crary@nationalgrid.com</a> ; <a href="mailto:Patricia.easterly@nationalgrid.com">Patricia.easterly@nationalgrid.com</a> ; <a href="mailto:William.Richer@nationalgrid.com">William.Richer@nationalgrid.com</a> ;	
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<b>File an original &amp; ten copies w/:</b> Luly E. Massaro, Commission Clerk John Harrington, Commission Counsel Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a> ; <a href="mailto:John.harrington@puc.ri.gov">John.harrington@puc.ri.gov</a> ; <a href="mailto:Cynthia.WilsonFrias@puc.ri.gov">Cynthia.WilsonFrias@puc.ri.gov</a> ; <a href="mailto:Todd.bianco@puc.ri.gov">Todd.bianco@puc.ri.gov</a> ; <a href="mailto:Alan.nault@puc.ri.gov">Alan.nault@puc.ri.gov</a> ;	401-780-2107

## **Electric Infrastructure, Safety, and Reliability Plan**

### **FY 2020 Quarterly Update**

#### **Revised Fourth Quarter Ending March 31, 2020**

### **EXECUTIVE SUMMARY**

As shown in Attachment A for Fiscal Year 2020 (FY 2020), the Company<sup>1</sup> spent \$103.7 million for capital investment projects against a FY 2020 budget of \$101.8 million. Overall, FY 2020 spending was over-budget by \$1.9 million. FY 2020 spending for the Non-Discretionary category was \$5.1 million over the budget of \$40.5 million. FY 2020 spending for the Discretionary category, including the Southeast Substation project, was \$3.3 million under the budget of \$61.3 million. Each of these categories is addressed in more detail below.

On July 11, 2016, the Rhode Island Public Utilities Commission (PUC) issued an Order<sup>2</sup> directing the Company to provide more detail on capital spending in the Damage/Failure category. The detail must include work type, location, and, where applicable, Level 1 Inspections and Maintenance (I&M) repairs completed with Damage/Failure funding. The Company has included additional detail on Level 1 I&M repairs in Section 5 of this report and has included summary information on capital spending in the Damage/Failure category in Attachment F of this report. Attachment F is also included as an executable Excel file that organizes raw data captured in the Company's financial, asset, and work management systems.

For FY 2020, the Company and the Rhode Island Division of Public Utilities and Carriers (Division) agreed to provide a quarterly budget and project management report on the Southeast Substation project. The latest report is included as Attachment G of this report.

As part of the FY 2020 budget process, the Company has agreed to provide detail related to meter purchases as part of its quarterly report. Attachment H is the meter purchase detail through March 31, 2020.

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<sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

<sup>2</sup> Written Order No. 22471 (issued on July 11, 2016 in Docket No. 4592), at pages 16, 29.

## I. FY 2020 Capital Spending by Key Driver Category

### 1. Non-Discretionary Spending

#### *a. Customer Request/Public Requirement – \$1.6 million over budget*

FY 2020 capital spending in the Customer Request/Public Requirement category was \$28.7 million, which was over budget by \$1.6 million. The major drivers of the variance are

- New Business Commercial and Public Requirements projects spending was \$13.0 million, \$3.5 million over the FY 2020 budget of \$9.5 million.
- Transformer purchase spending was \$5.2 million, \$1.6 million over the FY 2020 budget of \$3.5 million. This is primarily driven by increased purchases of capacitors and regulators and applied capital overheads.
- Partially offsetting these overages was the FY 2020 spending on Distributed Generation projects, which was \$1.6 million, \$3.1 million under the FY 2020 budget of \$4.7 million.

#### *b. Damage/Failure - \$3.5 million over budget*

FY 2020 capital spending in the Damage/Failure category was \$17.0 million, which was \$3.5 million over the budget of \$13.5 million. This variance is primarily driven by overspending of \$2.6 million on the storms capital confirming projects and two transformer failures. The budget includes a cost estimate for one transformer failure.

### 2. Discretionary Spending

#### *a. Asset Condition (without Southeast Substation) - \$5.0 million under budget*

FY 2020 capital spending in the Asset Condition category (excluding the Southeast Substation project) was \$28.5 million, which was \$5.0 million under the budget of \$33.4 million. The major variances were the following:

- Capital spending on Dyer Street substation was \$0.7 million, \$4.2 million under the FY 2020 budget of \$4.9 million. The Company has paused work on this project so that options can be reassessed as current cost estimates are higher than previous estimates.

- Capital spending on the Providence Area Study projects was \$1.6 million, \$1.3 million under the FY 2020 budget of \$2.9 million primarily due to project delays.
- Capital spending on the Lee, Cottage and Front Street projects was \$4.8 million, \$1.5 million over the FY 2020 budget of \$3.3 million. The overage is due to additional costs on Cottage and Front Street projects associated with working in a thickly settled, urban area.
- Capital spending on the South Street Substation project was \$0.8 million less than the budget of \$1.8 million due to work occurring in FY 2019 that was expected to occur in the FY 2020 when the budget was developed.
- Capital spending on the Pawtucket 1 breaker replacement project was \$1.1 million under the FY 2020 budget due to less expensive manufacturing costs associated with the Pawtucket breakers.

***b. Non-Infrastructure – \$0.4 million under budget***

Capital spending for FY 2020 for the Non-Infrastructure category was \$0.2 million, which was \$0.4 million under the budget of \$0.6 million. This variance is attributed to the application of capital overheads.

***c. System Capacity and Performance - \$3.9 million over budget***

FY 2020 capital spending for the System Capacity and Performance category was \$25.0 million, which was \$3.9 million over the budget of \$21.1 million.

- Capital spending on the Aquidneck Island project was \$17.7 million, \$3.6 million over the budget of \$14.1 million. The factors impacting costs were limitations placed on work hours and soil conditions.
- Capital spending on Quonset and Chase Hill substations was \$1.9 million. Budgets were not set for these projects in FY 2020 as project delays pushed completion of work from FY 2019 into FY 2020 after budgets were set.

***d. Southeast Substation Projects – \$1.8 million under budget***

FY 2020 capital spending on the Southeast Substation project was \$4.4 million, \$1.8 million under the budget of \$6.3 million. The Company expects the FY 2020 delays to be caught up in FY 2021. See Attachment G for additional details.

***e. Large Project Variances***

As ordered by the PUC in Docket No. 4473,<sup>3</sup> the Company provides explanations for large projects<sup>4</sup> with variances that exceed +/- 10% of the annual fiscal year budget in quarterly reports. These projects represented \$42.3 million of the total FY 2020 budget of \$101.8 million. Specific project information is provided in Attachment E.

***f. New Distribution System Technology Update***

In Order No. 22955, the PUC directed the Company to include an explanation of all new technologies that National Grid is exploring to assist in distribution planning, particularly related to the integration of distributed energy resources or providing additional visibility on the distribution grid.<sup>5</sup> Currently, these include the following:

- The Company utilizes CYME advanced power engineering software to perform distribution system analysis. The software's Hosting Capacity module was used to develop the Rhode Island Hosting Capacity Map which was delivered via the System Data Portal on September 28, 2018.
- The Company has implemented advanced protection function and logic in Point of Common Coupling (PCC) Reclosers which will help reduce the witness testing required at customer DG sites. Also, the advanced sensing and logic functions will allow automatic reconnect to the utility for utility side interruptions which will minimize outage and nuisance tripping.
- The Company has implemented Python Scripting training to assist in refining CYME models. The training focused on creation scripts intended to automate tasks formally done by hand and create accurate base models in a more efficient manner. The training can also be used for data maintenance and review.

**3. Investment Placed-in-Service**

For FY 2020, \$105.0 million of plant additions were placed-in-service which was 102% of the FY 2020 current projected year-end target of \$102.8 million. Details by spending rationale are included in Attachment B.

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<sup>3</sup> Written Order No. 21559 (issued on August 12, 2014 in Docket No. 4473), at page 25.

<sup>4</sup> Large projects are defined as exceeding \$1.0 million in total project cost.

<sup>5</sup> Written Order No. 22955 (issued on November 14, 2017 in Docket No. 4682), at page 19.

As shown on Attachment B, for FY 2020, Non-Discretionary plant additions placed in service totaled \$47.9 million, which was 142% of the annual forecast of \$33.6 million. The Discretionary plant additions placed in service totaled \$57.1 million, which was 83% of the annual forecast of \$69.2 million.

#### **4. Vegetation Management (VM)**

In FY 2020 the Company completed 1,208 miles or 100% of its annual distribution mileage cycle pruning goal. The Company's VM O&M spending was \$10.5 million, 1% over budget, for the year.

Attachment C provides the spending for FY 2020 for the sub-components of VM, as well as an update of the gypsy moth and other pest-related damage tracked by the Company.<sup>6</sup>

#### **5. Inspection and Maintenance (I&M)**

In FY 2020 the Company completed 100% of its annual structure inspection goal of 53,241 with an associated spend of \$0.5 million, or 102% of the Repair and Inspections Related Cost category of the O&M budget. Repairs and Inspection Related Costs includes mobile elevated voltage testing and repairs, which the PUC approved in Docket No. 4237.

The Company began performing inspections on its overhead distribution system in FY 2011 and began performing the repairs based on those inspections in FY 2012. Deficiencies found are categorized as Level I, II, or III. Level I deficiencies are repaired immediately or within one week of the inspection. The Company bundles Level II and III work for planned replacement. At the end of the FY 2020, the Company has completed repairs for 33% of the total deficiencies found. Total deficiencies found and repairs made are shown in the table below.

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<sup>6</sup> At the March 20, 2018 Open Meeting, in Docket 4783, the PUC directed the Company to include a summary in its FY 2019 ISR quarterly reports of the gypsy moth and other pest-related damage tracked by the Company.

<b>Summary of Deficiencies and Repair Activities RI Distribution</b>				
<b>Year Inspection Performed</b>	<b>Priority Level/Repair Expected</b>	<b>Deficiencies Found (Total)</b>	<b>Repaired as of 3/31/20</b>	<b>Not Repaired as of 3/31/20</b>
<b>FY 2011</b>	I	18	18	0
	II	13,146	13,128	18
	III	28	28	2,578
<b>FY 2012</b>	I	17	17	0
	II	15,847	15,455	392
	III	626	567	1,200
<b>FY 2013</b>	I	15	15	0
	II	26,149	16,471	9,678
	III	8,862	4,617	4,245
<b>FY 2014</b>	I	11	11	0
	II	22,418	3,898	18,520
	III	8,623	2,789	5,834
<b>FY 2015</b>	I	5	5	0
	II	21,136	1	21,135
	III	4,383	0	4,383
<b>FY 2016</b>	I	2	2	0
	II	11,018	558	10,460
	III	6,441	59	6,382
<b>FY 2017</b>	I	2	2	0
	II	8,300	0	8,300
	III	7,539	0	7,539
<b>FY 2018</b>	I	11	11	0
	II	8,740	0	8,740
	III	7,208	0	7,208
<b>FY 2019</b>	I	28	28	0
	II	3,699	0	3,699
	III	2,464	0	2,464
<b>FY 2020</b>	I	19	19	0
	II	67	1	66
	III	31	0	31
<b>Total Since Program Inception</b>	<b>I, II, III</b>	<b>176,853</b>	<b>57,700</b>	<b>122,872</b>

**FY 2020 – I&M Level 1 Deficiencies Repaired**

Year Inspection Performed	Deficiencies Found	Structure Number	Location	Description of Work Performed	Inspection Date	Repaired Date
2019	1	53	Douglas Ave, Providence	Replaced switch tag.	4/4/2019	4/16/2019
2019	1	83	Danielson Pike, Scituate	Replaced switch tag.	4/4/2019	5/9/2019
2019	1	181	Plainfield Pike, Foster	Replaced switch tag.	5/8/2019	5/14/2019
2019	1	6	Hilton St, Pawtucket	Replaced defective switch.	5/23/2019	6/4/2019
2019	1	5	Eaton Ave, Warwick	Repaired floating insulator.	9/13/2019	9/16/2019
2019	1	143	Pippin Orchard Rd, Cranston	Repaired broken guy wire.	9/10/2019	9/26/2019
2019	1	105	Rockland Rd, Scituate	Replaced switch tag.	6/14/2019	10/31/2019
2019	1	10	Chestnut St, Warwick	Repaired floating primary.	10/15/2019	11/12/2019
2019	1	16	Peck Hill Rd, Johnston	Repaired street light hazard condition	9/18/2019	11/12/2019
2019	1	9273	Pawtucket Ave, East Providence	Replaced switch tag.	11/13/2019	11/20/2019
2019	1	17	Langworthy Rd, Westerly	Replaced switch tag.	10/8/2019	11/27/2019
2019	1	2	Snow Rd, Warwick	Replaced switch tag.	9/19/2019	12/2/2019
2019	1	1	Namquid Dr, Warwick	Replaced switch tag.	9/17/2019	12/2/2019
2019	1	158-50	Cmdr Oliver Hazard Perry Memor, South Kingstown	Replaced switch tag.	6/24/2019	12/2/2019
2019	1	7	Farnum Rd, Warwick	Replaced switch tag.	9/19/2019	12/3/2019
2019	1	1	Maple St, Warwick	Replaced switch tag.	9/19/2019	12/3/2019
2019	1	9006	Maple St, Warwick	Replaced switch tag.	9/19/2019	12/3/2019
2019	1	87	Warwick Ave, Warwick	Replaced switch tag.	9/19/2019	12/3/2019
2019	1	63-50	West Shore Rd, Warwick	Replaced switch tag.	9/19/2019	12/3/2019

Note: Table includes replaced switch tag deficiencies identified during FY20, but these are not considered Level 1 work that requires repair within one week.

As shown in the table below, results of the Company’s manual elevated voltage testing for FY 2020 have not indicated any instances of elevated voltages found through either overhead or manual elevated voltage inspections.

<b>Manual Elevated Voltage Testing</b>				
<b>Manual Elevated Voltage Testing</b>	<b>Total System Units Requiring Testing</b>	<b>FY 2020 Units Completed thru 3/31/20</b>	<b>Units with Voltage Found (&gt;1.0v)</b>	<b>Percent of Units Tested with Voltage (&gt;1.0v)</b>
Distribution Facilities	268,651	52,587	0	0%
Underground Facilities	12,438	3	0	0%
Street Lights	4,929	0	0	0%

FY 2020 I&M program costs and other O&M spending are shown in Attachment D

## Attachment A

### US Electricity Distribution - Rhode Island Capital Spending by Spending Rationale FY 2020 through March 31, 2020 (\$000)

	FY 2020		
	Budget	Actual	Variance Over Spend / (Under Spend)
<b>Customer Request/Public Requirement</b>	\$27,025	\$28,646	\$1,621
<b>Damage Failure</b>	\$13,505	\$17,028	\$3,523
<i>Subtotal Non-Discretionary</i>	\$40,530	\$45,674	\$5,144
<b>Asset Condition</b>	\$33,425	\$28,450	(\$4,975)
<b>Non-Infrastructure</b>	\$550	\$145	(\$405)
<b>System Capacity &amp; Performance</b>	\$21,045	\$24,957	\$3,912
<i>Subtotal Discretionary (Without Southeast Sub)</i>	\$55,020	\$53,553	(\$1,467)
<b>Southeast Substation Project</b>	\$6,250	\$4,427	(\$1,823)
<i>Subtotal Discretionary</i>	\$61,270	\$57,980	(\$3,290)
<b>Total Capital Investment in System</b>	<b>\$101,800</b>	<b>\$103,654</b>	<b>\$1,854</b>

**Attachment B**

**US Electricity Distribution - Rhode Island  
Plant Additions by Spending Rationale  
FY 2020 through March 31, 2020  
(\$000)**

	<b>Target</b>	<b>Actual</b>	<b>% of Target Placed in Service</b>
<b>Customer Request/Public Requirement</b>	\$20,053	\$29,844	149%
<b>Damage Failure</b>	\$13,568	\$18,035	133%
<i>Subtotal Non-Discretionary</i>	\$33,621	\$47,879	142%
<b>Asset Condition (w/Southeast Substation)</b>	\$28,008	\$23,271	83%
<b>Non- Infrastructure</b>	\$553	\$194	35%
<b>System Capacity &amp; Performance</b>	\$40,615	\$33,671	83%
<i>Subtotal Discretionary</i>	\$69,176	\$57,136	83%
<b>Total Capital Investment in System</b>	<b>\$102,797</b>	<b>\$105,015</b>	102%

### Attachment C

#### US Electricity Distribution - Rhode Island Vegetation Management O&M Spending FY 2020 through March 31, 2020 (\$000)

	Budget	Actual	% Spend
Cycle Pruning (Base)	\$5,600	\$5,540	99%
Hazard Tree	\$2,250	\$2,230	99%
Sub-T (on & off road)	\$500	\$616	123%
Police/Flagman Details	\$825	\$746	90%
Core Crew (all other activities)	\$1,225	\$1,385	113%
<b>Total VM O&amp;M Spending</b>	<b>\$10,400</b>	<b>\$10,517</b>	<b>101%</b>

	Goal	Completed	% Complete
<b>Distribution Mileage Trimming</b>	<b>1,208</b>	<b>1,208</b>	<b>100%</b>

#### FY 2020 Q4 Gypsy Moth Update

District	Circuit	Location	Removals
Capital	49 53 112W43	Cumberland	18
Capital	49 53 112W44	Cumberland	17
Capital	49 53 127W40	Burrillville	180
Capital	49 53 34F1	Foster/ Scituate	251
Capital	49 53 34F2	Foster/ Scituate	160
Capital	49 53 34F3	Foster/ Scituate	134
Capital	49 53 38F1	Smithfield	1
Capital	49 53 26W1	North Smithfield	54
Capital	49 53 15F2	Scituate	55
Coastal	49 56 155F6	Hopkinton	38
Coastal	49 56 155F8	Hopkinton	58
Coastal	49 56 30F2	North Kingstown	5
Coastal	49 56 54F1	Coventry	247
Coastal	49 56 63F6	Coventry/Exeter	1,504
Coastal	49 56 85T3	Charlestown	19
Coastal	49 56 68F4	Kenyon	68
Coastal	49 56 68F2	Kenyon	19
Coastal	49 56 68F3	Kenyon	33
Coastal	49 56 68F1	Kenyon	134
Totals			2,995

FY 2020 Total Gypsy Moth Spend	\$1,291,634
Gypsy Moth Removals	2,626
Cost/Tree	\$492

**Attachment D**

**US Electricity Distribution - Rhode Island  
Inspection and Maintenance Program and Other O&M Spending  
FY 2020 through March 31, 2020  
(\$000)**

	<b>Budget</b>	<b>Actual</b>	<b>% Spend</b>
Opex Related to Capex	\$256	\$202	79%
Repair & Inspections Related Costs	\$515	\$524	102%
System Planning & Protection Coordination Study	\$25	\$104	414%
VVO/CRV Program	\$311	\$121	39%
<b>Total I&amp;M Program and Other O&amp;M Spending</b>	<b>\$1,107</b>	<b>\$950</b>	<b>86%</b>

	<b>Goal</b>	<b>Completed</b>	<b>% Complete</b>
<b>RI Distribution Overhead Structures Inspected</b>	53,241	53,241	100%

## Attachment E

### US Electricity Distribution - Rhode Island Project Variance Report FY 2020 through March 31, 2020 (\$000)

Project Description	Project Funding Number(s)	Budget	Actual	Overspend / (Underspend) Variance	Variance Cause
Aquidneck Island Projects (Gate 2, Newport, Jepson)	CD00649, C024159, C015158, C028628, C054054, CD00656	\$14,055	\$17,693	\$3,638	Limitations placed on working hours, soil conditions, and more mature project estimates
Volt/Var Program	C079300, C080896, C080895, C079282, C080899, C080900, C079482, C079288, C076367, C077201, C077200, C075573, C076365, C080898, C080894, C080897, C080901, C075571, C082915, C082900	\$1,850	\$1,232	(\$618)	Project delays. Also, Nasonville projects were swapped for Woonsocket projects.
Lee Street & Cottage Street D-Line and D-Sub	C050758, C051118, C051126, C050760	\$2,900	\$3,486	\$586	<b>Lee Street D-Line</b> - FY20 Project received a credit due to duplicate accrual processed in FY19. <b>Cottage St D-Line overspending</b> due to conversion work in thickly settled urban area.
SouthEast Substation (D-Line and D-Sub)	C053657, C053658	\$6,250	\$4,427	(\$1,823)	<b>D-Sub</b> delays in completing final design documents.
Front Street MC Retirement	C050778	\$400	\$1,309	\$909	Project cost increases due to more complex construction and coordination related to being in an urban area
Quonset Substation (D-Line and D-Sub)	C053646, C053647	\$0	\$742	\$742	Project delays pushed completion of work from FY19 into FY20 after the budget was set.
University Solar	C079116	\$4,000	\$2,391	(\$1,609)	CIAC Timing
Sockanosett & Westerly Failure	C082725, C081110	\$0	\$1,870	\$1,870	<b>Sockanosett</b> - Damage Failure (D/F) of TB#1 and purchase of a replacement spare. <b>Westerly</b> - Final payments for replacement transformer of TB#4 D/F.
Chase Hill Substation (D-Line and D-Sub)	C024175, C024176	\$0	\$1,149	\$1,149	Project delays pushed completion of work from FY19 into FY20 after the budget was set.
East Providence Sub.	C046727, C046726	\$1,280	\$411	(\$869)	Project delayed.
Dyer Street Indoor Sub	C051205, C051211	\$4,900	\$732	(\$4,168)	Most recent cost estimates are higher than expected. The Company is pausing this project so that options can be reassessed
Hope Substation	C078476, C046697	\$750	\$2,169	\$1,419	Final construction sequencing and outage plans resulted in higher costs than originally estimated. In addition, FY19 decision to combine pole structure work with flood work carried over costs into FY20.
Providence Study	C078734, C078796, C078796, C078797, C078800, C078802-6, C078857	\$2,860	\$1,594	(\$1,266)	Project delayed.
South Street Substation	C051212, C051213, C055623	\$1,800	\$1,016	(\$784)	Underspending due to work occurring in FY19 that was expected to occur in FY20, such as earlier final cutover to new substation in FY19
Pawtucket Breaker	C069166	\$1,225	\$104	(\$1,121)	Project costs expected to be less due to actual breakers being manufactured at lower cost than originally assumed.
		<b>\$42,270</b>	<b>\$40,326</b>	<b>(\$1,944)</b>	

## Attachment F

### US Electricity Distribution - Rhode Island Damage/Failure Detail by Work Type FY 2020 through March 31, 2020 (\$000)

	Project Type					Grand Total
	D-Line Blanket	D-Line Property Damage	D-Line Storm	D-Sub Blanket	D-Sub & D-Line Specific	
AFUDC	\$77,643	\$0	\$22,589	\$3,770	\$45,606	\$149,608
Default Accounting	\$1,808,627	\$276,668	\$173,090	\$190,192	\$238,574	\$2,687,150
Engineering/Design/Supervision	\$692,559	\$101,312	\$412,801	\$12,557	\$44,284	\$1,263,513
Outdoor Lighting - Cable/Wire	\$10,828	(\$3)	\$123	\$0	\$3	\$10,951
Outdoor Lighting - Framing	\$73,393	\$2,064	\$2,427	\$0	\$0	\$77,885
Outdoor Lighting - Poles/Foundation	\$28,995	\$3,262	\$0	\$0	\$0	\$32,257
Overhead Bonding/Grounding	\$14,207	\$347	\$1,659	\$0	\$184	\$16,398
Overhead Services	\$257,150	\$11,320	\$133,800	\$0	\$0	\$402,270
Overhead Switches/Reclosers/Fuses	\$496,443	\$34,660	\$106,713	\$0	\$159	\$637,975
Overhead Transformers/Capacitors/Regulators/Meters	\$549,147	\$46,471	\$315,507	\$0	\$0	\$911,125
Overhead Wire & Conductor	\$499,361	\$12,624	\$235,268	\$0	\$532	\$747,785
Pole Framing	\$274,004	\$76,090	\$145,444	\$0	\$2,213	\$497,751
Poles/Anchors/Guying	\$1,571,418	\$619,231	\$2,462,252	\$0	\$3,532	\$4,656,433
Substation Equipment Installations	\$0	\$0	\$0	\$460,202	\$1,607,332	\$2,067,535
Substations Civil/Structural	\$0	\$0	\$0	\$3,128	\$31,421	\$34,549
Switching and Restoration	\$75,912	\$4,422	\$8,609	\$1,164	\$0	\$90,107
Traffic Control	\$300,978	\$132,376	\$118,047	\$0	\$10,496	\$561,897
Underground Cable	\$895,090	\$8,759	\$76,752	\$0	\$69,712	\$1,050,314
Underground Cable Splicing	\$68,841	(\$392)	\$5,163	\$0	\$0	\$73,612
Underground Civil Infrastructure	\$331,865	\$64,868	\$13,566	\$0	\$80,401	\$490,699
Underground Direct-Buried Cable	\$110,211	(\$1,207)	\$7,808	\$0	\$0	\$116,812
Underground Services	\$20,191	\$419	(\$1,357)	\$0	\$0	\$19,254
Underground Switches/Reclosers/Fuses	\$135,256	(\$5)	\$4,713	\$0	\$801	\$140,765
Underground Transformers/Capacitors/Regulators/Meters	\$284,198	\$14,453	\$19,495	\$0	\$0	\$318,146
<b>Grand Total</b>	<b>\$8,576,317</b>	<b>\$1,407,739</b>	<b>\$4,264,470</b>	<b>\$671,013</b>	<b>\$2,135,250</b>	<b>\$17,054,789</b>

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## Attachment G

### US Electricity Distribution - Rhode Island New Southeast Substation Budget and Project Management Report FY 2020 through March 31, 2020

**New Southeast Substation**  
Date: May 1, 2020

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## New Southeast Substation Project Agenda



- Background & Drivers
- Scope
- Cost & Major Milestones
- Support Documentation
- Other



## New Southeast Substation Project Background & Drivers



- Pawtucket No. 1 substation supplies load in the City of Pawtucket, Rhode Island. It consists of an indoor substation located in a four story brick building constructed in 1907 and an outdoor substation on the yard. It supplies approximately 36,000 customers with a peak electrical demand of 114MW. There are a number of concerns in this area:
  - The equipment in the indoor substation is 40 to 94 years old, obsolete, and no longer supported by any vendor. Parts have to be custom made or salvaged from facilities removed from service.
  - The building has structural issues that cause concern for the continued safe and reliable operation of the substation.
  - There is un-served load for loss of either the 73 transformer or the 74 transformer that exceeds the distribution planning criteria.
  - The loading on a number of feeders is projected to exceed summer normal ratings along with the loading on bus section 73



## New Southeast Substation Project Scope



- Construct a new eight feeder 115/13.8kV metal clad station (Dunnell Park #1201) with two transformers and breaker and a half design on a site adjacent to the transmission line right of way on York Avenue in the City of Pawtucket.
- Supply the new station from the existing 115kV lines crossing the site, X-3 and T-7.
- Rearrange the 13.8kV distribution system so that the new station supplies most of the load east of the Seekonk River.
- Install a new control house at the Pawtucket No 1 station site to house the control equipment for the 115 kV station presently located in the four story brick building and upgrade the 115kV Line Protections (P-11,X-3,T-7).
- Upgrade in Valley station the 115kV Line Protections for P-11.
- Remove the indoor substation and all electrical equipment from the four story brick building and demolish the building.



# New Southeast Substation Project Cost & Major Milestones



## Project Cost

- Total Project Cost of \$38.182M (+/- 10%) DOA: \$38.182M
- Transmission Project Cost of \$12.742M (+/-10%)
- Distribution Project Cost of \$25.440M (+/-10%)



## New Southeast Substation Project Cost & Major Milestones



- The variance between the initial potential project investment of \$23.000M and this sanction of \$38.182M was caused by:
  - Addition of new 115kV equipment on Pawtucket No. 1 and on the new substation (Dunnell Park #1201) as result of the review of protection requirements for the project. The updated scope includes the installation of 115kV CCVT's, Line Traps, Line Tuners and related relaying and civil & structural work on X-3 and T-7 transmission line terminals on both substations (\$4.485M).
  - Additional civil and environmental scope of work on Pawtucket No. 1 based on the final location of the new control house inside the 100 year floodplain and the alignment with Tidewater Environmental Project requirements (\$4.865M).
  - Underestimation on the scope and level of effort on the distribution line work for the new feeders and distribution circuits rearrangement on the City of Pawtucket (\$4.517M).
  - Increase on equipment market value and other miscellaneous additional costs (\$1.315M).



## New Southeast Substation Project Major Milestones



### Project Major Milestones

Project Sanction	July 2019
Engineering Design Complete (EDC)	December 2019
Construction Start	January 2020
Dunnell Park Sub Ready for Load (RFL)	April 2021
Pawtucket 1 & Valley Sub Ready for Load (RLF)	September 2021
Construction Complete (CC)	November 2021
Demolish Pawtucket 1 Station Building	January 2022
Project Closeout	October 2022



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# New Southeast Substation Project Location

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**New Southeast Station (Dunnell Park) – Location**



## Attachment H

### US Electricity Distribution - Rhode Island Meter Purchases FY 2020 through March 31, 2020

TYPE	DESCRIPTION	QUANTITY
METER	KV2C - 45S	84
METER	KV2C - 9S	296
METER	KV2C - 2S	24
SWITCHES	"B" & "X" SWITCHES	5
METER	CENTRON - 2S ERT CL200	13,200
METER	CENTRON - 12S ERT CL200	3,000
METER	CENTRON - C1SR, CL320 240V	240
METER	FOCUS - 2S AMR 240V CL320	1,344
METER	FOCUS - 2S ERT CL200	8,256
METER	FORM 12S, 120V	960
METER	2S AMR 240V	192
INSTRUMENT TRANSFORMER	CUR OUTDOOR 75/5 15KV	44
INSTRUMENT TRANSFORMER	CUR OUTDOOR 50/5 15KV	10
INSTRUMENT TRANSFORMER	CUR OUTDOOR 15/5 15KV	12
INSTRUMENT TRANSFORMER	CUR OUTDOOR 25/5 15KV	15
INSTRUMENT TRANSFORMER	CUR OUTDOOR 70/1 8.4KV	48
INSTRUMENT TRANSFORMER	CUR OUTDOOR 5/5 15KV	13
INSTRUMENT TRANSFORMER	CUR OUTDOOR 60/1 7.2KV	16
INSTRUMENT TRANSFORMER	CUR OUTDOOR 15KV	12
INSTRUMENT TRANSFORMER	CUR OUTDOOR 15KV	0
INSTRUMENT TRANSFORMER	200:5 BASE BUSHINGS	120
INSTRUMENT TRANSFORMER	400:5 BASE BUSHINGS	240
INSTRUMENT TRANSFORMER	800:5 BASE BUSHINGS	60
INSTRUMENT TRANSFORMER	400:5 CAP	240
INSTRUMENT TRANSFORMER	240:120 VT	24
INSTRUMENT TRANSFORMER	2000:5 BASE BUSHINGS	54
INSTRUMENT TRANSFORMER	600:120 VT	36
INSTRUMENT TRANSFORMER	2000:5 CAP	18
INSTRUMENT TRANSFORMER	1200:5 CAP	30
INSTRUMENT TRANSFORMER	1500:5 CAP	24
INSTRUMENT TRANSFORMER	1500:5 CAP	18
INSTRUMENT TRANSFORMER	ASTRA DB 2.5 300:120	240
	<b>TOTAL</b>	<b>28,875</b>



Attachment 2

2019 Electric Service Quality Report

May 1, 2020

**VIA ELECTRONIC MAIL**

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

**RE: Docket 3628 – 2019 Service Quality Report (Electric Operations)**

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid (National Grid or the Company), enclosed, please find an electronic version<sup>1</sup> of the Company's Annual Service Quality Report which assesses the quality of the Company's electric operations for the performance period of January 1, 2019 through December 31, 2019 (the 2019 Service Quality Report or Report). As indicated in the Report, the Company's actual performance results for both reliability and customer service was within acceptable levels and, as a result, the Company did not incur any penalties for calendar year 2019.

The 2019 Service Quality Report stems from the Company's electric Service Quality Plan (the SQ Plan) as approved by the Public Utilities Commission (the PUC or Commission) through Order Nos. 18294, 19020, and 22456.<sup>2</sup> The purpose of the SQ Plan is to ensure that ratepayers receive a reasonable level of service. To this end, the SQ Plan establishes penalties and offsets relating to performance standards in four categories comprising of service reliability and customer service: (i) interruption frequency; (ii) interruption duration; (iii) customer contact survey; and (iv) telephone calls answered within 20 seconds. For each category, a benchmark or range representing acceptable performance is set forth. If the Company's performance falls below the acceptable range in any of the four categories, a penalty is assessed. For additional details on the SQ Plan, please see Attachment 1 of the Settlement Agreement.<sup>3</sup>

---

<sup>1</sup> Per practice during the COVID-19 emergency period, the Company is providing a PDF version of the 2019 Service Quality Report. The Company will provide the Commission Clerk with a hard copy and, if needed, additional hard copies of the Report at a later date.

<sup>2</sup> Through Order No. 18294, the PUC approved a Settlement Agreement between the Company and the Division of Public Utilities and Carriers (Division) which incorporated the SQ Plan to be effective January 1, 2005 (the Settlement Agreement). The SQ Plan also includes amendments made in 2007 (Order No. 19020) and 2016 (Order No. 22456).

<sup>3</sup> See [http://www.ripuc.ri.gov/eventsactions/docket/3628-NEC-Ord18294\(7-12-05\).pdf](http://www.ripuc.ri.gov/eventsactions/docket/3628-NEC-Ord18294(7-12-05).pdf)

Luly E. Massaro, Commission Clerk  
Docket 3628 – 2019 Service Quality Report  
May 1, 2020  
Page 2 of 2

Section 1 of the Report includes descriptions of each of the performance standards, the targeted performance levels for 2019 with their related dollar values, and the actual 2019 results with the applicable annual penalty or offset. Section 2 of the Report provides a summary calculation of the Company's annual penalty or offset for each of the four categories for 2019. As shown in Column (i), there is no annual penalty for calendar year 2019.

In addition, the Plan requires the Company to report on additional aspects of service quality: (1) the worst performing circuits; (2) trouble/non-outage calls received; (3) annual meter reading performance; and (4) information on Major Event Days. In accordance with the SQ Plan, Major Event Days are excluded from the calculation of the reliability performance standards for the purposes of penalty and offset assessment. Section 3 summarizes the results of these reporting requirements.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-4263.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew S. Marcaccio", is centered on the page.

Andrew S. Marcaccio

Enclosures

cc: Docket 3628 Service List  
Christy Hetherington, Esq.  
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.

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



\_\_\_\_\_  
Joanne M. Scanlon

May 1, 2020  
Date

**National Grid – Electric Service Quality Plan – Compliance - Docket 3628  
Service List Updated 5/1/2020**

<b>Name</b>	<b>E-mail Distribution List</b>	<b>Phone</b>
Jennifer Brooks Hutchinson Andrew Marcaccio National Grid 280 Melrose Street Providence, RI 02907-1438	<a href="mailto:jennifer.hutchinson@nationalgrid.com">jennifer.hutchinson@nationalgrid.com</a> ;	401-784-7288
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	<a href="mailto:Al.contente@dpuc.ri.gov">Al.contente@dpuc.ri.gov</a> ;	
	<a href="mailto:John.bell@dpuc.ri.gov">John.bell@dpuc.ri.gov</a> ; <a href="mailto:chetherington@riag.ri.gov">chetherington@riag.ri.gov</a> ;	
<b>Original &amp; 9 copies file w/:</b> Luly E. Massaro, Commission Clerk Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888	<a href="mailto:Luly.massaro@puc.ri.gov">Luly.massaro@puc.ri.gov</a> ;	401-780-2107
	<a href="mailto:Todd.bianco@puc.ri.gov">Todd.bianco@puc.ri.gov</a> ;	
	<a href="mailto:Cynthia.WilsonFrias@puc.ri.gov">Cynthia.WilsonFrias@puc.ri.gov</a> ;	
	<a href="mailto:Alan.nault@puc.ri.gov">Alan.nault@puc.ri.gov</a> ;	

The Narragansett Electric Company  
d/b/a National Grid

# 2019 Service Quality Report

May 1, 2020

Submitted to:  
Rhode Island Public Utilities Commission  
RIPUC Docket No. 3628

Submitted by:

**nationalgrid**

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**SECTION 1: RELIABILITY AND CUSTOMER SERVICE PERFORMANCE  
STANDARDS**

**Interruption Frequency and Duration**

Under the Service Quality Plan, an interruption is defined as the loss of electric service to more than one customer for more than one minute. The interruption duration is defined as the period of time, measured in minutes, from the initial notification of the interruption event to the time when service has been restored to the customers. Interruptions are tracked using System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI). SAIFI is calculated by dividing the total number of customers interrupted by the total number of customers served. SAIFI measures the number of times per year the average customer experienced an interruption. This is an average, so in any given year some customers will experience no interruptions, and some will experience several interruptions. SAIDI measures the length of interruption time that the average customer experienced for the year. It is calculated by dividing the total customer minutes of interruption by the total number of customers served.

Certain events are defined as Major Event Days and are excluded from the calculation of reliability performance standards for the purpose of penalty and offset assessment. There were six Major Event Days that occurred during 2019. The Major Event Days are February 25, April 15, October 16, October 17, October 31 and November 1.

<b><u>2019 Total Frequency Standard</u></b>		<b><u>2019 Frequency (SAIFI) Results</u></b>	
<u>Frequency of Interruptions per Customer</u>	<u>(Penalty)/Offset</u>	<u>Frequency of Interruptions per Customer</u>	<u>Annual (Penalty)/Offset</u>
Greater than 1.18	(\$916,000)		
1.06-1.18	linear interpolation		
0.84-1.05	\$0	1.02	\$0
0.75-0.83	linear interpolation		
Less than 0.75	\$229,000		

<b><u>2019 Duration (SAIDI) Standard</u></b>		<b><u>2019 Duration (SAIDI) Results</u></b>	
<u>Duration of Interruptions (minutes)</u>	<u>(Penalty)/Offset</u>	<u>Duration of Interruptions (minutes)</u>	<u>Annual (Penalty)/Offset</u>
Greater than 89.9	(\$916,000)		
72.0-89.9	linear interpolation		
45.9-71.9	\$0	68.2	\$0
36.7-45.8	linear interpolation		
Less than 36.7	\$229,000		

**CUSTOMER SERVICE PERFORMANCE STANDARDS**

**Customer Contact Survey**

The customer contact survey results are based on responses from National Grid’s Rhode Island customers from a survey performed by an independent third-party consultant, Praxis Research Partners. Praxis surveys a random sample of customers who have contacted National Grid recently to determine their level of satisfaction with their most recent contact with the Company regarding any call reason. Survey results are based on a composite measure of two questions from National Grid’s internal contactor survey: (1) Overall, on a scale from 1 to 10, where 1 means “dissatisfied”, and 10 means “satisfied”, how satisfied are you with the services provided by National Grid? (2) Overall, on a scale from 1 to 10, where 1 means “dissatisfied”, and 10 means “satisfied”, how satisfied are you with the quality of service provided by the telephone representative? The individual score for each question is the percentage of respondents who provided a rating of “8”, “9”, or “10” on a 10-point scale, where 1 means “dissatisfied”, and 10 means “satisfied”. The “percent satisfied” composite score is a simple arithmetic average of the satisfaction score from each question.

<b><u>2019 Customer Contact Standard</u></b>		<b><u>2019 Customer Contact Results</u></b>	
<u>Percent Satisfied</u>	<u>(Penalty)/Offset</u>	<u>Percent Satisfied</u>	<u>Annual (Penalty)/Offset</u>
Less than 74.4%	(\$184,000)		
74.4%-78.7%	linear interpolation		
78.8%-87.6%	\$0	80.4%	\$0
87.7%-92.0%	linear interpolation		
More than 92.0%	\$46,000		

**Telephone Calls Answered Within 20 Seconds**

The calls answered performance standard reflects the annual percentage of calls answered within 20 seconds. “Calls answered” include calls answered by a customer service representative (CSR) and calls completed within the Voice Response Unit (VRU). The time to answer is measured once the customer makes a selection to either speak with a CSR or use the VRU.

<b><u>2019 Calls Answered Standard</u></b>		<b><u>2019 Calls Answered Results</u></b>	
<u>% Answered Within 20 Seconds</u>	<u>(Penalty)/Offset</u>	<u>% Answered Within 20 Seconds</u>	<u>Annual (Penalty)/Offset</u>
Less than 53.5%	(\$184,000)		
53.5% - 65.7%	linear interpolation		
65.8% - 90.4%	\$0	77.91%	\$0
90.5% - 100.0%	linear interpolation, to maximum of \$46,000		

**SECTION 2: CALCULATION OF PENALTY/OFFSET**

**National Grid**  
2019 Results of Service Quality Plan  
Calculation of Penalty/Offset

<u>Performance Standard</u>	Potential <u>Penalty</u> (a)	Potential <u>Offset</u> (b)	2019 <u>Results</u> (c)	Maximum <u>Penalty</u> (d)	One Std Dev. Worse <u>Than Mean</u> (e)	<u>Mean</u> (f)	One Std Dev. Better <u>Than Mean</u> (g)	Maximum <u>Offset</u> (h)	Annual (Penalty)/ <u>Offset</u> (i)
Reliability - Frequency	\$ 916,000	\$229,000	1.024	1.18	1.05	0.94	0.84	0.75	\$0
Reliability - Duration	\$ 916,000	\$229,000	68.2	89.9	71.9	57.5	45.9	36.7	\$0
Customer Service - Customer Contact Survey	\$ 184,000	\$ 46,000	80.4%	74.4%	78.8%	83.2%	87.6%	92.0%	\$0
Customer Service - Telephone Calls Answered	\$ 184,000	\$ 46,000	77.91%	53.5%	65.8%	78.1%	90.4%	100.0%	\$0
Total Penalty/Offset	\$ 2,200,000	\$550,000							\$0

**Notes:**

Columns (a), (b), and (d)-(h) are per the Amended Electric Service Quality Plan, RIPUC Docket No. 3628.

Column (c) represents the actual 2019 annual results for the performance standards listed in the first column.

Column (i) is calculated as follows:

- For Reliability Standards:

If Column (c) is between Column (g) and Column (e): \$0

If Column (c) is between Column (h) and Column (g):  $[\text{Column (g) - Column (c)}] \div [\text{Column (g) - Column (h)}] \times \text{Column (b)}$

If Column (c) is between Column (e) and Column (d):  $[\text{Column (c) - Column (e)}] \div [\text{Column (d) - Column (e)}] \times \text{Column (a)}$

If Column (c) is greater than Column (d): 100% of Column (a)

If Column (c) is less than Column (h): 100% of Column (b)

- For Customer Service Standards:

If Column (c) is between Column (e) and Column (g): \$0

If Column (c) is between Column (g) and Column (h):  $[\text{Column (c) - Column (g)}] \div [\text{Column (e) - Column (d)}] \times \text{Column (b)}$

If Column (c) is between Column (d) and Column (e):  $[\text{Column (e) - Column (c)}] \div [\text{Column (e) - Column (d)}] \times \text{Column (a)}$

If Column (c) is less than Column (d): 100% of Column (a)

If Column (c) is greater than Column (h): 100% of Column (b)

### SECTION 3: ADDITIONAL REPORTING CRITERIA

Under the Company's Service Quality Plan, the following additional reporting criteria are required to be filed with the PUC.

1. **Reporting Requirement:** Each quarter, the Company will file a report of 5% of all circuits designated as worst performing on the basis of customer frequency. Included in the report will be:
  1. The circuit ID and location.
  2. The number of customers served.
  3. The towns served.
  4. The number of events.
  5. The average duration.
  6. The total customer minutes.
  7. A discussion of the cause or causes of events.
  8. A discussion of the action plan for improvements including timing.

**Results:** The Company filed its first quarter 2019 feeder ranking results on August 28, 2019, the second quarter results on September 20, 2019, the third quarter results on February 4, 2020 and fourth quarter results on March 4, 2020.

2. **Reporting Requirement:** The Company will track and report monthly the number of calls it receives in the category of Trouble, Non-Outage. This includes inquiries about dim lights, low voltage, half-power, flickering lights, reduced TV picture size, high voltage, frequently burned-out bulbs, motor running problems, damaged appliances and equipment, computer operation problems, and other non-interruptions related inquiries.

**Results:** The Company filed the required Trouble, Non-Outage reports during 2019, with the final report for the 13 months ended December 2019 filed on January 21, 2020.

3. **Reporting Requirement:** The Company will report its annual meter reading performance as an average of monthly percentage of meters read.

**Results:** During 2019, the Company's annual meter reading performance (as an average of monthly percentage of meters read) was 99.15%, compared to 99.06% during 2018, and 97.43% during 2017. The following table details the percentage of meters read per month for 2019, 2018, and 2017.

**The Narragansett Electric Company  
Monthly Percentage of Meters Read**

	<b>2019</b>	<b>2018</b>	<b>2017</b>
January	99.21%	98.93%	98.50%
February	99.23%	99.01%	98.34%
March	99.26%	98.19%	98.32%
April	99.29%	99.11%	98.60%
May	99.32%	99.13%	98.92%
June	99.29%	99.19%	98.94%
July	99.24%	99.11%	98.96%
August	99.22%	99.16%	98.96%
September	99.12%	99.24%	98.95%
October	98.70%	99.21%	98.92%
November	99.03%	99.19%	82.62%
December	98.94%	99.20%	98.94%
YTD Average	99.15%	99.06%	97.43%

4. **Reporting Requirement:** For each event defined as a Major Event Day, the Company will prepare a report, which will be filed annually as part of the annual SQ filing, detailing the following information:
1. Start date/Time of event.
  2. Number/Location of crews on duty (both internal and external crews).
  3. Number of crews assigned to restoration efforts.
  4. The first instance of mutual aid coordination.
  5. First contact with material suppliers.
  6. Inventory levels: pre-event/daily/post-event.
  7. Date/Time of request for external crews.
  8. Date/Time of external crew assignment.
  9. # of customers out of service by hour.
  10. Impacted area.
  11. Cause.
  12. Weather impact on restoration.
  13. Analysis of protective device operation.
  14. Summary of customers impacted.

**Results:** IEEE Std. 1366-2012<sup>1</sup> identifies reliability performance during both day-to-day operations and Major Event Days. Major Event Days represent those few days during the year on which the energy delivery system experienced stresses beyond that normally expected, such as severe weather. A day is considered a Major Event Day if the daily SAIDI exceeds a threshold value, calculated using the IEEE methodology. For 2019 the T<sub>MED</sub> value was 5.05 minutes of SAIDI (using IEEE Std. 1366-2012 methodology). There were six days during four separate storms that exceeded this threshold in 2019. These four storms occurred on February 25, April 15, October 16-17, and October 31-November 1. The storms are described below.

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<sup>1</sup> RIPUC Order No 19020 refers to IEEE Std. 1366-2003. This standard has been superseded by IEEE Std. 1366-2012. The updated standard requires no changes for identifying Major Event Days or calculating thresholds.

**February 25, 2019 Storm**

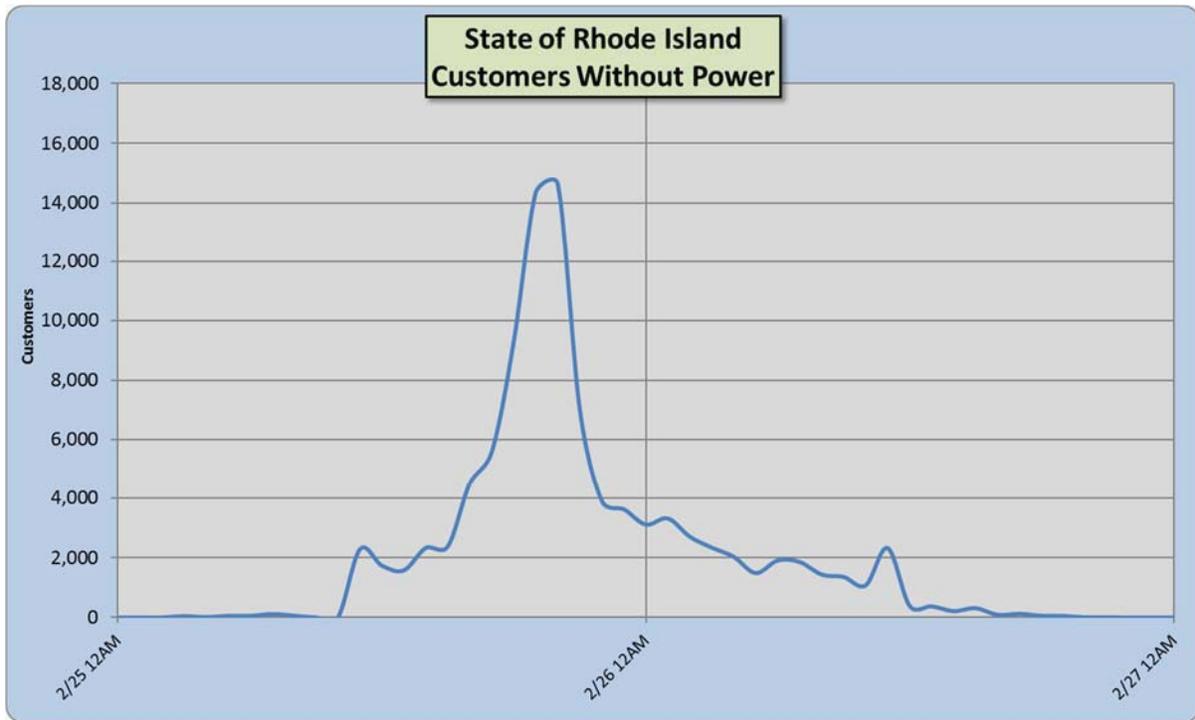
1. Start Date and Time of event: The storm began in the late morning on Monday, Feb 25, 2019 with scattered interruptions starting at approximately 7:00 a.m. and peaked around 7:25 p.m. on Monday Feb 25, 2019. The peak reached 17,009 customers interrupted.
2. Number/Location of crews on duty (both internal and external crews): The Company secured 309.5 internal and external field crews to restore power to customers in Rhode Island, consisting of approximately 170 external crews and 139.5 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, substation, and underground personnel.
3. Number of crews assigned to restoration efforts: At peak, the Company had the following crews performing restoration activities throughout the impacted areas in the state.

<u>Location</u>	<u>Crew Type</u>	<u># Crews</u>
Rhode Island	Internal Overhead Line	60.5 crews total
	External Overhead Line	106 crews total
	Internal Wire Down	25 crews total
	Internal Transmission	1 crews total
	Internal Underground	10 crews total
	Internal Substation	9 crews total
	Contractor Forestry	64 crews total

4. The first instance of mutual aid coordination: The Company did not call for mutual aid coordination for this event.
5. The first contact with material suppliers: The first contact with material suppliers was February 25, 2019.
6. Inventory levels: Pre-event/Daily/Post-event: Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", pre-capitalized items, such as transformers. These items are not reported as inventory on the balance sheet. The inventory positions indicate those inventories held in RI and those allocated to RI stored in National Grid's Central Warehouse located in Whitinsville, MA.

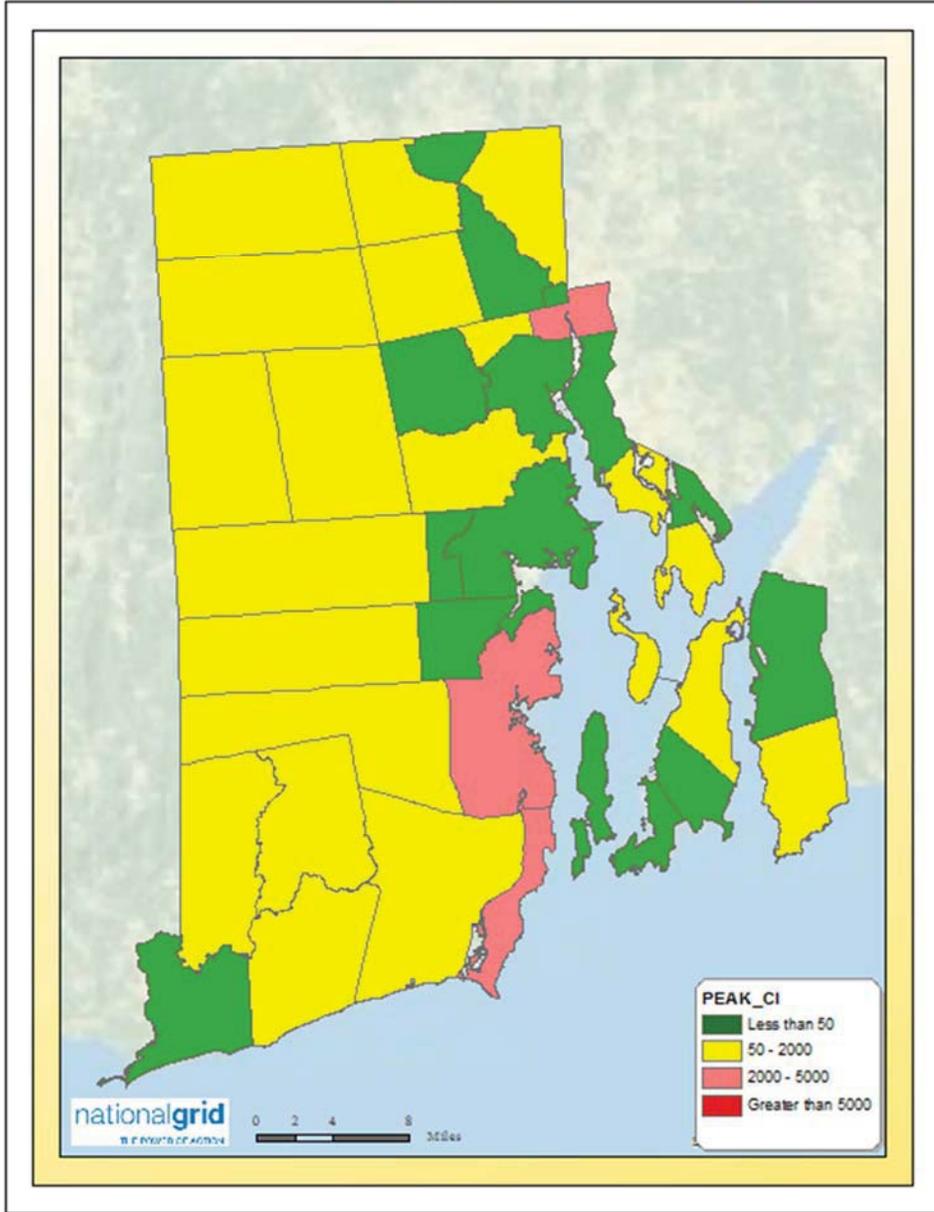
<u>Date</u>	<u>RI Inventory Location</u>	<u>NEDC total</u>	<u>RI ELEC %</u>	<u>Allocated NEDC Inventory</u>	<u>Total Narragansett Electric Inventory</u>
2/25/2019		\$35,948,525.71	22.70%	\$8,153,047.36	\$9,768,429.73

7. Date/Time of request for External Crews: Given the potential magnitude of the Storm and forecast of hazardous winds, the Company secured crews in advance from its contractors of choice and other outside contractors to support restoration efforts for all New England as part of its regional preparation for the Storm, consistent with its Emergency Response Plan. By 8:00 a.m. on Monday, February 25, the Company had 60.5 internal overhead line crews, 106 external overhead line crews, 64 external forestry crews, 10 internal underground crews, 18 internal substation resources, 1 internal transmission crew, and 50 internal wires down resources. The Company established two staging sites to support restoration across the state at the Community College of Rhode Island in Warwick and the Twin River Casino in Lincoln.
  
8. Date/Time of external Crews assignment: External crews were first assigned and began working on outages beginning on Monday, February 25, 2019, at approximately 12:00 a.m. through the end of the Storm.
  
9. # of customers out graph (graphs following):

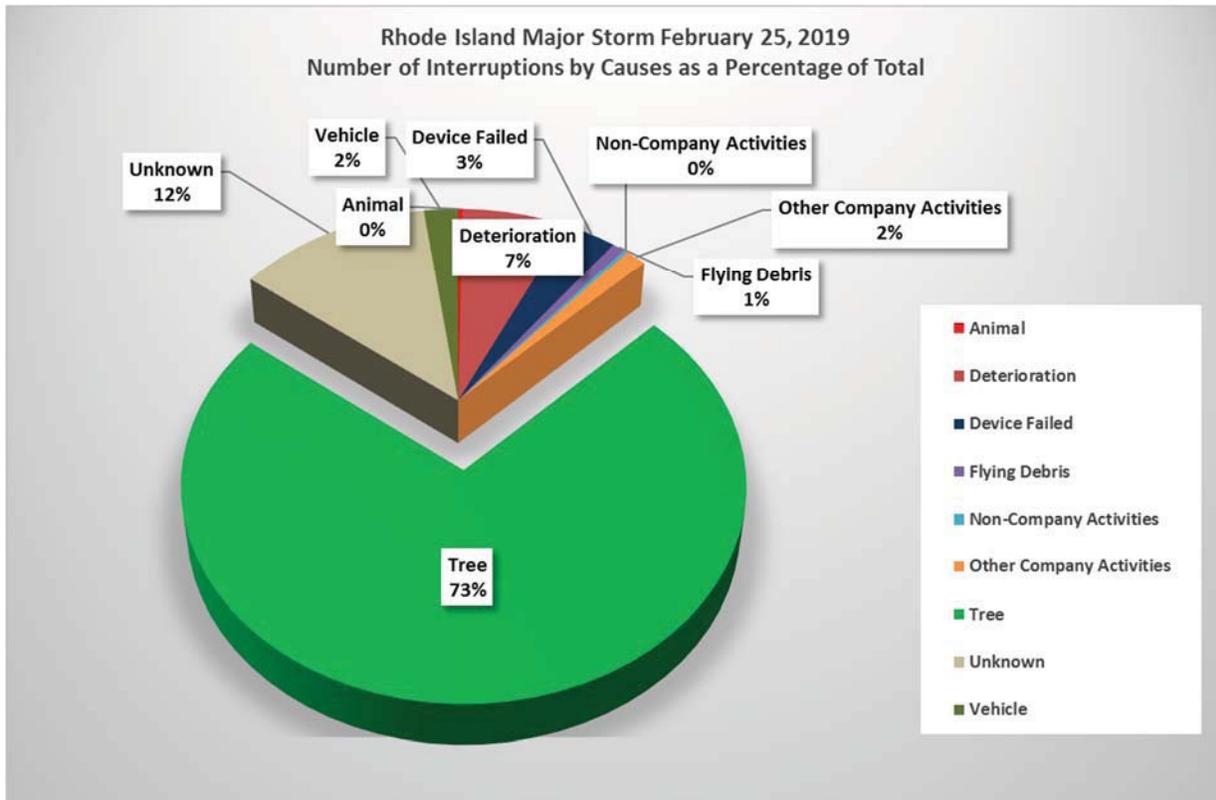


10. Impacted area: The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

**Customer Interrupted by Town at Company Peak  
RI 02/25/2019 - 02/26/2019**



11. Cause: February storm caused widespread destruction to Rhode Island’s electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration: The February 25, 2019 Storm was a significant weather event that resulted in moderate damage to the Company’s electrical system. The Storm brought widespread hazardous winds to the Company’s service territory. Much of Rhode Island experienced wind gusts in the 50 to 55 mph range, with a peak gust of 56 mph in Providence.

The Company experienced interruptions in 36 of the 38 Rhode Island communities it serves. The Towns of West Greenwich and Little Compton were affected most heavily with approximately 71 and 52 percent of their customers impacted, respectively, by the event.

13. Analysis of Protective Device Operation: National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system, interrupting devices include circuit breakers, air-break switches, and circuit switchers. Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s).

For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm like this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation.

14. Summary of Customers Impacted: The February storm caused the following customer impact:

**February 25, 2019** - During this storm, on February 25, 2019 Rhode Island experienced a total of 224 interruptions that affected 36,238 customers and 5,456,514 customer minutes of interruption. On average these interruptions resulted in 0.073 SAIFI, 10.97 minutes of SAIDI. Since a SAIDI value of 10.97 minutes exceeded the threshold value of 5.05 minutes, February 25, 2019 qualified as a Major Event Day under the IEEE methodology.

**February 26, 2019** - During this storm, on February 26, 2019 Rhode Island experienced a total of 37 interruptions that affected 5,459 customers and 475,357 customer minutes of interruption. On average these interruptions resulted in 0.011 SAIFI, 0.95 minutes of SAIDI. Since a SAIDI value of 0.96 minutes is less than the threshold value of 5.05 minutes, February 26 is not qualified as a Major Event Day under the IEEE methodology.

**April 15, 2019 Lightning Storm**

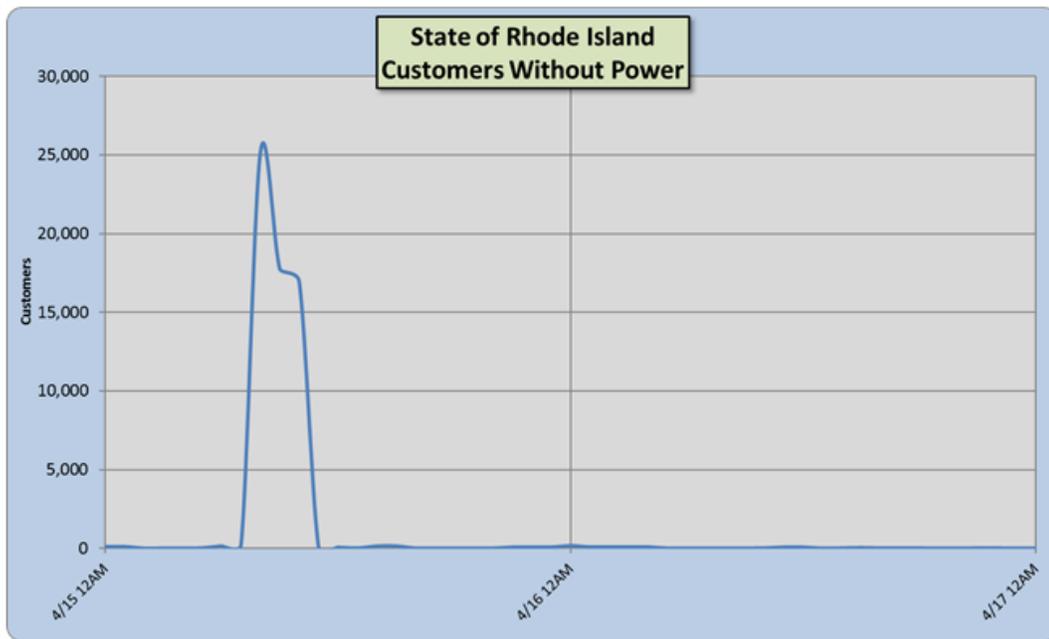
1. Start Date and Time of event: The storm began in the late morning on Monday, April 15, 2019 with scattered interruptions starting at approximately 6:00 a.m. and peaked around 7:15 p.m. on Monday, April 15, 2019. The peak reached 25,189 customers interrupted.
2. Number/Location of crews on duty (both internal and external crews): The Company secured 105 internal and external field crews to restore power to customers in Rhode Island, consisting of approximately 53 external crews and 52 internal crews. The internal and external field crew numbers included distribution overhead line, forestry, substation, and underground personnel.
3. Number of crews assigned to restoration efforts: At peak, the Company had the following crews performing restoration activities throughout the impacted areas in the State.

<u>Location</u>	<u>Crew Type</u>	<u># Crews</u>
Rhode Island	Internal Overhead Line	34 crews total
	Internal Underground	11 crews total
	Internal Substation	14 crews total
	Contractor Forestry	53 crews total

4. The first instance of mutual aid coordination: The Company did not call for mutual aid coordination for this event.
5. The first contact with material suppliers: The first contact with material suppliers was April 15, 2019.
6. Inventory levels: pre-event/daily/post-event: Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", pre-capitalized items, such as transformers. These items are not reported as inventory on the balance sheet. The inventory positions indicate those inventories held in Rhode Island and those allocated to RI stored in National Grid's Central Warehouse located in Whitinsville, MA.

<u>Date</u>	<u>RI Inventory Location</u>	<u>NEDC total</u>	<u>RI ELEC %</u>	<u>Allocated NEDC Inventory</u>	<u>Total Narragansett Electric Inventory</u>
4/15/2019	\$1,610,461.06	\$35,948,526.00	23.50%	\$8,440,147.75	\$10,050,608.81

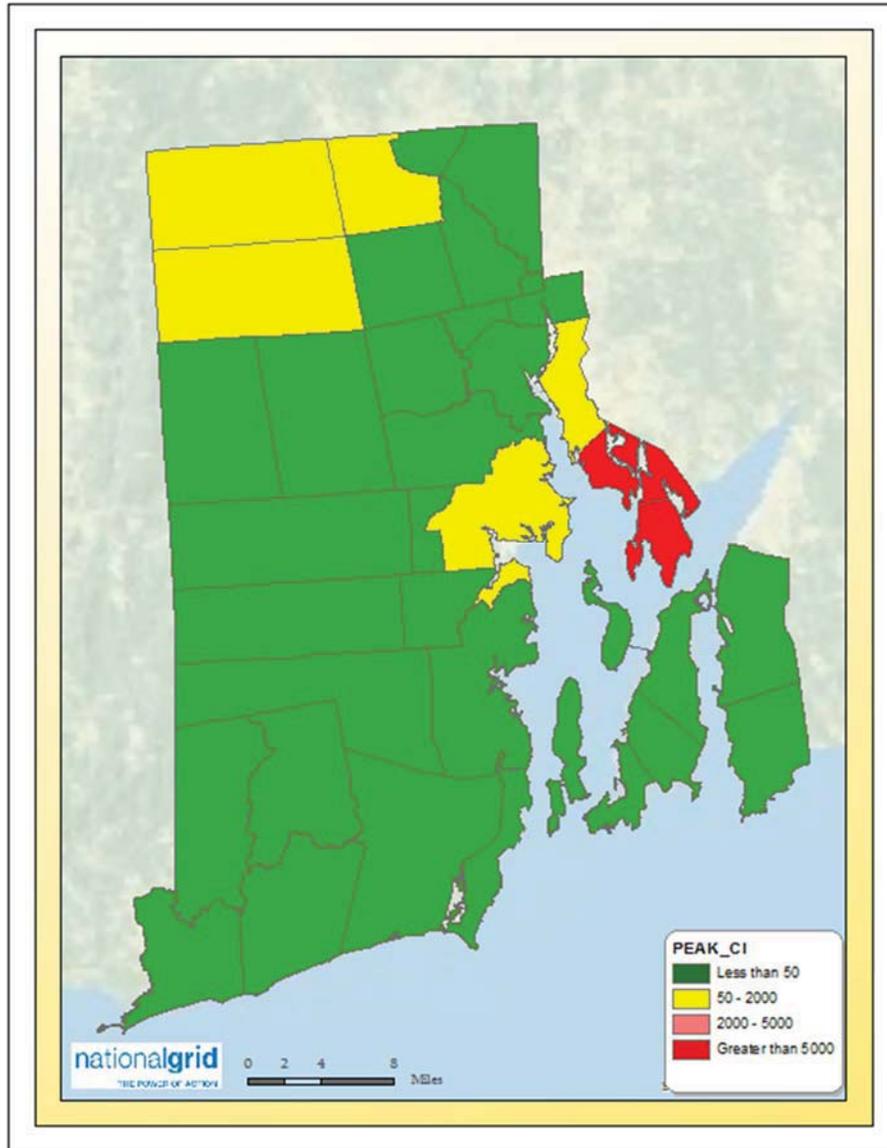
- 7. Date/Time of request for external Crews: External crews were not requested for this storm.
- 8. Date/Time of external Crews assignment: External crews were not requested for this storm.
- 9. # of customers out graph (graphs following):



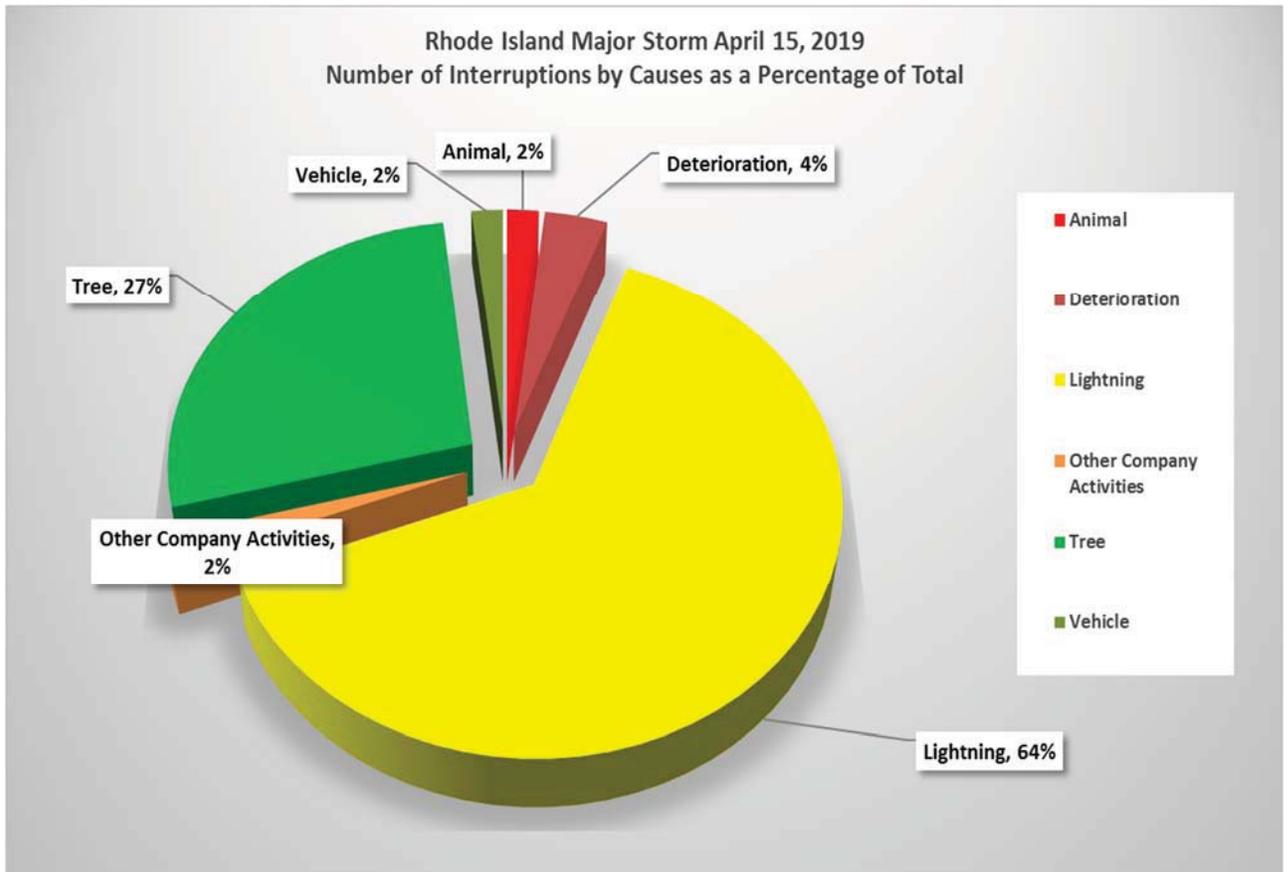
**April 15, 2019**

- 10. Impacted area: The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

**Customer Interrupted by Town at Company Peak  
RI 04/15/2019**



11. Cause: April lightning storm caused some destruction to Rhode Island’s electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration: The April 15, 2019 Storm was a mild weather event that resulted in some damage to the Company’s electrical system. There was a transmission line lockout caused by lightning.
13. Analysis of Protective Device Operation: National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system, interrupting devices include circuit breakers, air-break switches, and circuit switchers. Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s). For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm like this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection

devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation.

14. Summary of Customers Impacted: During this storm, on April 15, 2019 Rhode Island experienced a total of 31 interruptions that affected 26,023 customers and 4,027,424 customer minutes of interruption. On average these interruptions resulted in 0.052 SAIFI, 8.09 minutes of SAIDI. Since a SAIDI value of 8.09 minutes exceeded the threshold value of 5.05 minutes, April 15, 2019 qualified as a Major Event Day under the IEEE methodology.

**October 16-17, 2019 Storm**

1. Start Date and Time of event: The storm began in the late night on Wednesday, October 16, 2019 with scattered interruptions starting at approximately 9:00 p.m. and peaked around 1:25 a.m. on Thursday October 17, 2019. The peak reached 36,737 customers interrupted.
2. Number/Location of crews on duty (both internal and external crews): The Company secured 248 internal and external field crews<sup>1</sup> to restore power to customers in Rhode Island, consisting of approximately 141 external crews and 107 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, substation, and underground personnel.
3. Number of crews assigned to restoration efforts: At peak, the Company had the following crews performing restoration activities throughout the impacted areas in the state.

<u>Location</u>	<u>Crew Type</u>	<u># Crews</u>
Rhode Island	Internal Overhead Line	35 crews total
	External Overhead Line	75 crews total
	Internal Wire Down	81 crews total
	Internal Transmission	1 crews total
	Internal Underground	12 crews total
	Damage Appraisal	20 crews total
	Internal Substation	33 crews total
	Contractor Forestry	54 crews total

4. The first instance of mutual aid coordination: The State Incident Commander for National Grid’s Rhode Island Company requested mutual assistance from companies in the North Atlantic Mutual Assistance Group (NAMAG) to support restoration for this event starting October 17, 2019 7:00 a.m.
5. The first contact with material suppliers: The first contact with material suppliers was October 16, 2019.
6. Inventory levels: pre-event/daily/post-event: Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", pre-capitalized items, such as transformers. These items are not reported as inventory on the balance sheet. The inventory positions indicate those inventories held in Rhode Island and those allocated to RI stored in National Grid’s Central Warehouse located in Whitinsville, MA.

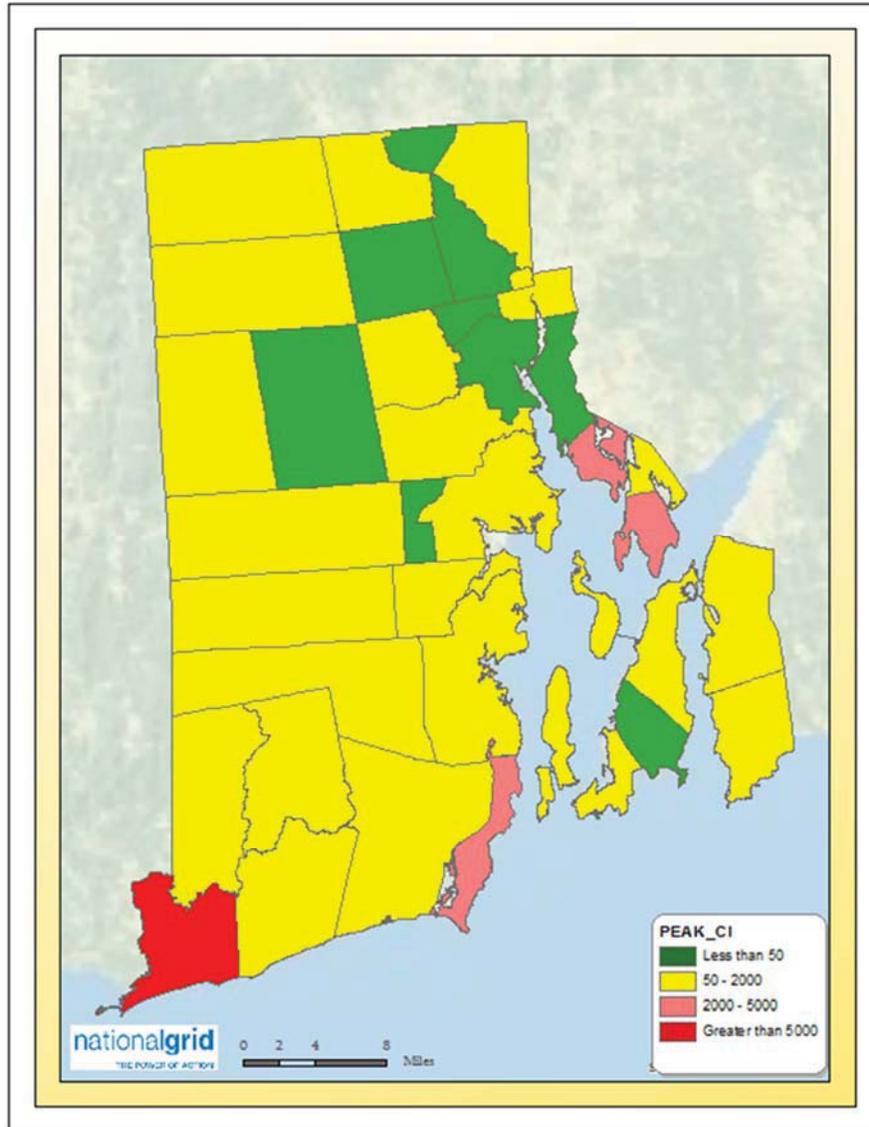
<u>Date</u>	<u>RI Inventory Location</u>	<u>NEDC total</u>	<u>RI ELEC %</u>	<u>Allocated NEDC Inventory</u>	<u>Total Narragansett Electric Inventory</u>
10/16/2019	\$1,580,148.07	\$34,054,276.00	22.20%	\$7,555,030.58	\$9,135,178.65
10/17/2019	\$1,580,148.07	\$34,054,276.00	22.20%	\$7,555,030.58	\$9,135,178.65

7. Date/Time of request for external Crews: Given the potential magnitude of the Storm and forecast of hazardous winds, the Company secured crews in advance from its contractors of choice and other outside contractors to support restoration efforts for all New England as part of its regional preparation for the Storm, consistent with its Emergency Response Plan. The Company secured 248 internal and external field crews to restore power to customers in Rhode Island, consisting of approximately 141 external crews and 107 internal crews.
8. Date/Time of external Crews assignment: External crews were first assigned and began working on outages beginning on Thursday, October 17, 2019, at approximately 7:00 a.m. through the end of the Storm.
9. # of customers out graph (graphs following):

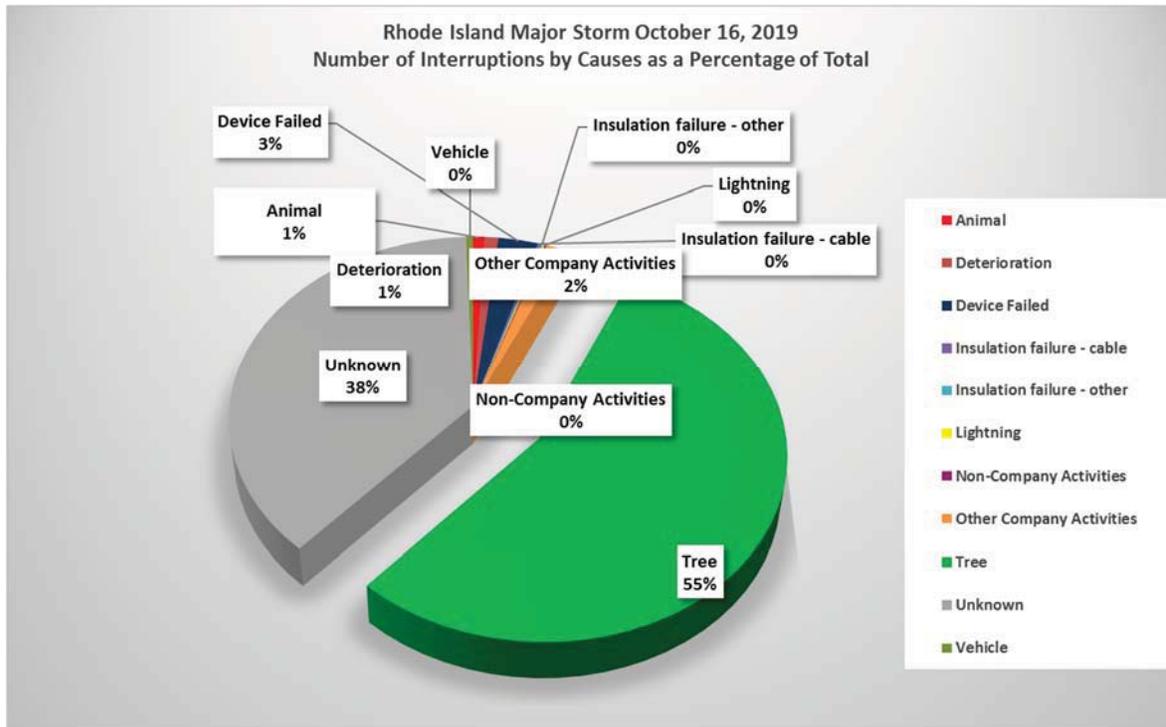


10. Impacted area: The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

**Customer Interrupted by Town at Company Peak  
RI 10/16/2019 to 10/19/2019**



11. Cause: February storm caused widespread destruction to Rhode Island’s electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration: The October 16-17, 2019 Storm was a significant weather event that resulted in moderate damage to the Company’s electrical system. The Storm brought widespread rain and hazardous winds to the Company’s service territory. Much of Rhode Island experienced wind gusts in the 40 to 50 mph range, with coastal areas seeing 55 to 65 mph gusts. The Town of Westerly experienced a peak gust of 70 mph. The Towns of Westerly and Gloucester were affected most heavily with approximately 85 and 59 percent of their customers impacted, respectively, by the event.
13. Analysis of Protective Device Operation: National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system, interrupting devices include circuit breakers, air-break switches, and circuit switchers. Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s). For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm like this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection

devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation.

#### 14. Summary of Customers Impacted:

**October 16, 2019** - During this storm, on October 16, 2019 Rhode Island experienced a total of 81 interruptions that affected 15,442 customers and 16,820,937 customer minutes of interruption. On average these interruptions resulted in 0.031 SAIFI, 33.92 minutes of SAIDI. Since a SAIDI value of 33.92 minutes exceeded the threshold value of 5.05 minutes, October 16, 2019 qualified as a Major Event Day under the IEEE methodology.

**October 17, 2019** - During this storm, on October 17, 2019 Rhode Island experienced a total of 462 interruptions that affected 43,359 customers and 31,045,840 customer minutes of interruption. On average these interruptions resulted in 0.087 SAIFI, 62.61 minutes of SAIDI. Since a SAIDI value of 62.61 minutes exceeded the threshold value of 5.05 minutes, October 17, 2019 qualified as a Major Event Day under the IEEE methodology.

**October 18, 2019** - During this storm, on October 18, 2019 Rhode Island experienced a total of 25 interruptions that affected 614 customers and 184,225 customer minutes of interruption. On average these interruptions resulted in 0.0012 SAIFI, 0.37 minutes of SAIDI. Since a SAIDI value of 0.37 minutes was less than the threshold value of 5.05 minutes, October 18, 2019 is not qualified as a Major Event Day under the IEEE methodology.

**October 19, 2019** - During this storm, on October 19, 2019 Rhode Island experienced a total of 28 interruptions that affected 508 customers and 57,833 customer minutes of interruption. On average these interruptions resulted in 0.001 SAIFI, 0.12 minutes of SAIDI. Since a SAIDI value of 0.12 minutes was less than the threshold value of 5.05 minutes, October 19, 2019 is not qualified as a Major Event Day under the IEEE methodology.

**October 31 - November 1, 2019 Wind Storm**

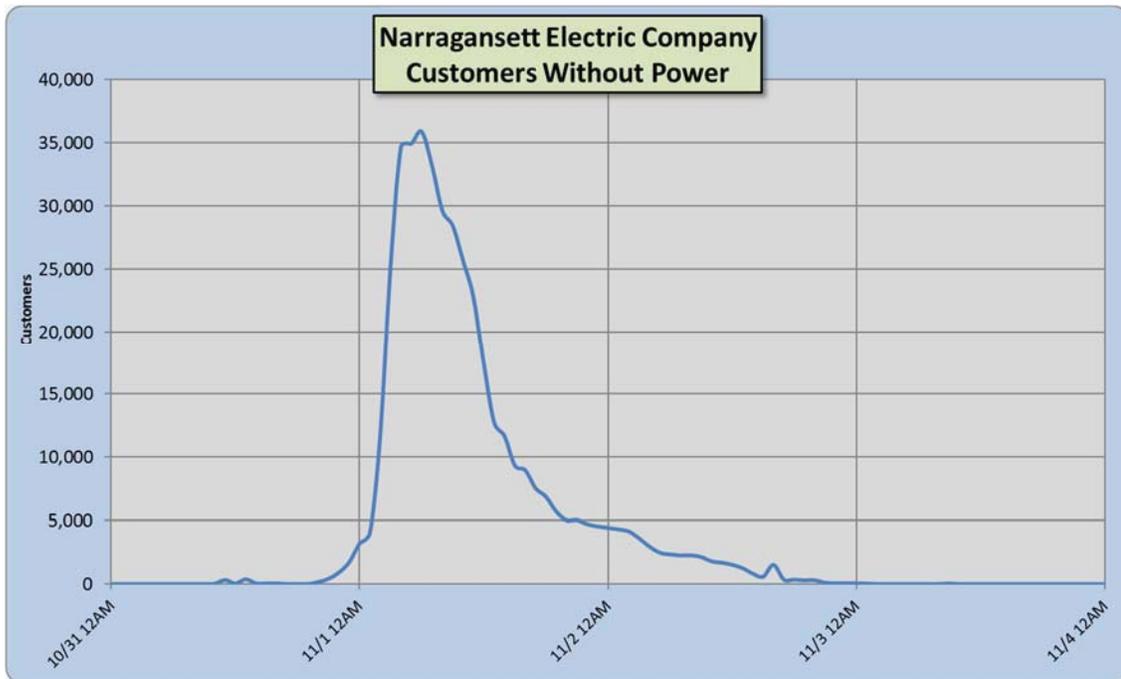
1. Start Date and Time of event: The storm began in the late morning on Thursday, Oct 31, 2019 with scattered interruptions starting at approximately 10:00 a.m. and peaked around 3:58 a.m. on Friday, Nov 1, 2019. The peak reached 36,524 customers interrupted.
2. Number/Location of crews on duty (both internal and external crews): The Company secured 269 internal and external field crews to restore power to customers in Rhode Island, consisting of approximately 129 external crews and 140 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, substation, and underground personnel.
3. Number of crews assigned to restoration efforts: At peak, the Company had the following crews performing restoration activities throughout the impacted areas in the state.

<u>Location</u>	<u>Crew Type</u>	<u># Crews</u>
Rhode Island	Internal Overhead Line	35 crews total
	External Overhead Line	31 crews total
	Internal Wire Down	35 crews total
	Internal Transmission	2 crews total
	Internal Underground	11 crews total
	Internal Substation	29 crews total
	Contractor Forestry	43 crews total

4. The first instance of mutual aid coordination: The State Incident Commander for National Grid’s Rhode Island Company requested mutual assistance from companies in the North Atlantic Mutual Assistance Group (NAMAG) to support restoration for this event starting November 1, 2019 7:00 a.m.
5. The first contact with material suppliers: The first contact with material suppliers was October 31, 2019.
6. Inventory levels: pre-event/daily/post-event: Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", pre-capitalized items, such as transformers; these items are not reported as inventory on the balance sheet. The inventory positions indicate those inventories held in Rhode Island and those allocated to RI stored in National Grid’s Central Warehouse located in Whitinsville, MA.

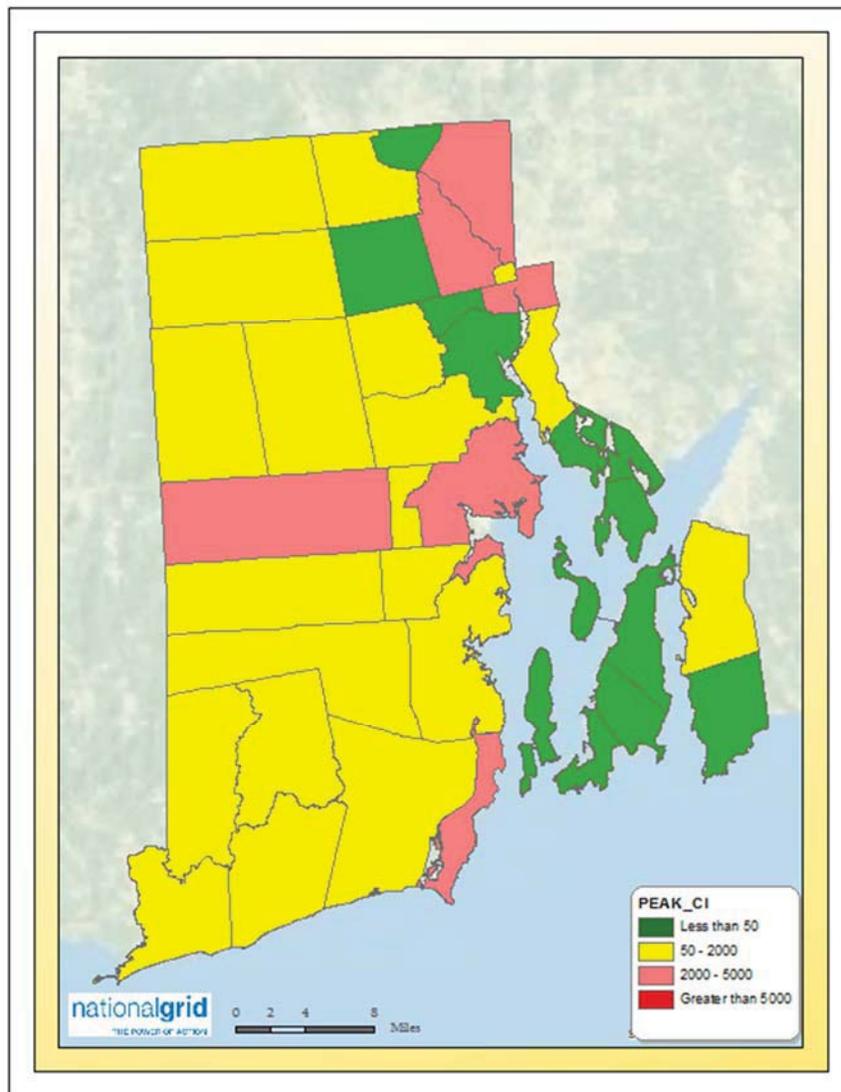
<u>Date</u>	<u>RI Inventory Location</u>	<u>NEDC total</u>	<u>RI ELEC %</u>	<u>Allocated NEDC Inventory</u>	<u>Total Narragansett Electric Inventory</u>
10/31/2019	\$1,580,148.07	\$34,054,276.00	22.20%	\$7,555,030.58	\$9,135,178.65
11/1/2019	\$1,311,836.68	\$34,603,309.57	21.50%	\$7,455,532.00	\$8,767,368.68

7. Date/Time of request for external Crews: Given the potential magnitude of the Storm and forecast of hazardous winds, the Company secured crews in advance from its contractors of choice and other outside contractors to support restoration efforts for all New England as part of its regional preparation for the Storm, consistent with its Emergency Response Plan. The Company secured 269 internal and external field crews to restore power to customers in Rhode Island, consisting of approximately 129 external crews and 140 internal crews.
8. Date/Time of external Crews assignment: External crews were first assigned and began working on outages beginning on Friday, November 1, 2019, at approximately 7:00 a.m. through the end of the Storm.
9. # of customers out graph (graphs following):

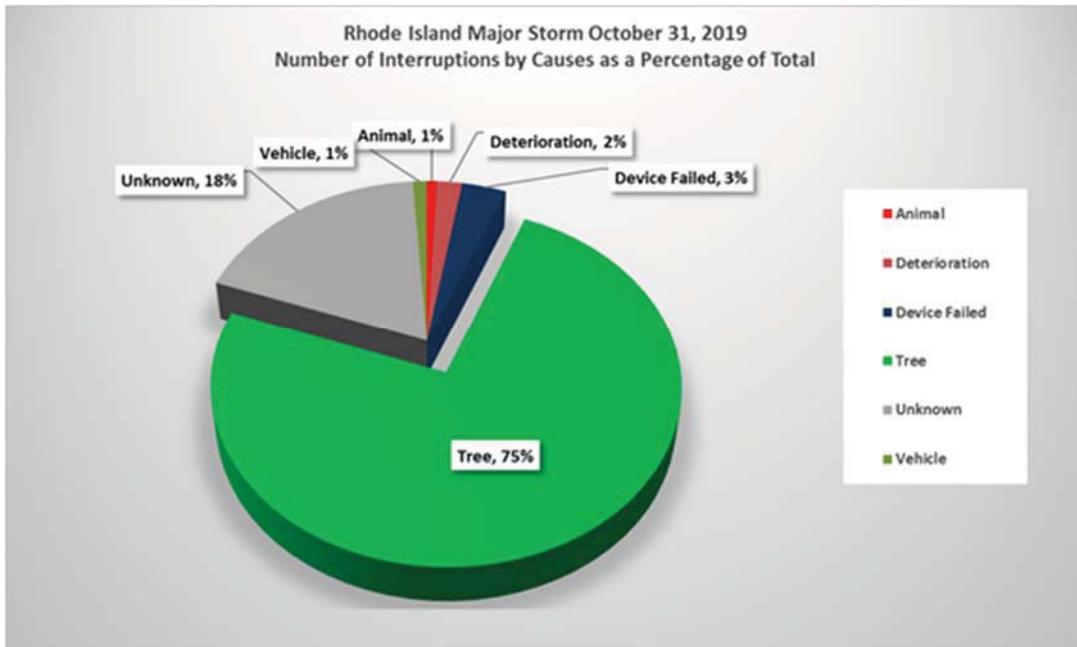


10. Impacted area: The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

**Customer Interrupted by Town at Company Peak  
RI 10/31/2019 to 11/03/2019**



11. Cause: October 31 storm caused widespread destruction to Rhode Island’s electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration: The October 31, 2019 Storm was a significant weather event that resulted in moderate damage to the Company's electrical system. The Storm brought widespread rain and hazardous winds to the Company's service territory. Much of Rhode Island experienced wind gusts in the 40 to 50 mph range, with interior areas seeing 55 to 60 mph gusts. The Towns of Foster and Hopkinton were affected most heavily with approximately 88 and 39 percent of their customers impacted, respectively, by the event.
13. Analysis of Protective Device Operation: National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system, interrupting devices include circuit breakers, air-break switches, and circuit switchers. Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s). For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm like this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation.

14. Summary of Customers Impacted:

**October 31, 2019** - During this storm, on October 31, 2019 Rhode Island experienced a total of 63 interruptions that affected 11,676 customers and 3,059,222 customer minutes of interruption. On average these interruptions resulted in 0.023 SAIFI, 6.17 minutes of SAIDI. Since a SAIDI value of 6.17 minutes exceeded the threshold value of 5. minutes, October 31, 2019 qualified as a Major Event Day under the IEEE methodology.

**November 1, 2019** - During this storm, on November 1, 2019 Rhode Island experienced a total of 254 interruptions that affected 43,949 customers and 23,336,315 customer minutes of interruption. On average these interruptions resulted in 0.089 SAIFI, 46.98 minutes of SAIDI. Since a SAIDI value of 46.98 minutes exceeded the threshold value of 5.05 minutes, November 1, 2019 qualified as a Major Event Day under the IEEE methodology.

**November 2, 2019** - During this storm, on November 2, 2019 Rhode Island experienced a total of 42 interruptions that affected 1,456 customers and 139,181 customer minutes of interruption. On average these interruptions resulted in 0.0029 SAIFI, 0.28 minutes of SAIDI. Since a SAIDI value of 0.28 minutes was less than the threshold value of 5.05 minutes, November 2, 2019 is not qualified as a Major Event Day under the IEEE methodology. On November 3, 2019, the restoration was going on. But SAIDI on November 3 was much less than 5.05 and is not qualified as a Major Event Day.

**Schedules of  
Melissa A. Little**

**PRE-FILED DIRECT TESTIMONY**

**OF**

**MELISSA A. LITTLE**

**August 3, 2020**

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1 **I. Introduction**

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.**

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

14  
15 **Q. Please describe your education and professional experience.**

16 A. In 2000, I received a Bachelor of Science degree in Accounting Information Systems  
17 from Bentley College (now Bentley University). In September 2000, I joined  
18 Pricewaterhouse Coopers LLP in Boston, Massachusetts, where I worked as an associate  
19 in the Assurance practice. In November 2004, I joined National Grid in the Service  
20 Company as an Analyst in the General Accounting group. After the merger of National  
21 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) for Narragansett, in the 2017 general rate case filing in Docket No. 4770;  
10 (2) for Narragansett Electric, in the Fiscal Year 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  
15 Docket 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 new Electric ISR factor, which went into effect on  
19 April 1, 2019. That factor was based on a projected FY 2020 ISR revenue requirement of  
20 \$17,567,757 for the estimated operation and maintenance (O&M) work associated with  
21 the Company's vegetation management (VM) and inspection and maintenance (I&M)

1 programs for the Company's FY ended March 31, 2020, on the estimated ISR plant  
2 additions during the Company's FYs ended March 31, 2020 and 2019, and on the actual  
3 ISR additions during the Company's FY ended March 31, 2018, which were incremental  
4 to the levels reflected in rate base in the Company's last base rate case (Docket No.4770).  
5 On September 1, 2018, new distribution base rates as approved in Docket No. 4770  
6 became effective. The revenue requirements on actual ISR additions made from FY 2012  
7 through FY 2017 plus forecasted ISR additions for FY 2018, FY 2019 and a portion of  
8 FY 2020 were included in these new base rates. Thus, the purpose of my testimony is to  
9 present an updated FY 2020 Electric ISR revenue requirement associated with actual FY  
10 2020 O&M programs, the actual capital investment levels for each of FY 2018 through  
11 FY 2020 incremental to the level of investment assumed in Docket No. 4770, and actual  
12 tax deductibility percentages for FY 2019 capital additions.

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

1           2020 plant additions will be reflected in the Company's FY 2021 Electric ISR  
2           Reconciliation filing and will generate a true-up adjustment in that filing.

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

10  
11          As shown on Attachment MAL-1, Page 1 at Line 12, the updated FY 2020 ISR revenue  
12          requirement collectible through the Company's ISR factor for the FY 2020 period,  
13          including updated tax deductibility adjustments to the FY 2019 revenue requirement,  
14          totals \$22,371,835. This is an increase of \$4,804,078 from the projected FY 2020  
15          Electric ISR revenue requirement of \$17,567,757, previously approved by the PUC in  
16          this docket. This increase is primarily attributable to the revenue requirement on  
17          increased capital investment and corresponding rate base over the estimated amount of  
18          capital investment and rate base in the FY 2020 Electric ISR Plan for vintage years FY  
19          2019 and 2020.

20

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

2 A. Yes, I am sponsoring the following Attachments with my testimony:

- 3 • Attachment MAL-1: FY 2020 Electric Infrastructure, Safety, and Reliability Plan  
4 Reconciliation Revenue Requirement twelve-month Summary  
5 and Calculation and FY 2019 Electric Infrastructure, Safety and  
6 Reliability Plan Revenue Requirement twelve-month Summary  
7 and Calculation for the seven-month period September 1, 2018  
8 through March 31, 2019  
9
- 10 • Attachment MAL-2: FY 2019 Electric Infrastructure, Safety and Reliability Plan  
11 Revenue Requirement for the five-month period April 1, 2018  
12 through August 31, 2018  
13

14 **II. Electric ISR FY 2020 Revenue Requirement**

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

18 A. Yes, the Company calculated the FY 2020 Electric ISR Plan revenue requirement in the  
19 same fashion as calculated in the previous Electric ISR Factor submissions. 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 FY 2012  
23 through FY 2017 capital investment in addition to the estimated revenue requirement on  
24 FY 2018 through FY 2020 capital investment were included in base rates effective  
25 September 1, 2018. Therefore, the updated FY 2020 revenue requirement calculation is  
26 presented in two parts: (1) the FY 2020 revenue requirement on incremental FY 2018

1 through FY 2020 capital investment and the FY 2019 revenue requirement on  
2 incremental FY 2018 through FY 2019 capital investment reflecting known tax  
3 deductibility (representing the seven-month period after new base rates were effective)  
4 and (2) the FY 2019 revenue requirement on incremental FY 2012 through FY 2019  
5 capital investment reflecting known tax deductibility (representing the five-month period  
6 before new base rates were effective).

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

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

5 A. Per Attachment MAL-1, Page 1, Line 12, column (c), the overall FY 2020 revenue  
6 requirement increase is \$4,804,078, which is the net impact of: (1) a \$3.9 million  
7 increase in the FY 2020 revenue requirement on vintage FY 2019 ISR capital additions  
8 mainly driven by \$22 million higher actual capital investment compared to the estimated  
9 FY 2019 investment approved in the Plan, plus the actual FY 2019 income tax  
10 deductibility update particularly a \$7 million decrease in NOL utilization; (2) a \$416,040  
11 increase in the FY 2020 revenue requirement on vintage FY 2020 ISR capital additions  
12 caused by \$2 million higher capital investment compared to the amount approved in the  
13 FY 2020 Plan, \$15 million lower actual plant retirements than estimated in the FY 2020  
14 Plan, and a \$2.5 million reduction in the FY 2020 NOL utilization estimate; (3) a  
15 \$138,053 increase in the FY 2020 property tax recovery adjustment for higher actual FY  
16 2019 and FY 2020 investments and (4) increase of \$352,656 due to the true-up of FY  
17 2019 revenue requirement to reflect actual tax deductibility as described in detail later in  
18 this testimony.

19

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 electric base distribution rates that were approved by the PUC in Docket No. 4**  
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 electric  
7 infrastructure and improve the reliability and safety of its electric facilities. When new  
8 base rates are implemented, as was the case in Docket No. 4770, the costs being  
9 recovered associated with pre-rate case ISR capital investment cease to be recovered  
10 through a separate ISR factor, and are instead recovered through base rates, and the  
11 underlying ISR capital investment becomes a component of base distribution rate base  
12 from that point forward. In November 2017, the Company filed an application with the  
13 PUC seeking a change in base rates for its gas and electric distribution businesses. The  
14 proceeding culminated with the Commission's approval of a settlement agreement with  
15 the Division and numerous intervenors establishing new base rates for the Company. The  
16 Company's rate base in that request reflected projected capital investments through  
17 August 31, 2019. In its base rate request, the Company proposed to maintain consistency  
18 with the existing ISR mechanism for the FY 2019 and FY 2020 periods. Consequently,  
19 the forecast used to develop rate base in the first year of the distribution rate case  
20 included actual capital investment through the test year ending June 30, 2017, nine  
21 months of the ISR approved capital investment levels for vintage FY 2018, 12 months of

1 vintage FY 2019 investment and five months of vintage FY 2020 investment (using the  
2 FY 2018 ISR approved level of plant additions as a proxy for FY 2018, FY 2019 and FY  
3 2020).

4  
5 **Q. Please continue.**

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

1 estimated FY 2018 through FY 2020 capital investments included in Docket No. 4770;  
2 and Attachment MAL-2 reflects the five-month (April 1, 2018 through August 31, 2018)  
3 FY 2019 revenue requirement reflecting actual tax deductibility on actual FY 2012  
4 through FY 2019 incremental capital investments.

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

8 A. The decrease in the federal income tax rate from 35 percent to 21 percent reduced the  
9 amount of income tax to be recovered from customers on the return on equity component  
10 of each Electric ISR vintage year revenue requirement. The return on rate base in each  
11 revenue requirement is calculated by multiplying the Electric ISR rate base times the  
12 weighted average cost of capital (WACC). The equity component of the return on rate  
13 base is the taxable component of the Electric ISR revenue requirement. The federal  
14 income taxes that the Company must recover from customers are derived by grossing up  
15 the WACC to a pre-tax rate of return. Consequently, the Company revised the pre-tax  
16 WACC to reflect the change in the federal income tax rate. The calculation of the revised  
17 pre-tax WACC is shown on Page 22 of Attachment MAL-1 and Page 35 of Attachment  
18 MAL-2. The pre-tax WACC approved in Docket No. 4323 was 9.68 percent at the 35  
19 percent tax rate and 8.41 percent at the 21 percent tax rate, effective January 1, 2018, as  
20 shown. The pre-tax WACC approved in Docket No. 4770 is 8.23 percent effective  
21 September 1, 2018. The Company used the Docket No. 4323 pre-tax WACC of 8.41

1           percent for the revenue requirement calculation of April 1, 2018 through August 31, 2018  
2           and the approved pre-tax WACC of 8.23 percent to calculate the return on rate base  
3           included in the revenue requirement for the period from September 1, 2018 through  
4           March 31, 2019 and FY 2020.

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

9   A.    Yes, effective December 31, 2017, the Company has restated all its deferred tax balances  
10        based on the new 21 percent federal income tax rate because the Company is paying  
11        income taxes as the book/tax timing differences reverse at that 21 percent federal income  
12        tax rate. However, because deferred taxes are an offset to rate base in the Electric ISR  
13        revenue requirement, reducing the deferred tax balances based on the 21 percent federal  
14        income tax rate has the effect of artificially increasing rate base. To counteract this  
15        artificial increase to rate base, a new line item called Excess Deferred Income Taxes has  
16        been added to each vintage year's revenue requirement calculation reflecting the value of  
17        the decrease to ISR rate base as of December 31, 2017. These excess deferred income  
18        taxes represent the net benefit as of December 31, 2017 that will eventually be earned by  
19        the Company through reduced future income taxes and must ultimately be passed back to  
20        customers. The pass back of excess deferred income taxes to customers is fully reflected  
21        in base distribution rates under Docket No. 4770 per the Company's Excess Deferred

1           Income Tax True-Up - Second Compliance filing dated May 30, 2019<sup>2</sup> and as approved  
2           by the PUC on June 17, 2019; thus, there is no need to adjust the excess deferred tax  
3           balance in the ISR revenue requirements.  
4

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

6   A.   The excess deferred income taxes are calculated on Page 34 of Attachment MAL-2. The  
7       Company derived the excess deferred income tax amounts by calculating the balance of  
8       ISR deferred taxes as of December 31, 2017 by vintage fiscal year and multiplying that  
9       amount by the 14 percent change in the tax rate (35 percent minus 21 percent).

10  
11   **Q.   How was the Electric ISR revenue requirement revised for the change in the bonus  
12       depreciation rules resulting from the Tax Act?**

13   A.   Bonus depreciation, sometimes known as first year bonus depreciation, is an  
14       accelerated tax depreciation method that was established first in 2002 as an economic  
15       stimulus to incent U.S. corporations to increase capital investments. Bonus depreciation  
16       allows companies to take an immediate tax deduction for some portion of certain  
17       qualified capital investments based on the bonus depreciation rates in effect for that year  
18       of investment. Bonus depreciation rates have ranged from a high of 100 percent in some  
19       years, to as low as 30 percent for calendar 2019 as was specified in the tax laws prior to  
20       the passage of the Tax Act. Pursuant to those prior tax laws, bonus depreciation was set

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<sup>2</sup> The Company's Compliance Filing for Electric Base Distribution Rates for Rate Year 3 filed on June 1, 2020 in Docket No. 4770 is currently pending with the PUC.

1 to expire at the end of calendar year 2019. However, the Tax Act changed the rules for  
2 bonus depreciation for certain capital investments, including ISR eligible investments,  
3 effective September 28, 2017. Based on the 2017 Tax Act, property acquired prior to  
4 September 28, 2017 and placed in service during tax years beginning after December 31,  
5 2017 are allowed bonus depreciation.

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

14  
15 **Q. Are there any updates to the FY 2019 revenue requirement reflected in the FY 2020**  
16 **Electric ISR Reconciliation?**

17 A. Yes. The Company filed its FY 2019 Electric ISR Reconciliation on August 1, 2019.  
18 However, it had not filed its FY 2019 income tax return until later that year in the month  
19 of December. As a result, the Company used certain tax assumptions, and the Company  
20 has revised its vintage FY 2019 revenue requirement to reflect the following updates on  
21 Attachment MAL-1, Pages 7 and 15 and Attachment MAL-2, Pages 2 and 3: (1) actual

1 capital repairs deduction rate of 9.68 percent as shown on Attachment MAL-1, Page 7,  
2 Line 2 and Attachment MAL-2, Page 3, Line 2 ; (2) actual bonus depreciation rate of  
3 14.20 percent as shown on Attachment MAL-1 Page 7, Line 12 and Attachment MAL-2  
4 Page 3, Line 12; (3) actual tax loss on retirements of \$1,449,776 as shown on  
5 Attachment MAL-1 Page 7, Line 20 and Attachment MAL-2 Page 3, Line 21; and (4)  
6 actual NOL utilization of \$1,506,783 as shown on Attachment MAL-1 Page 15, Line 11,  
7 column (b) and Attachment MAL-2 Page 33, Line 13 column (p). The net result of these  
8 tax deductibility updates is an increase to the FY 2019 ISR revenue requirement of  
9 \$352,656, as shown on Attachment MAL-1, Page 2 at Line 17 and carried forward to  
10 Page 1 of that Attachment at Line 10.

11  
12 **Q. Q. Are there any updates to the FY 2020 Property Tax calculation in the FY 2020**  
13 **Gas ISR Reconciliation?**

14 A. Yes, to simplify the property tax calculation, format changes were made as shown in  
15 Attachment MAL-1 at Page 20 and Page 21. In previous ISR Plan and Reconciliation  
16 filings, the property tax calculation was presented in two parts: the first part showed the  
17 net ISR plant additions by vintage investment year multiplied by the rate case effective  
18 property tax rate; the second part showed all net ISR additions as well as net plant  
19 amounts embedded in the most recent rate case multiplied by the difference between the  
20 rate case effective property tax rates as approved in Docket No. 4323 or Docket No. 4770  
21 and the ISR year effective rate. The sum of these two parts would arrive at the total

1 property tax adjustment. Starting with this FY2020 ISR Reconciliation filing, the net ISR  
2 plant additions are multiplied directly by the ISR year effective property tax rate; the net  
3 plant amount embedded in the rate case is multiplied by the difference between the Rate  
4 Case effective property tax rate as approved in Docket No. 4770 and the ISR year  
5 effective rate. These revisions to the presentation of the property tax adjustment in no  
6 way change the underlying calculation of the property tax adjustment mechanism  
7 established in Docket No. 4323.

8  
9 **Q. Please summarize the updated FY 2020 ISR revenue requirement.**

10 A. As shown on Page 1 of Attachment MAL-1, the Company's FY 2020 Electric ISR  
11 Program revenue requirement includes two elements: (1) O&M expense associated with  
12 the Company's VM activities and system inspection, feeder hardening, and potted  
13 porcelain cutouts, as encompassed by the Company's I&M Program (2) the Company's  
14 capital investment in electric utility infrastructure. The description of these elements and  
15 the related amounts are supported by the direct testimony and supporting attachments of  
16 Ms. Patricia Easterly. Line 4 reflects the actual FY 2020 revenue requirement related to  
17 O&M expenses of \$11,516,290.

18  
19 As shown on Page 1, at Line 11 of Attachment MAL-1, the FY 2020 revenue  
20 requirement associated with the Company's actual capital investment totals \$10,855,545.

21 As previously noted, the total FY 2020 capital investment component of revenue

1 requirement includes (1) FY 2020 revenue requirement on vintages FY 2018 through FY  
2 2020 ISR capital investments above or below the level of capital investment reflected in  
3 base distribution rates in Docket No. 4770, (2) the FY 2020 property tax recovery  
4 mechanism component, and (3) the FY 2019 revenue requirement true-up for changes to  
5 previously estimated tax depreciation expense and NOL position to align with the  
6 Company's FY 2019 tax return, which was filed in December 2019. The total actual FY  
7 2020 ISR Plan revenue requirement for both O&M expenses and capital investment of  
8 \$22,371,835 is shown on Line 12.

9  
10 **Q. Please describe how the attachments to your testimony are structured.**

11 A. Page 1 of Attachment MAL-1 summarizes the individual components of the updated FY  
12 2020 ISR revenue requirement. Page 1, Column (a) reflects the approved FY 2020  
13 Electric ISR Plan revenue requirement on projected VM and I&M program costs and  
14 incremental ISR capital investment as well as the projected FY 2020 property tax  
15 recovery adjustment. Page 1, Column (b) represents (1) the O&M components for FY  
16 2020; (2) FY 2020 ISR revenue requirements for incremental FY 2018 through FY 2020  
17 ISR investments – not included in the Company's base rates in Docket No. 4770– and as  
18 supported with detailed calculations on Attachment MAL-1, Pages 3 , 6 and 11; (3) FY  
19 2020 property tax adjustment on incremental capital not included in the Company's base  
20 rates in Docket No. 4770; and (4) Line 10 reflects the reconciliation of the approved FY  
21 2019 ISR revenue requirement for vintage FY 2019 plant additions with the actual

1 vintage FY 2019 revenue requirement on those investments. As previously discussed,  
2 this reconciliation is necessary because the actual level of tax deductibility on FY 2019  
3 investments was not known when the Company filed the FY 2019 ISR reconciliation and  
4 FY 2020 ISR Plan proposals. A detailed calculation of the updated FY 2019 revenue  
5 requirement is presented on page 2 of Attachment MAL-1.

6  
7 Attachment MAL-2 represents the five months of FY 2019 (April 1, 2018 through  
8 August 31, 2018) ISR revenue requirements for incremental FY 2012 through FY 2019  
9 ISR investments – meaning those investments not included in the Company’s base rates  
10 in Docket No. 4323– and as supported with detailed calculations on Pages 2, 7, 10, 13,  
11 16, 19, 22 and 25, respectively. The actual FY 2019 tax deductibility is reflected on Page  
12 3 and the resulting five-month revenue requirement for FY 2019 is included on Page 2 at  
13 Line 37.

14  
15 **Q. Has the Company provided support for the actual level of FY 2020 ISR-eligible**  
16 **plant investments?**

17 A. Yes. The description of the FY 2020 Electric ISR program and the amount of the  
18 incremental plant additions eligible for inclusion in the ISR mechanism are supported by  
19 the direct testimony and supporting attachment of Ms. Easterly. The ultimate revenue  
20 requirement on the ISR eligible plant additions equals the return on the investment (i.e.  
21 average rate base at the weighted average cost of capital), plus depreciation expense and

1 property taxes associated with the investment. Incremental ISR eligible plant additions  
2 for this purpose are intended to represent the net change in rate base for electric  
3 infrastructure investments, since the establishment of the Company's ISR mechanism  
4 effective April 1, 2011, and are defined as capital additions plus cost of removal, less  
5 annual depreciation expense included in the Company's rates, net of depreciation expense  
6 attributable to general plant. As discussed in the testimony of Ms. Easterly, the actual  
7 ISR eligible plant additions for FY 2020 totals \$104.9 million associated with the  
8 Company's FY 2020 ISR Plan (electric infrastructure investment net of general plant).

9  
10 **Q. Please explain the distinction between non-discretionary and discretionary capital**  
11 **spending as they relate to the revenue requirement calculation.**

12 A. For purposes of calculating the capital-related revenue requirement, investments in  
13 electric infrastructure have been divided into two categories: (1) non-discretionary capital  
14 investments, which principally represent the Company's commitment to meet statutory  
15 and/or regulatory obligations; and (2) discretionary capital investments, which represent  
16 all other electric infrastructure-related capital investment falling outside of the  
17 specifically defined non-discretionary categories. The amount of discretionary  
18 investment the Company is allowed to include in the revenue requirement calculation is  
19 subject to certain limitations. The amount of discretionary capital investment the  
20 Company uses in the revenue requirement must be no greater than the cumulative amount  
21 of discretionary project spend as approved by the PUC in this proceeding. This means

1 that the discretionary investment is limited to the lesser of actual cumulative discretionary  
2 capital additions or spending, or cumulative discretionary spending approved by the PUC  
3 in this docket. For purposes of the FY 2020 revenue requirement, the lesser of these  
4 items was actual discretionary capital additions of \$57,144,002, as shown on Attachment  
5 MAL-1, Page 23, Line 13, column (a), of which \$39,597,335 was incremental to the  
6 amount of discretionary capital additions assumed in base rates.  
7

8 **Q. What is the updated revenue requirement associated with actual plant additions?**

9 A. The updated FY 2020 revenue requirement, associated with the Company's actual FY  
10 2018 through FY 2020 ISR eligible plant investments, totals \$22,371,835. This amount  
11 includes the updated FY 2020 O&M components and revenue requirement on FY 2018  
12 through FY 2020 incremental ISR investments, inclusion of the property tax recovery  
13 adjustment pursuant to the rate case settlement agreements in Docket No. 4323 and in  
14 Docket No. 4770, and the reconciliation of the approved FY 2019 ISR revenue  
15 requirements on vintage FY 2019 investments with the actual FY 2019 income tax  
16 deductibility on those investments.  
17

18 **III. Conclusion**

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

20 A. Yes, it does.

**Cwcej o gwri'of  
Melissa A. Little**

**Index of Attachments**

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



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: MELISSA A. LITTLE  
ATTACHMENTS**

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Attachment MAL-1

FY 2020 Electric Infrastructure, Safety, and Reliability Plan Reconciliation Revenue  
Requirement Twelve-month Summary and Calculation

and

FY 2019 Electric Infrastructure, Safety and Reliability Plan Revenue Requirement Twelve-  
month Summary and Calculation for the seven-month period September 1, 2018 through March  
August 31, 2019

**The Narragansett Electric Company  
d/b/a National Grid  
Electric Infrastructure, Safety, and Reliability (ISR) Plan  
FY 2020 Annual Revenue Requirement Summary**

Line No.		Approved Fiscal Year <u>2020</u> (a)	Actual Fiscal Year <u>2020</u> (b)	Variance Fiscal Year <u>2020</u> (c) = (b)-(a)
	<b><u>Operation and Maintenance (O&amp;M) Expenses:</u></b>			
1	Current Year Vegetation Management (VM)	\$10,400,000	\$10,516,698	\$116,698
2	Current Year Inspection & Maintenance (I&M)	\$771,000	\$774,784	\$3,784
3	Current Year Other Programs	\$336,000	\$224,808	(\$111,192)
4	<b>Total O&amp;M Expense Component of Revenue Requirement</b>	<b>\$11,507,000</b>	<b>\$11,516,290</b>	<b>\$9,290</b>
	<b><u>Capital Investment:</u></b>			
5	Actual 2020 Revenue Requirement on FY 2018 Incremental Capital included in ISR Rate Base	\$2,114,916	\$2,113,264	(\$1,653)
6	Actual 2020 Revenue Requirement on FY 2019 Incremental Capital included in ISR Rate Base	\$552,992	\$4,442,683	\$3,889,691
7	Actual 2020 Revenue Requirement on FY 2020 Incremental Capital included in ISR Rate Base	\$2,197,258	\$2,613,298	\$416,040
8	Subtotal	\$4,865,166	\$9,169,245	\$4,304,079
9	FY 2020 Property Tax Recovery Adjustment	\$1,195,591	\$1,333,644	\$138,053
10	True-Up for FY 2019 (Income Tax)		\$352,656	\$352,656
11	<b>Total Capital Investment Component of Revenue Requirement</b>	<b>\$6,060,757</b>	<b>\$10,855,545</b>	<b>\$4,794,788</b>
12	<b>Total Fiscal Year Revenue Requirement</b>	<b>\$17,567,757</b>	<b>\$22,371,835</b>	<b>\$4,804,078</b>
13	<b>Incremental Fiscal Year Rate Adjustment</b>		<b>\$4,804,078</b>	

Column/Line Notes:

Col (a)	Docket No. 4915, FY 2020 Electric ISR Plan, Revised Section 5: Attachment 1S, Page 1 of 19, Column (c)
Col (b)	
1	Vegetation Management, Section IV of Att. PCE-1, Table 10
2	Other Operations and Maintenance, Section V of Att. PCE-1, Table 11
3	Other Operations and Maintenance, Section V of Att. PCE-1, Table 11
4	Sum of Lines 1 through 3
5	Page 3 of 23, Line 34 column (c)
6	Page 6 of 23, Line 36, Column (b)
7	Page 11 of 23, Line 33, Column (a)
8	Sum of Lines 5 through 7
9	Page 21 of 23, Line 44, Column (g) × 1,000
10	Page 2 of 23, Line 17 column (e)
11	Sum of Lines 8 through 10
12	Line 4 + Line 11
13	Line 12 Col (b) - Line 12 Col (a)

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

Line No.		As Reconciled	Fiscal Year 2019 Tax Update			True-Up (e) = (d) - (a)
		Fiscal Year 2019 (a)	Apr-Aug Actuals (b)	Sep-Mar Actuals (c)	Subtotal Actuals (d) = (b) + (c)	
<b><u>Operation and Maintenance (O&amp;M) Expenses:</u></b>						
1	Current Year Vegetation Management (VM)	\$9,738,760	\$4,057,817	\$5,680,943	\$9,738,760	\$0
2	Current Year Inspection & Maintenance (I&M)	\$603,064	\$251,277	\$351,787	\$603,064	\$0
3	Current Year Other Programs	\$126,700	\$52,792	\$73,908	\$126,700	\$0
4	Electric Contact Voltage expenses included in RIPUC Docket No. 4323	(\$68,229)	(\$68,229)		(\$68,229)	\$0
5	<b>Total O&amp;M Expense Component of Revenue Requirement</b>	<b>\$10,400,295</b>	<b>\$4,293,657</b>	<b>\$6,106,639</b>	<b>\$10,400,295</b>	<b>\$0</b>
<b><u>Capital Investment:</u></b>						
6	FY 2019 Revenue Requirement on FY 2012 Actual Incremental Capital Investment	\$97,255	\$97,255		\$97,255	\$0
7	FY 2019 Revenue Requirement on FY 2013 Actual Incremental Capital Investment	(\$393,472)	(\$393,472)		(\$393,472)	\$0
8	FY 2019 Revenue Requirement on FY 2014 Actual Incremental Capital Investment	\$271,208	\$271,208		\$271,208	\$0
9	FY 2019 Revenue Requirement on FY 2015 Actual Capital Investment	\$1,404,557	\$1,404,557		\$1,404,557	\$0
10	FY 2019 Revenue Requirement on FY 2016 Actual Capital Investment	\$1,395,551	\$1,395,551		\$1,395,551	\$0
11	FY 2019 Revenue Requirement on FY 2017 Actual Capital Investment	\$1,356,179	\$1,356,179		\$1,356,179	\$0
12	FY 2019 Revenue Requirement on FY 2018 Actual Capital Investment	\$3,774,644	\$2,494,752	\$1,279,892	\$3,774,644	\$0
13	FY 2019 Revenue Requirement on FY 2019 Actual Capital Investment	\$3,117,935	\$1,916,002	\$1,554,589	\$3,470,591	\$352,656
14	Subtotal	\$11,023,858	\$8,542,033	\$2,834,481	\$11,376,514	\$352,656
15	FY 2019 Property Tax Recovery Adjustment	\$1,535,387	\$799,626	\$735,761	\$1,535,387	\$0
16	<b>Total Capital Investment Component of Revenue Requirement</b>	<b>\$12,559,245</b>	<b>\$9,341,659</b>	<b>\$3,570,242</b>	<b>\$12,911,901</b>	<b>\$352,656</b>
17	<b>Total Fiscal Year Revenue Requirement</b>	<b>\$22,959,540</b>	<b>\$13,635,315</b>	<b>\$9,676,881</b>	<b>\$23,312,196</b>	<b>\$352,656</b>

Column Notes:

- (a) As approved per RIPUC Docket No. 4783 Reconciliation Filing, Attachment MAL-1, P 1, Column (e)
- (b) Attachment MAL-2, Page 1 of 35, Column (b)

Line Notes:

- Line 1~4 As actual per RIPUC Docket No. 4783 Reconciliation Filing, Attachment MAL-1, P 1, Column (c)
- 5 Sum of Lines 1 through 4
- 12(c) Page 3 of 23, Line 35 Column (b)
- 13(c) Page 6 of 23, Line 36 Column (a)
- 14 Sum of Lines 6 through 13
- 15(c) Page 21 of 23, Line 44, Column (c) × 1,000
- 16 Sum of Lines 14 through 15
- 17 Line 5 + Line 16

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

Line No.		Fiscal Year 2018 (a)	Fiscal Year 2019 (b)	Fiscal Year 2020 (c)
	<b>Capital Investment Allowance</b>			
1	Non-Discretionary Capital	\$3,178,398		
2	Discretionary Capital			
	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending			
3	Total Allowed Capital Included in Rate Base	\$17,816,654	\$0	\$0
	Page 15 of 23, Line 4(a)			
4	Depreciable Net Capital Included in Rate Base			
5	Total Allowed Capital Included in Rate Base in Current Year	\$17,816,654	\$0	\$0
6	Retirements	(\$5,245,072)	\$0	\$0
	Year 1 = Line 4 - Line 5; then = Prior Year Line 6	\$23,061,726	\$23,061,726	\$23,061,726
7	Change in Net Capital Included in Rate Base	\$17,816,654	\$0	\$0
	Capital Included in Rate Base			
8	Depreciation Expense	\$0	\$0	\$0
9	Incremental Capital Amount	\$17,816,654	\$17,816,654	\$17,816,654
10	Cost of Removal	\$1,719,991	\$0	\$0
	Page 15 of 23, Line 7, Col (a)			
11	<b>Total Net Plant in Service</b>	<b>\$19,536,645</b>	<b>\$19,536,645</b>	<b>\$19,536,645</b>
	Year 1 = Line 9 + Line 10; then = Prior Year			
	<b>Deferred Tax Calculation:</b>			
12	Composite Book Depreciation Rate	3.40%	3.26%	3.16%
13	Vintage Year Tax Depreciation:			
14	2018 Spend	\$13,898,861	\$571,028	\$528,156
15	Cumulative Tax Depreciation	\$13,898,861	\$14,469,889	\$14,998,045
	Year 1 = Page 4 of 23, Line 23; then = Page 4 of 23, Column (d)			
	Year 1 = Line 14; then = Prior Year Line 15 + Current Year Line 14			
16	Book Depreciation	\$392,049	\$751,812	\$728,751
17	Cumulative Book Depreciation	\$392,049	\$1,143,862	\$1,872,612
	Year 1 = Line 6 * Line 12 * 50%; then = Line 6 * Line 12			
	Year 1 = Line 16; then = Prior Year Line 17 + Current Year Line 16			
18	Cumulative Book / Tax Timer	\$13,506,812	\$13,326,028	\$13,125,433
19	Effective Tax Rate	21.00%	21.00%	21.00%
20	Deferred Tax Reserve	\$2,836,430	\$2,798,466	\$2,756,341
21	Less: FY 2018 Federal NOL	(\$2,998,499)	(\$2,998,499)	(\$2,998,499)
	Year 1 = Page 15 of 23, Line 15, Col (a); then = Prior Year Line 21			
22	Excess Deferred Tax	\$1,424,969	\$1,424,969	\$1,424,969
23	Net Deferred Tax Reserve before Proration Adjustment	\$1,262,901	\$1,224,936	\$1,182,811
	Year 1 = (Line 18 * 31.55% blended FY18 tax rate) - Line 20; then = Year 1 Sum of Lines 20 through 22			
	<b>Rate Base Calculation:</b>			
24	Cumulative Incremental Capital Included in Rate Base	\$19,536,645	\$19,536,645	\$19,536,645
25	Accumulated Depreciation	(\$392,049)	(\$1,143,862)	(\$1,872,612)
26	Deferred Tax Reserve	(\$1,262,901)	(\$1,224,936)	(\$1,182,811)
27	Year End Rate Base before Deferred Tax Proration	\$17,881,695	\$17,167,848	\$16,481,222
	Sum of Lines 24 through 26			
	<b>Revenue Requirement Calculation:</b>			
28	Average Rate Base before Deferred Tax Proration Adjustment	\$17,524,772	\$0	\$16,824,535
29	Proration Adjustment	\$0	\$0	(\$1,774)
30	Average ISR Rate Base after Deferred Tax Proration	\$17,524,772	\$16,822,761	\$16,822,761
31	Pre-Tax ROR	8.23%	8.23%	8.23%
32	Return and Taxes	\$1,442,289	\$1,384,513	\$1,384,513
33	Book Depreciation	\$751,812	\$728,751	\$728,751
34	<b>Annual Revenue Requirement</b>	<b>N/A</b>	<b>\$2,194,101</b>	<b>\$2,113,264</b>
	Line 32 + Line 33			
35	Revenue Requirement for 7 months (Sep 1, 2018 - Mar 31, 2019)		\$1,279,892	
	Line 34 * 7 ÷ 12			
	1/ 3.4% Composite Book Depreciation Rate approved per RIPUC Docket No. 4323, in effect until Aug 31, 2018			
	3.16% Composite Book Depreciation Rate for ISR plant, approved per RIPUC Docket No. 4770, effective on Sep 1, 2018, per Page 12 of 18			
	FY 19 Composite Book Depreciation Rate = 3.4% x 5/12 + 3.16% x 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			

The Narragansett Electric Company  
d/b/a National Grid

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

Line No.		Fiscal Year 2018 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$17,816,654				
2	Capital Repairs Deduction Rate	1/ 9.00%				
3	Capital Repairs Deduction	\$1,603,499				
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$17,816,654				
5	Less Capital Repairs Deduction	(\$1,603,499)				
6	Plant Additions Net of Capital Repairs Deduction	\$16,213,155				
7	Percent of Plant Eligible for Bonus Depreciation	100.00%				
8	Plant Eligible for Bonus Depreciation	\$16,213,155				
9	Bonus depreciation 100% category	2/ 16.38%				
10	Bonus depreciation 50% category	2/ 17.14%				
11	Bonus depreciation 40% category	2/ 17.69%				
12	Bonus depreciation 0% category	2/ 0.00%				
13	Total Bonus Depreciation Rate	51.21%				
14	Bonus Depreciation	\$8,303,081				
	<u>Remaining Tax Depreciation</u>					
15	Plant Additions	\$17,816,654				
16	Less Capital Repairs Deduction	\$1,603,499				
17	Less Bonus Depreciation	\$8,303,081				
18	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$7,910,074				
19	20 YR MACRS Tax Depreciation Rates	3.750%				
20	Remaining Tax Depreciation	\$296,628				
21	FY18 Loss incurred due to retirements	3/ \$1,975,662				
22	Cost of Removal	\$1,719,991				
23	Total Tax Depreciation and Repairs Deduction	\$13,898,861				

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

MACRS		20 Year MACRS Depreciation			
RS	basis:	Line 18	(c)	(d)	(e)
Fiscal Year	Annual	MACRS	Annual	Annual	Cumulative Tax Depr
2018	3.750%	\$296,628	\$7,910,074		\$13,898,861
2019	7.219%	\$571,028			\$14,469,889
2020	6.677%	\$528,156			\$14,998,045
2021	6.177%	\$488,605			\$15,486,650
2022	5.713%	\$451,903			\$15,938,553
2023	5.285%	\$418,047			\$16,356,600
2024	4.888%	\$386,644			\$16,743,245
2025	4.522%	\$357,694			\$17,100,938
2026	4.462%	\$352,948			\$17,453,886
2027	4.461%	\$352,868			\$17,806,754
2028	4.462%	\$352,948			\$18,159,702
2029	4.461%	\$352,868			\$18,512,570
2030	4.462%	\$352,948			\$18,865,518
2031	4.461%	\$352,868			\$19,218,386
2032	4.462%	\$352,948			\$19,571,334
2033	4.461%	\$352,868			\$19,924,202
2034	4.462%	\$352,948			\$20,277,149
2035	4.461%	\$352,868			\$20,630,018
2036	4.462%	\$352,948			\$20,982,965
2037	4.461%	\$352,868			\$21,335,834
2038	2.231%	\$176,474			\$21,512,308
		100.00%	\$7,910,074		

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

Line			(a)
<u>No.</u>	<b>Deferred Tax Subject to Proration</b>		<u>FY20</u>
1	Book Depreciation	Docket No. 4915, R. S. 5, Att. 1S, P 4 of 19, Col (a)	\$729,805
2	Bonus Depreciation		\$0
3	Remaining MACRS Tax Depreciation	Docket No. 4915, R. S. 5, Att. 1S, P 4 of 19, Col (a)	(\$528,156)
4	FY18 tax (gain)/loss on retirements		<u>\$0</u>
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	\$201,649
6	Effective Tax Rate		<u>21.00%</u>
7	Deferred Tax Reserve	Line 5 * Line 6	<u>\$42,346</u>
	<b>Deferred Tax Not Subject to Proration</b>		
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
11	Cumulative Book / Tax Timer		
12	Effective Tax Rate		
13	Deferred Tax Reserve		
14	Total Deferred Tax Reserve	Line 7 + Line 13	\$42,346
15	Net Operating Loss		
16	Net Deferred Tax Reserve	Line 14 + Line 15	\$42,346
	<b>Allocation of FY 2018 Estimated Federal NOL</b>		
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 2018 Federal NOL		
21	Allocated FY 2018 Federal NOL Not Subject to Proration		
22	Allocated FY 2018 Federal NOL Subject to Proration		
23	Effective Tax Rate		
24	Deferred Tax Benefit subject to proration		
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	\$42,346
	<b>Proration Calculation</b>		
		(h)	(i)
		<u>Number of Days in Month</u>	<u>Proration Percentage</u>
			(j)
			<u>FY20</u>
26	April	30	91.78%
27	May	31	83.29%
28	June	30	75.07%
29	July	31	66.58%
30	August	31	58.08%
31	September	30	49.86%
32	October	31	41.37%
33	November	30	33.15%
34	December	31	24.66%
35	January	31	16.16%
36	February	28	8.49%
37	March	31	0.00%
38	Total	<u>365</u>	<u>\$19,399</u>
39	Deferred Tax Without Proration	Line 25	\$42,346
40	Average Deferred Tax without Proration	Line 25 * 50%	\$21,173
41	Proration Adjustment	Line 38 - Line 40	(\$1,774)

**Column Notes:**

- (a) Docket no. 4915, Revised section 5, Att. 1S, Page 4 of 19, Col (a)
- (i) Sum of remaining days in the year (Col (h)) ÷ 365

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

Line No.		Fiscal Year 2019 (a)	Fiscal Year 2020 (b)
<u>Capital Investment Allowance</u>			
1	Non-Discretionary Capital	\$7,452,659	
2	Discretionary Capital Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	\$25,486,776	
3	Total Allowed Capital Included in Rate Base (non-intangible)	\$32,939,435	\$0
<u>Depreciable Net Capital Included in Rate Base</u>			
4	Total Allowed Capital Included in Rate Base in Current Year	\$32,939,435	\$0
5	Retirements	(\$10,649,479)	\$0
6	Net Depreciable Capital Included in Rate Base	\$43,588,914	\$43,588,914
<u>Change in Net Capital Included in Rate Base</u>			
7	Capital Included in Rate Base	\$32,939,435	\$0
8	Depreciation Expense	\$0	\$0
9	Incremental Capital Amount	\$32,939,435	\$32,939,435
10	Cost of Removal	\$101,073	
11	<b>Total Net Plant in Service</b>	<b>\$33,040,508</b>	<b>\$33,040,508</b>
<u>Deferred Tax Calculation:</u>			
12	Composite Book Depreciation Rate	3.26%	3.16%
13	Vintage Year Tax Depreciation:		
14	2019 Spend	\$9,919,837	\$1,842,847
15	Cumulative Tax Depreciation	\$9,919,837	\$11,762,684
16	Book Depreciation	\$710,499	\$1,377,410
17	Cumulative Book Depreciation	\$710,499	\$2,087,909
18	Cumulative Book / Tax Timer	\$9,209,338	\$9,674,775
19	Effective Tax Rate	21.00%	21.00%
20	Deferred Tax Reserve	\$1,933,961	\$2,031,703
21	Add: FY 2019 Federal NOL incremental utilization	\$991,622	\$991,622
22	Net Deferred Tax Reserve before Proration Adjustment	\$2,925,583	\$3,023,325
<u>Rate Base Calculation:</u>			
23	Cumulative Incremental Capital Included in Rate Base	\$33,040,508	\$33,040,508
24	Accumulated Depreciation	(\$710,499)	(\$2,087,909)
25	Deferred Tax Reserve	(\$2,925,583)	(\$3,023,325)
26	Year End Rate Base before Deferred Tax Proration	\$29,404,426	\$27,929,274
<u>Revenue Requirement Calculation:</u>			
27	Average Rate Base before Deferred Tax Proration Adjustment	\$14,702,213	\$28,666,850
28	Proration Adjustment	\$0	\$2,587
29	Average ISR Rate Base after Deferred Tax Proration	\$14,702,213	\$28,669,437
30	Pre-Tax ROR	8.23%	8.23%
31	Return and Taxes	\$1,209,992	\$2,359,495
32	Book Depreciation	\$710,499	\$1,377,410
33	Annual Revenue Requirement	\$1,920,491	\$3,736,904
34	Revenue Requirement of Plant	\$1,120,287	\$3,736,904
35	Revenue Requirement of Intangible	\$434,302	\$705,779
36	<b>Revenue Requirement</b>	<b>\$1,554,589</b>	<b>\$4,442,683</b>

1/ 3.4%, Composite Book Depreciation Rate approved per RIPUC Docket No. 4323, in effect until Aug 31, 2018  
3.16%, Composite Book Depreciation Rate for ISR plant, approved per RIPUC Docket No. 4770, effective on Sep 1, 2018  
FY 19 Composite Book Depreciation Rate = 3.4% x 5 / 12 + 3.16% x 7 / 12

The Narragansett Electric Company  
d/b/a National Grid

FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY 2019 Incremental Capital Investments

Line No.		Fiscal Year 2019 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$32,939,435				
2	Capital Repairs Deduction Rate	1/ 9.68%				
3	Capital Repairs Deduction	\$3,188,562	Line 1 * Line 2			
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$32,939,435	Line 1			
5	Plant Additions	\$0				
6	Less Capital Repairs Deduction	\$3,188,562	Line 3			
7	Plant Additions Net of Capital Repairs Deduction	\$29,750,873	Line 4 + Line 5 - Line 6			
8	Percent of Plant Eligible for Bonus Depreciation	100.00%	Per Tax Department			
9	Plant Eligible for Bonus Depreciation	\$29,750,873	Line 7 * Line 8			
10	Bonus Depreciation Rate	3.50%	1 * 11.65% * 30%			
11	Bonus Depreciation Rate	10.70%	1 * 26.75% * 40%			
12	Total Bonus Depreciation Rate	14.20%	Line 10 + Line 11			
13	Bonus Depreciation	\$4,223,136	Line 9 * Line 12			
	<u>Remaining Tax Depreciation</u>					
14	Plant Additions	\$32,939,435	Line 1			
15	Less Capital Repairs Deduction	\$3,188,562	Line 3			
16	Less Bonus Depreciation	\$4,223,136	Line 13			
	Remaining Plant Additions Subject to 20 YR MACRS Tax					
17	Depreciation	\$25,527,737	Line 14 - Line 15 - Line 16			
18	20 YR MACRS Tax Depreciation Rates	3.750%	Per IRS Publication 946			
19	Remaining Tax Depreciation	\$957,290	Line 17 * Line 18			
20	FY19 (Gain)/Loss incurred due to retirements	\$1,449,776	Per Tax Department			
21	Cost of Removal	\$101,073	Page 6 of 23, Line 10			
22	Total Tax Depreciation and Repairs Deduction	\$9,919,837	Sum of Lines 3, 13, 19, 20, and 21			

1/ Capital Repairs percentage is the actual result of FY 2019 tax return

2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY 2019 tax return

3/ Actual Loss for FY 2019

20 Year MACRS Depreciation		Annual		Cumulative
MACRS	Line 17	\$25,527,737		
Fiscal Year				
2019	3.750%	\$957,290		\$9,919,837
2020	7.219%	\$1,842,847		\$11,762,684
2021	6.677%	\$1,704,487		\$13,467,171
2022	6.177%	\$1,576,848		\$15,044,019
2023	5.713%	\$1,458,400		\$16,502,419
2024	5.285%	\$1,349,141		\$17,851,560
2025	4.888%	\$1,247,796		\$19,099,356
2026	4.522%	\$1,154,364		\$20,253,720
2027	4.462%	\$1,139,048		\$21,392,768
2028	4.461%	\$1,138,792		\$22,531,560
2029	4.462%	\$1,139,048		\$23,670,608
2030	4.461%	\$1,138,792		\$24,809,400
2031	4.462%	\$1,139,048		\$25,948,447
2032	4.461%	\$1,138,792		\$27,087,240
2033	4.462%	\$1,139,048		\$28,226,287
2034	4.461%	\$1,138,792		\$29,365,080
2035	4.462%	\$1,139,048		\$30,504,127
2036	4.461%	\$1,138,792		\$31,642,920
2037	4.462%	\$1,139,048		\$32,781,967
2038	4.461%	\$1,138,792		\$33,920,760
2039	2.231%	\$569,524		\$34,490,284
	100.00%	\$25,527,737		

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

Line No.			(a) FY20
<b>Deferred Tax Subject to Proration</b>			
1	Book Depreciation	Docket No. 4915, R. S. 5, Att. 1S, P 7 of 19, Col (a)	\$243,233
2	Bonus Depreciation		\$0
3	Remaining MACRS Tax Depreciation	Docket No. 4915, R. S. 5, Att. 1S, P 7 of 19, Col (a)	(\$537,263)
4	FY 2019 tax (gain)/loss on retirements		\$0
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	(\$294,029)
6	Effective Tax Rate		21.00%
7	Deferred Tax Reserve	Line 5 * Line 6	(\$61,746)
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction		
9	Cost of Removal		
10	Book/Tax Depreciation Timing Difference at 3/31/2018		
11	Cumulative Book / Tax Timer		
12	Effective Tax Rate		
13	Deferred Tax Reserve		
14	Total Deferred Tax Reserve	Line 7 + Line 13	(\$61,746)
15	Net Operating Loss		\$0
16	Net Deferred Tax Reserve	Line 14 + Line 15	(\$61,746)
<b>Allocation of FY 2019 Estimated Federal NOL</b>			
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		
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	Line 7 + Line 24	(\$61,746)
<b>Proration Calculation</b>			
		(h)	(i)
		<u>Number of Days in Month</u>	<u>Proration Percentage</u>
			(j) FY20
26	April	30	91.80% (\$4,724)
27	May	31	83.33% (\$4,288)
28	June	30	75.14% (\$3,866)
29	July	31	66.67% (\$3,430)
30	August	31	58.20% (\$2,995)
31	September	30	50.00% (\$2,573)
32	October	31	41.53% (\$2,137)
33	November	30	33.33% (\$1,715)
34	December	31	24.86% (\$1,279)
35	January	31	16.39% (\$844)
36	February	29	8.47% (\$436)
37	March	31	0.00% \$0
38	Total	366	(\$28,286)
39	Deferred Tax Without Proration	Line 25	(\$61,746)
40	Average Deferred Tax without Proration	Line 39 * 50%	(\$30,873)
41	Proration Adjustment	Line 38 - Line 40	\$2,587

**Column Notes:**

- (a) Docket no. 4995, Revised section 5 Revised: Attachment 1R, Page 4 of 19, column (a)
- (i) Sum of remaining days in the year (Col (h)) ÷ 365
- (j) Current Year Line ÷ 12 × Current Month Col (i)

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
FY 2020 Revenue Requirement on FY 2019 Intangible Investment

Line No.	Reference	Item 1 (a)	Item 2 (b)	FY19 Total (c) = (a) + (b)	Item 1 (d)	Item 2 (e)	FY 20 Total (f) = (d) + (e)
1	Capital Investment						
2	Start of Rev. Req. Period	09/01/18	09/01/18	09/01/18	04/01/19	04/01/19	04/01/19
3	End of Rev. Req. Period	03/31/19	03/31/19	03/31/19	03/31/20	03/31/20	03/31/20
4	Investment Name	Volt-Var Optimization for Lincoln Ope. Center	Volt-Var Optimization IS		Volt-Var Optimization for Lincoln Ope. Center	Volt-Var Optimization IS	
5	Work Order	90000194754	90000194755		90000194754	90000194755	
6	Total Spend	\$2,140,000	\$1,320,626	\$3,460,626	\$2,140,000	\$1,320,626	\$3,460,626
7	In Service Date	06/19/18	07/11/18		06/19/18	07/11/18	
8	Book Amortization Period	84	84		84	84	
9	Beginning Book Balance	\$2,089,048	\$1,289,183	\$3,378,230	\$1,910,714	\$1,179,131	\$3,089,845
10	Ending Book Balance	\$1,910,714	\$1,179,131	\$3,089,845	\$1,605,000	\$990,470	\$2,595,470
11	Average Book Balance	\$1,999,881	\$1,234,157	\$3,234,038	\$1,757,857	\$1,084,800	\$2,842,657
12	Deferred Tax Calculation:						
13	Tax Amortization Period	36	36		36	36	
14	Tax Expensing	\$0	\$0	\$0	\$0	\$0	\$0
15	Tax Bonus Rate	0%	0%	\$0	0%	0%	\$0
16	Bonus Depreciation	\$0	\$0	\$0	\$0	\$0	\$0
17	Beginning Acc. Tax Balance	\$713,262	\$440,165	\$1,153,427	\$713,262	\$440,165	\$1,153,427
18	Ending Acc. Tax Balance	\$713,262	\$440,165	\$1,153,427	\$1,664,492	\$1,027,183	\$2,691,675
19	Average Acc. Tax Balance	\$713,262	\$440,165	\$1,153,427	\$1,188,877	\$733,674	\$1,922,551
20	Beginning Acc. Dep. Balance	\$50,952	\$31,443	\$82,396	\$229,286	\$141,496	\$370,781
21	Ending Acc. Dep. Balance	\$229,286	\$141,496	\$370,781	\$535,000	\$330,157	\$865,157
22	Average Acc. Dep. Balance	\$140,119	\$86,470	\$226,589	\$382,143	\$235,826	\$617,969
23	Average Book / Tax Timer	\$573,143	\$353,695	\$926,838	\$806,734	\$497,848	\$1,304,582
24	Effective Tax Rate	21%	21%		21%	21%	
25	Deferred Tax Reserve	\$120,360	\$74,276	\$194,636	\$169,414	\$104,548	\$273,962
26	Rate Base Calculation:						
27	Average Book Balance	\$1,999,881	\$1,234,157	\$3,234,038	\$1,757,857	\$1,084,800	\$2,842,657
28	Deferred Tax Reserve	\$120,360	\$74,276	\$194,636	\$169,414	\$104,548	\$273,962
29	Average Rate Base	\$1,879,521	\$1,159,881	\$3,039,402	\$1,588,443	\$980,252	\$2,568,695
30	Revenue Requirement Calculation:						
31	Pre-Tax ROR	4.80%	4.80%		8.23%	8.23%	
32	Return and Taxes	\$90,233	\$55,684	\$145,917	\$130,729	\$80,675	\$211,404
33	Book Depreciation	\$178,333	\$110,052	\$288,386	\$305,714	\$188,661	\$494,375
34	Annual Revenue Requirement	\$268,566	\$165,736	\$434,302	\$436,443	\$269,336	\$705,779

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
MACRS Tables For Information Systems**

Line No.	Annual Rate			Monthly Cumulative Rate				
	Year			Year	Period	Cumulative Rate		
1	Yr 1	33.33%	33.33%	1	1	33.33%	2.78%	Yr 1 - Monthly rate
2	Yr 2	44.45%	77.78%	1	2	33.33%		
3	Yr 3	14.81%	92.59%	1	3	33.33%		
4	Net Salvage Value	7.41%	100.00%	1	4	33.33%		
11				1	11	33.33%		
12				1	12	33.33%		
13				2	13	77.78%	3.70%	Yr 2 - Monthly rate
25				3	25	92.59%	1.23%	Yr 3 - Monthly rate
36				3	36	92.59%	0.62%	Yr 3 - Monthly rate
48				4	48	100.00%		
60				5	60	100.00%		
72				6	72	100.00%		
84				7	84	100.00%		
96				8	96	100.00%		
108				9	108	100.00%		
120				10	120	100.00%		
132				11	132	100.00%		
144				12	144	100.00%		
156				13	156	100.00%		
168				14	168	100.00%		
180				15	180	100.00%		
192				16	192	100.00%		
204				17	204	100.00%		
216				18	216	100.00%		
228				19	228	100.00%		
240				20	240	100.00%		
252				21	252	100.00%		
264				22	264	100.00%		
276				23	276	100.00%		
288				24	288	100.00%		
300				25	300	100.00%		

**The Narragansett Electric Company  
d/b/a National Grid  
Electric Infrastructure, Safety, and Reliability (ISR) Plan  
FY 2020 Revenue Requirement on FY 2020 Actual Incremental Capital Investment**

Line No.		Fiscal Year <u>2020</u> (a)
	<u>Capital Investment Allowance</u>	
1	Non-Discretionary Capital <span style="float: right;">Page 23 of 23, Line 1</span>	\$34,127,476
2	Discretionary Capital Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending <span style="float: right;">Page 23 of 23, Line 13</span>	\$39,597,335
3	Total Allowed Capital Included in Rate Base <span style="float: right;">Page 15 of 23, Line 4(c)</span>	\$73,724,811
	<u>Depreciable Net Capital Included in Rate Base</u>	
4	Total Allowed Capital Included in Rate Base in Current Year <span style="float: right;">Line 3</span>	\$73,724,811
5	Retirements <span style="float: right;">Page 15 of 23, Line 10, Col (c)</span>	\$4,015,632
6	Net Depreciable Capital Included in Rate Base <span style="float: right;">Year 1 = Line 4 - Line 5; Then = Prior Year Line 6</span>	\$69,709,179
	<u>Change in Net Capital Included in Rate Base</u>	
7	Capital Included in Rate Base <span style="float: right;">Line 3</span>	\$73,724,811
8	Depreciation Expense <span style="float: right;">Page 19 of 23, Line 41, Col (d) × 7 ÷ 12</span>	\$29,112,370
9	Incremental Capital Amount <span style="float: right;">Year 1 = Line 7 - Line 8; then = Prior Year Line 9</span>	\$44,612,441
10	Cost of Removal <span style="float: right;">Page 15 of 23, Line 7, Col (c)</span>	\$10,949,557
11	<b>Total Net Plant in Service</b> <span style="float: right;">Year 1 = Line 9 + Line 10, Then = Prior year</span>	<b>\$55,561,997</b>
	<u>Deferred Tax Calculation:</u>	
12	Composite Book Depreciation Rate <span style="float: right;">Page 17 of 23, Line 3, Col (e)</span>	1/ 3.16%
13	Vintage Year Tax Depreciation:	
14	2020 Spend <span style="float: right;">Year 1 = Page 12 of 23, Line 22</span>	, Then = \$35,527,606
15	Cumulative Tax Depreciation <span style="float: right;">Prior Year Line 15 + Current Year Line 14</span>	\$35,527,606
16	Book Depreciation <span style="float: right;">Year 1 = Line 6 * Line 12 * 50% ; Then = Line 6 * Line 12</span>	\$1,101,405
17	Cumulative Book Depreciation <span style="float: right;">Year 1 = Line 16; Then = Prior Year Line 17 + Current Year Line 16</span>	\$1,101,405
18	Cumulative Book / Tax Timer <span style="float: right;">Line 15 - Line 17</span>	\$34,426,201
19	Effective Tax Rate	21.00%
20	Deferred Tax Reserve <span style="float: right;">Line 18 * Line 19</span>	\$7,229,502
21	Add: FY 2020 Federal NOL Utilization <span style="float: right;">Page 15 of 23, Line 15, Col (c)</span>	(\$1,462,980)
22	Net Deferred Tax Reserve before Proration Adjustment <span style="float: right;">Sum of Lines 20 through 21</span>	\$5,766,522
	<u>Rate Base Calculation:</u>	
23	Cumulative Incremental Capital Included in Rate Base <span style="float: right;">Line 11</span>	\$55,561,997
24	Accumulated Depreciation <span style="float: right;">-Line 17</span>	(\$1,101,405)
25	Deferred Tax Reserve <span style="float: right;">-Line 22</span>	(\$5,766,522)
26	Year End Rate Base before Deferred Tax Proration <span style="float: right;">Sum of Lines 23 through 25</span>	\$48,694,071
	<u>Revenue Requirement Calculation:</u>	
27	Average Rate Base before Deferred Tax Proration Adjustment <span style="float: right;">Year 1 = Current Year Line 26 * Page 14 of 23, Line 16, Col(e); Then</span>	\$18,339,599
28	Proration Adjustment <span style="float: right;">Page 13 of 23, Line 41, Column (j)</span>	\$30,912
29	Average ISR Rate Base after Deferred Tax Proration <span style="float: right;">Line 28 + Line 29</span>	\$18,370,512
30	Pre-Tax ROR <span style="float: right;">Page 22 of 23, Line 36</span>	8.23%
31	Return and Taxes <span style="float: right;">Line 29 * Line 30</span>	\$1,511,893
32	Book Depreciation <span style="float: right;">Line 16</span>	\$1,101,405
33	<b>Annual Revenue Requirement</b> <span style="float: right;">Line 31 + Line 32</span>	<b>\$2,613,298</b>

1/ 3.16% = Composite Book Depreciation Rate for ISR plant per RIPUC Docket No. 4770 (Page 17 of 23, Line 3, Col (e))

Electric Infrastructure, Safety, and Reliability (ISR) Plan

Calculation of Tax Depreciation and Repairs Deduction on FY 2020 Incremental Capital Investments

Line No.		Fiscal Year 2020 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$73,724,811				
2	Capital Repairs Deduction Rate	24.67%				
3	Capital Repairs Deduction	\$18,187,911	Line 1 * Line 2	Line 17	\$53,137,706	Annual
	<u>Bonus Depreciation</u>					Cumulative
4	Plant Additions	\$73,724,811	Line 1	2020	\$1,992,664	\$35,527,606
5	Plant Additions	\$0		2021	\$3,836,011	\$39,363,617
6	Less Capital Repairs Deduction	\$18,187,911	Line 3	2022	\$3,548,005	\$42,911,621
7	Plant Additions Net of Capital Repairs Deduction	\$55,536,900	Line 4 + Line 5 - Line 6	2023	\$3,282,316	\$46,193,937
8	Percent of Plant Eligible for Bonus Depreciation	100.00%	Per Tax Department	2024	\$3,035,757	\$49,229,694
9	Plant Eligible for Bonus Depreciation	\$55,536,900	Line 7 * Line 8	2025	\$2,808,328	\$52,038,022
10	Bonus Depreciation Rate (Estimated)	4.32%	1 * 14.40% * 30%	2026	\$2,597,371	\$54,635,393
11	Bonus Depreciation Rate	0.00%		2027	\$2,402,887	\$57,038,280
12	Total Bonus Depreciation Rate	4.32%	Line 10 + Line 11	2028	\$2,371,004	\$59,409,285
13	Bonus Depreciation	\$2,399,194	Line 9 * Line 12	2029	\$2,370,473	\$61,779,758
	<u>Remaining Tax Depreciation</u>					
14	Plant Additions	\$73,724,811	Line 1	2030	\$2,371,004	\$64,150,762
15	Less Capital Repairs Deduction	\$18,187,911	Line 3	2031	\$2,370,473	\$66,521,235
16	Less Bonus Depreciation	\$2,399,194	Line 13	2032	\$2,371,004	\$68,892,240
17	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$53,137,706	Line 14 - Line 15 - Line 16	2033	\$2,370,473	\$71,262,713
18	20 YR MACRS Tax Depreciation Rates	3.750%	Per IRS Publication 946	2034	\$2,371,004	\$73,633,717
19	Remaining Tax Depreciation	\$1,992,664	Line 17 * Line 18			
20	FY20 Loss incurred due to retirements	\$1,998,280	Per Tax Department	2035	\$2,370,473	\$76,004,190
21	Cost of Removal	\$10,949,557	Page 11 of 23, Line 10	2036	\$2,371,004	\$78,375,195
22	Total Tax Depreciation and Repairs Deduction	\$35,527,606	Sum of Lines 3, 13, 19, 20, and 21	2037	\$2,370,473	\$80,745,668
	1/ Per Tax Department			2038	\$2,371,004	\$83,116,672
	2/ Per Tax Department			2039	\$2,370,473	\$85,487,145
	3/ Per Tax Department				\$1,185,502	\$86,672,648



The Narragansett Electric Company  
d/b/a National Grid

FY 2020 Electric ISR Revenue Requirement Reconciliation  
ISR Additions April 2019 through March 2020

<u>Line No.</u>	<u>Month</u>	<u>FY 2020 Plant Additions</u>	<u>In Rates</u>	<u>Not In Rates</u>	<u>Weight for Days</u>	<u>Weighted Average</u>	<u>Weight for</u>
		(a)	(b)	(c) = (a) - (b)	(d)	(e) = (d) * (c)	(f)=(c)/Total(c)
1							
2	1 Apr-19	8,742,450	6,236,917	2,505,533	0.958	2,401,136	3.40%
3	2 May-19	8,742,450	6,236,917	2,505,533	0.875	2,192,341	3.40%
4	3 Jun-19	8,742,450	6,236,917	2,505,533	0.792	1,983,547	3.40%
5	4 Jul-19	8,742,450	6,236,917	2,505,533	0.708	1,774,752	3.40%
6	5 Aug-19	8,742,450	6,236,917	2,505,533	0.625	1,565,958	3.40%
7	6 Sep-19	8,742,450	-	8,742,450	0.542	4,735,493	11.86%
8	7 Oct-19	8,742,450	-	8,742,450	0.458	4,006,956	11.86%
9	8 Nov-19	8,742,450	-	8,742,450	0.375	3,278,419	11.86%
10	9 Dec-19	8,742,450	-	8,742,450	0.292	2,549,881	11.86%
11	10 Jan-20	8,742,450	-	8,742,450	0.208	1,821,344	11.86%
12	11 Feb-20	8,742,450	-	8,742,450	0.125	1,092,806	11.86%
13	12 Mar-20	8,742,450	-	8,742,450	0.042	364,269	11.86%
14	Total	\$104,909,394	\$31,184,583	\$73,724,811		\$27,766,902	100.00%
15	<b>Total September 2019 through March 2020</b>			<b>\$ 61,197,147</b>			
16	<b>FY2020 Weighted Average Incremental Rate Base Percentage</b>					<b>37.66%</b>	

Column (a)=Page 15 of 23, Line 1(c)  
Column(b)=Page 15 of 23, Line 2(c)  
Line 15 = sum of Line 7(c) through Line 13(c)  
Line 16 = Line 14(f)/Line 14(c)

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

Line No.		Fiscal Year 2018 (a)	Fiscal Year 2019 (b)	Fiscal Year 2020 (c)	
<b><u>Capital Investment</u></b>					
1	ISR - Eligible Capital Investment	Col (a) = FY 2018 ISR Docket No.4682, Att MAL-1 P2, L3; Col (b)=FY 2019 ISR Docket No.4783, Att PCE-1 P3, Table 1; Col (c)= Section I of Att. PCE-1, Table 2	\$92,659,654	\$111,243,061	\$104,909,394
2	Intangible Assest included in Total Allowed Discretionary Capital	Col (a)=0; Col (b) = FY 2019 ISR Docket No. 4783, Att. MAL-1,Page 30 of 38, Line13; Col (c) = Actual per Operation	\$0	\$3,460,626	\$0
3	ISR - Eligible Capital Additions included in Rate Base per RIPUC Docket No. 4770	Docket No. 4770, S. C. Att. 2, Sch 11-ELEC, P5, L1, Col (a) = Col(a)+Col(b); Col(b)=Col(c)+Col(d); Col(c)=Col(e), Col(d)=Col(j)+Col(k)	\$74,843,000	\$74,843,000	\$31,184,583
4	Incremental ISR Capital Investment (non-intangible)	Line 1 - Line 2 - Line 3	<u>\$17,816,654</u>	<u>\$32,939,435</u>	<u>\$73,724,811</u>
<b><u>Cost of Removal</u></b>					
5	ISR - Eligible Cost of Removal	Col (a) =FY 2018 ISR Docket No. 4682; Col (b) = FY 2019 ISR Docket No. 4783, Att PCE-1 P3, Table 2, Col (c) = Section 1 of Att. PCE-1, Table 3	\$9,979,698	\$7,949,082	\$14,387,482
6	ISR - Eligible Cost of Removal in Rate Base per RIPUC Docket No. 4770	Schedule 6-ELEC, Docket No. 4770: Col(a)=Docket No. 4682, FY2018 ISR Elec Rec, [P2]L10×3÷12, [P1]L26+L45×7÷12; Col(b)=[P1]L45×5÷12+[P2]L18×7÷12; Col (c) = [P2]L18×5÷12+L39×7÷12	\$8,259,707	\$7,848,009	\$3,437,925
7	Incremental Cost of Removal	Line 5 - Line 6	<u>\$1,719,991</u>	<u>\$101,073</u>	<u>\$10,949,557</u>
<b><u>Retirements</u></b>					
8	ISR - Eligible Retirements/Actual	Col (a) =FY 2018 ISR Docket No. 4682; Col (b) = FY 2019 ISR Docket No. 4783, Att PCE-1 P3, Table 2, Col (c) =Per Company's Book	\$15,206,748	\$12,015,754	\$13,944,441
9	ISR - Eligible Retirements in Rate Base per RIPUC Docket No. 4770	Schedule 6-ELEC, Docket No. 4770: Col(a)=Docket No. 4682, FY2018 ISR Elec Rec, [P2]L5×3÷12+[P1]L25+L27+L46×7÷12; Col(b)=[P1]L46×5÷12+[P2]L19×7÷12; Col (c)=[P2]L19×5÷12+L40×7÷12	\$20,451,820	\$22,665,233	\$9,928,809
10	Incremental Retirements	Line 8 - Line 9	<u>(\$5,245,072)</u>	<u>(\$10,649,479)</u>	<u>\$4,015,632</u>
<b><u>Net NOL Position</u></b>					
11	ISR - (NOL)/Utilization	Col (a) =FY 2018 ISR Docket No. 4682; Col (b) = FY 2021 ISR Plan Docket No. 4995, Col (c) =Per Tax Departmen	(\$4,571,409)	\$1,506,783	\$0
12	less: (NOL)/Utilization recovered in transmission rates	Quarterly average transmission plant allocator per Integrated Facilities Agreement (IFA) * Line 11	<u>(\$1,572,911)</u>	<u>\$515,161</u>	<u>\$0</u>
13	Distribution-related (NOL)/Utilization	Maximum of (Line 11 - Line 12) or -Page 16 of 23, Line 9	(\$2,998,499)	\$991,622	\$0
14	(NOL)/Utilization in Rate Base per RIPUC Docket No. 4770	Docket No. 4770, S. C. Att. 2, Sch 11-ELEC, P. 12: Col (c) = L39×7÷12	\$0	\$0	\$1,462,980
15	Incremental (NOL)/Utilization	Line 13 - Line 14	<u>(\$2,998,499)</u>	<u>\$991,622</u>	<u>(\$1,462,980)</u>

The Narragansett Electric Company  
d/b/a National Grid

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

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Test Year July 2016	July & Aug 2017	12 Mths Aug 31 2018	12 Mths Aug 31 2019	12 Mths Aug 31 2020		
1 Total Base Rate Plant DIT Provision	\$18,265,666	\$2,580,654	\$5,847,765	\$4,355,117	\$707,056		
2 Excess DIT Amortization				(\$3,074,665)	(\$3,074,665)		
3 Total Base Rate Plant DIT Provision							
4 Incremental FY 18	\$4,261,399	\$4,181,310	\$10,558,267	\$3,183,499	(\$847,583.55)		
5 Incremental FY 19	\$0	\$2,305,665	\$4,261,399	(\$37,965)	(\$42,125)		
6 Incremental FY 20		\$7,229,502		\$2,128,597	\$177,068		
7 TOTAL Plant DIT Provision	\$4,261,399	\$6,352,031	\$14,819,666	\$5,274,131	\$6,516,862		
8 Distribution-related NOL			\$2,998,499	(\$991,622)	\$0		
9 Lesser of Distribution-related NOL or DIT Provision			\$2,998,499	(\$991,622)	\$0		

Line Notes:

- 1(b) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-ELEC, Page 2 of 23, Line 29, Col (e) - (a)
- 1(d) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-ELEC, Page 11 of 20, Line 3
- 1(e) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-ELEC, Page 11 of 20, Line 7
- 1(f) RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Schedule 11-ELEC, Page 11 of 20, Line 50
- 2 RIPUC Docket Nos. 4770/4780, Compliance, Revised Rebuttal Attachment 1, Sch. 11-ELEC, P.11 of 20, L. 51; P. 12 of 20, L. 42 & 52
- 3 Col(e) = Line 1(b)÷12×3+ Line1(d) + Line1(e)÷12×7; Col (f) = (Line1(e) + Line2(e) )÷12×5 + (Line1(f) + Line2(f))÷12×5 + (Line1(g) + Line2(g) )÷12×7
- 4(a)-(c) Cumulative DIT per vintage year ISR revenue requirement calculations (P.3, L.20(a)+L.22(a); P.3, L.20(b)+L.22(b); P.3, L.20(c)+L.22(c))
- 5(a)-(c) Cumulative DIT per vintage year ISR revenue requirement calculations (P.6, L.20(b)+ P.9, L.23(c); P.6, L.20(c)+ P.9, L.23(f))
- 6(a)-(c) Cumulative DIT per vintage year ISR revenue requirement calculations (P.11, L.20(a))
- 4(d) -6(g) Year over year change in cumulative DIT shown in Cols (a) through (c)
- 7 Sum of Lines 3 through 6
- 8 Page 15 of 23, Line 13
- 9 Lesser of Line 7 or Line 8

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID RIPUC Docket Nos. 4770/4780 Compliance Attachment 2 Schedule 6-ELEC Page 3 of 5				
The Narragansett Electric Company d/b/a National Grid Depreciation Expense - Electric For the Test Year Ended June 30, 2017 and the Rate Year Ending August 31, 2019				
		Adjusted Plant Balance (a)	Approved Rate (b)	Test Year Depreciation (c) = (a) x (b)
<b>Intangible Plant</b>				
1	303.00			
2				
3				
4				
5				
6				
7	330.00			
8	331.00			
9	332.00			
10				
11				
12				
13				
14				
15				
16				
17	360			
18	362			
19	365			
20	367.1			
21	360.00			
22	360.10			
23	361.00			
24	362.00			
25	362.10			
26	362.55			
27	364.00			
28	365.00			
29	366.10			
30	366.20			
31	367.10			
32	368.10			
33	368.20			
34	368.30			
35	369.10			
36	369.20			
37	369.21			
38	370.10			
39	370.20			
40	370.30			
41	370.35			
42	371.00			
43	373.10			
44	373.20			
45	374.00			
46				
47				
48				
49				
50				
51	389.00			
52	390.00			
53	391.00			
54	391.00			
55	393.00			
56	394.00			
57	395.00			
58	395.00			
59	397.00			
60	397.10			
61	397.50			
62	398.00			
63	399.00			
64	399.10			
65				
66				
67				
68				

The Narragansett Electric Company d/b/a National Grid ISR Depreciation Rate per RIPUC Docket No. 4770			
	Adjusted Plant Balance (d)	Average Rate (e)=(f)/(g)	Approved Depreciation (f)
1	\$ 1,463,098,971	3.16%	\$ 46,183,339
2	\$ 7,918,047	4.65%	\$ 368,062
3	\$ 1,471,017,018	<b>3.16%</b>	\$ 46,551,401
4			
5	\$ 42,889,885		
6	\$ 1,513,906,902		

Line Notes:  
1 Docket No. 4770, Schedule 6-ELEC: [P3 and P4] on left Line 47  
2 Docket No. 4770, Schedule 6-ELEC: [P3 and P4] on Left Lines 59 through 61  
3 Line 1+Line 2  
5 Docket No. 4770, Schedule 6-ELEC: [P3 and P4] on Left Lines 59 through 61  
6 Line 3+Line 6

Column Notes:  
(a) - (c) - Per Docket 4770/4780 Compliance Attachment 2, Schedule 6 ELEC, Pages 3 & 4

THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID RIPUC Docket Nos. 4770/4780 Compliance Attachment 2 Schedule 6-ELEC Page 1 of 5				The Narragansett Electric Company d/b/a National Grid ISR Depreciation Expense in Base Rates less non-ISR eligible plant      ISR Eligible Amount	
The Narragansett Electric Company d/b/a National Grid Depreciation Expense - Electric For the Test Year Ended June 30, 2017 and the Rate Year Ending August 31, 2019					
Line No.	Description	Reference (a)	Amount (b)	(c)	(d)
1	Total Company Rate Year Distribution Depreciation Expense	Sum of Page 2, Line 16 and Line 17	\$50,128,332		
2	Test Year Depreciation Expense	Per Company Books	\$69,031,187		
3	Less : Test Year IFA related Depreciation Expense	Page 4, Line 30, Column (c)	(\$19,814,202)		
4	Less: ARO and other adjustments	Page 4, Line 30, Column (b) + Column (d)	(\$55,610)		
5	Adjusted Total Company Test Year Distribution Depreciation Expense	Sum of Line 2 through Line 4	\$49,161,375		
6	Depreciation Expense Adjustment	Line 1 - Line 5	\$966,957		
7					
8			Per Book Amount		
9	Test Year Depreciation Expense 12 Months Ended 06/30/17:				
10	Total Distribution Utility Plant 06/30/17	Page 4, Line 28, Column (e)	\$2,141,474,644	(\$39,763,450)	\$2,101,711,193
11	Less Non Depreciable Plant	Page 4, Line 26, Column (e)	(\$627,567,742)		(\$627,567,742)
12	Depreciable Utility Plant 6/30/17	Line 10 + Line 11	\$1,513,906,902	(\$39,763,450)	\$1,474,143,451
13					
14	Plus: Added Plant 2 Mos Ended 08/31/17	Schedule 11-ELEC, Page 6, Line 7	\$12,473,833	\$0	\$12,473,833
15	Less: Streetlights retired in the 2 Mos Ended 08/31/17	Per Company Books	(\$1,057,011)	\$0	(\$1,057,011)
16	Less: Retired Plant 2 Months Ended 08/31/17	1/ Line 14 x Retirement Rate	(\$3,699,739)	\$0	(\$3,699,739)
17	Depreciable Utility Plant 08/31/17	Line 12 + Line 14 + Line 16	\$1,521,623,985	(\$39,763,450)	\$1,481,860,535
18					
19	Average Depreciable Plant from 06/30/17 to 08/31/17	(Line 12 + Line 17)/2	\$1,517,765,443		\$1,478,001,993
20					
21	Composite Book Rate %	As Approved in RIPUC Docket No. 4323	3.40%		3.40%
22					
23	Book Depreciation Reserve 06/30/17	Page 5, Line 69, Column (e)	\$652,405,159		
24	Plus: Book Depreciation Expense excluding Streetlight Retirement	1/6 of (Line 19 excl. Line 15 x Line 21)	\$8,603,666		\$8,381,334
25	Less: Streetlights retired in the 2 Mos Ended 08/31/17 and Dep. for 2 Mos	1/12 of (Line 15 x SL Dep Rate)	(\$1,307)		(\$1,307)
26	Less: Net Cost of Removal/(Salvage)	2/ Line 14 x Cost of Removal Rate	(\$1,281,063)		
27	Less: Retired Plant	Line 16	(\$3,699,739)		
28	Book Depreciation Reserve 08/31/17	Sum of Line 23 through Line 27	\$656,026,715		
29					
30	Depreciation Expense 12 Months Ended 08/31/18				
31	Total Utility Plant 08/31/17	Line 10 + Line 14 + Line 15 + Line 16	\$2,149,191,727	(\$39,763,450)	\$2,109,428,277
32	Less Non Depreciable Plant	Line 11	(\$627,567,742)	\$0	(\$627,567,742)
33	Depreciable Utility Plant 08/31/17	Line 31 + Line 32	\$1,521,623,985	(\$39,763,450)	\$1,481,860,535
34					
35	Plus: Plant Added in 12 Months Ended 08/31/18	Schedule 11-ELEC, Page 6, Line 14	\$74,843,000	\$0	\$74,843,000
36	Less: Plant Retired in 12 Months Ended 08/31/18	1/ Line 35 x Retirement rate	(\$22,198,434)	\$0	(\$22,198,434)
37	Depreciable Utility Plant 08/31/18	Sum of Line 33 through Line 36	\$1,574,268,551	(\$39,763,450)	\$1,534,505,101
38					
39	Average Depreciable Plant for 12 Months Ended 08/31/18	(Line 33 + Line 37)/2	\$1,547,946,268	(\$39,763,450)	\$1,508,182,818
40					
41	Composite Book Rate %	As Approved in RIPUC Docket No. 4323	3.40%		3.40%
42					
43	Book Depreciation Reserve 08/31/17	Line 28	\$656,026,715		
44	Plus: Book Depreciation 08/31/18	Line 39 x Line 41	\$52,630,173		\$51,278,216
45	Less: Net Cost of Removal/(Salvage)	2/ Line 35 x Cost of Removal Rate	(\$7,686,376)		
46	Less: Retired Plant	Line 36	(\$22,198,434)		
47	Book Depreciation Reserve 08/31/18	Sum of Line 43 through Line 46	\$678,772,079		
1/	3 year average retirement over plant addition in service FY 15 ~ FY17		29.66%		
2/	3 year average Cost of Removal over plant addition in service FY 15 ~ FY17		10.27%		

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 4915  
FY 2020 Electric Infrastructure, Safety,  
and Reliability Plan Reconciliation Filing  
Attachment MAL-1  
Page 19 of 23

Compliance Attachment 2  
Schedule 6-ELEC  
Page 2 of 5

The Narragansett Electric Company d/b/a National Grid  
Depreciation Expense - Electric

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  
ISR Depreciation Expense in Base Rates  
(Continued)

Line No.	Description	Reference	Amount	less non-ISR eligible plant (c)	ISR Eligible Amount (d)
		(a)	(b)		
1	<b>Rate Year Depreciation Expense 12 Months Ended 08/31/19:</b>				
2	Total Utility Plant 08/31/18	Page 1, Line 31 + Line 35 + Line 36	\$2,201,836,293	(\$39,763,450)	\$2,162,072,843
3	Less Non-Depreciable Plant	Page 1, Line 11	(\$627,567,742)	\$0	(\$627,567,742)
4	Depreciable Utility Plant 08/31/18	Line 2 + Line 3	\$1,574,268,551	(\$39,763,450)	\$1,534,505,101
5					
6	Plus: Added Plant 12 Months Ended 08/31/19	Schedule 11-ELEC, Page 6, Line 38	\$77,541,000	(\$2,698,000)	\$74,843,000
7	Less: Depreciable Retired Plant	1/ Line 6 x Retirement rate	(\$22,998,661)	\$800,227	(\$22,198,434)
8					
9	Depreciable Utility Plant 08/31/19	Sum of Line 4 through Line 7	\$1,628,810,891	(\$41,661,224)	\$1,587,149,667
10					
11	Average Depreciable Plant for Rate Year Ended 08/31/19	(Line 4 + Line 9)/2	\$1,601,539,721	(\$40,712,337)	\$1,560,827,384
12					
13	Proposed Composite Rate %	Page 4, Line 18, Columnn (f)	3.15%		3.16%
14					
15	Book Depreciation Reserve 08/31/18	Page 1, Line 47	\$678,772,079		
16	Plus: Book Depreciation Expense	Line 11 x Line 13	\$50,375,341		\$49,322,145
17	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-ELECTRIC, Part VI, Page 6	(\$247,009)		(\$247,009)
18	Less: Net Cost of Removal/(Salvage)	2/ Line 6 x Cost of Removal Rate	(\$7,963,461)		
19	Less: Retired Plant	Line 7	(\$22,998,661)		
20	Book Depreciation Reserve 08/31/19	Sum of Line 15 through Line 19	\$697,938,290		\$49,075,136
21					
22	<b>Rate Year Depreciation Expense 12 Months Ended 08/31/20:</b>				
23	Total Utility Plant 08/31/19	Line 2 + Line 6 + Line 7	\$2,256,378,633	(\$41,661,224)	\$2,214,717,409
24	Less Non-Depreciable Plant	Page 1, Line 11	(\$627,567,742)	\$0	(\$627,567,742)
25	Depreciable Utility Plant 08/31/19	Line 23 + Line 24	\$1,628,810,891	(\$41,661,224)	\$1,587,149,667
26					
27	Plus: Added Plant 12 Months Ended 08/31/20	Schedule 11-ELEC, Page 5, Line 15(i)	\$2,000,000	(\$2,000,000)	\$0
28	Less: Depreciable Retired Plant	1/ Line 27 x Retirement rate	(\$593,200)	\$593,200	\$0
29					
30	Depreciable Utility Plant 08/31/20	Sum of Line 25 through Line 28	\$1,630,217,691	(\$43,068,024)	\$1,587,149,667
31					
32	Average Depreciable Plant for Rate Year Ended 08/31/20	(Line 25 + Line 30)/2	\$1,629,514,291	(\$42,364,624)	\$1,587,149,667
33					
34	Proposed Composite Rate %	Page 4, Line 18, Column (f)	3.15%		3.16%
35					
36	Book Depreciation Reserve 08/31/20	Line 20	\$697,938,290		
37	Plus: Book Depreciation Expense	Line 32 x Line 34	\$51,255,262		\$50,153,929
38	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-ELECTRIC, Part VI, Page 6	(\$247,009)		(\$247,009)
39	Less: Net Cost of Removal/(Salvage)	2/ Line 27 x Cost of Removal Rate	(\$205,400)		
40	Less: Retired Plant	Line 28	(\$593,200)		
41	Book Depreciation Reserve 08/31/20	Sum of Line 36 through Line 40	\$748,147,943	\$ 436,419,633	\$49,906,920
42					
43	<b>Rate Year Depreciation Expense 12 Months Ended 08/31/21:</b>				
44	Total Utility Plant 08/31/20	Line 23 + Line 27 + Line 28	\$2,257,785,433	(\$43,068,024)	\$2,214,717,409
45	Less Non-Depreciable Plant	Page 1, Line 11	(\$627,567,742)	\$0	(\$627,567,742)
46	Depreciable Utility Plant 08/31/20	Line 44 + Line 45	\$1,630,217,691	(\$43,068,024)	\$1,587,149,667
47					
48	Plus: Added Plant 12 Months Ended 08/31/21	Schedule 11-ELEC, Page 5, Line 15(l)	\$2,000,000	(\$2,000,000)	\$0
49	Less: Depreciable Retired Plant	1/ Line 48 x Retirement rate	(\$593,200)	\$593,200	\$0
50					
51	Depreciable Utility Plant 08/31/21	Sum of Line 46 through Line 49	\$1,631,624,491	(\$44,474,824)	\$1,587,149,667
52					
53	Average Depreciable Plant for Rate Year Ended 08/31/21	(Line 46 + Line 51)/2	\$1,630,921,091	(\$43,771,424)	\$1,587,149,667
54					
55	Proposed Composite Rate %	Page 4, Line 18, Columnn (f)	3.15%		3.16%
56					
57	Book Depreciation Reserve 08/31/20	Line 41	\$748,147,943		
58	Plus: Book Depreciation Expense	Line 53 x Line 55	\$51,299,512		\$50,153,929
59	Plus: Unrecovered Reserve Adjustment	Schedule NWA-1-ELECTRIC, Part VI, Page 6	(\$247,009)		(\$247,009)
60	Less: Net Cost of Removal/(Salvage)	2/ Line 48 x Cost of Removal Rate	(\$205,400)		
61	Less: Retired Plant	Line 49	(\$593,200)		
62	Book Depreciation Reserve 08/31/21	Sum of Line 57 through Line 61	\$798,401,846		\$49,906,920
1/	3 year average retirement over plant addition in service FY 15 ~ FY17		29.66%		Retirements
2/	3 year average Cost of Removal over plant addition in service FY 15 ~ FY17		10.27%		COR

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

Line	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	<u>End of FY 2018</u>	<u>ISR Additions</u>	<u>Non-ISR Add's</u>	<u>Total Add's</u>	<u>Bk Depr (L)</u>	<u>Retirements</u>	<u>COR</u>	<u>End of FY 2019</u>
1	Plant In Service	\$1,595,499	\$111,243	\$3,137	\$114,380	(\$12,016)		\$1,697,863
2	Accumulated Depr	\$672,116				(\$12,016)	(\$7,949)	\$705,047
3	Net Plant	\$923,383				\$52,896		\$992,816
4	Property Tax Expense	\$30,354						\$32,077
5	Effective Prop tax Rate	3.29%						3.23%
	<b>Effective tax Rate Calculation</b>							
6	Plant In Service	\$1,697,863	\$104,909	\$2,602	\$107,511	(\$14,649)		\$1,790,725
7	Accumulated Depr	\$705,047				(\$14,649)	(\$14,387)	\$730,354
8	Net Plant	\$992,816				\$54,344		\$1,060,371
9	Property Tax Expense	\$32,077						\$32,568
10	Effective Prop tax Rate	3.23%						3.07%
	<b>Property Tax Recovery Calculation</b>							
		<u>(a)</u>	<u>(b)</u>	<u>(c)</u>	<u>(d)</u>	<u>(e)</u>	<u>(f)</u>	<u>(g)</u>
		<u>Cumulative Incom. ISR Prop. Tax for FY2018</u>				<u>Cumulative Incom. ISR Prop. Tax for FY2019</u>		
						<u>1st 5 months</u>		
11	Incremental ISR Additions	\$92,660				\$111,243		
12	Book Depreciation: base allowance on ISR eligible plant	(\$43,032)				(\$43,032)		
13	Book Depreciation: current year ISR additions	(\$1,317)				(\$1,628)		
14	COR	\$9,980				\$7,949		
15	Net Plant Additions	\$58,291				\$74,532		
16	RY Effective Tax Rate	3.98%				3.98%		
17	ISR Year Effective Tax Rate	3.29%				3.23%		
18	RY Effective Tax Rate	3.98%				3.98%		
19	RY Effective Tax Rate 5 mos for FY 2019					5 month		
20	RY Net Plant times 5 mo rate	\$746,900				\$746,900		
21	FY 2014 Net Adds times ISR Year Effective Tax rate	\$1,566				\$1,232		
22	FY 2015 Net Adds times ISR Year Effective Tax rate	\$34,308				\$32,324		
23	FY 2016 Net Adds times ISR Year Effective Tax rate	\$33,535				\$32,090		
24	FY 2017 Net Adds times ISR Year Effective Tax rate	\$38,200				\$37,040		
25	FY 2018 Net Adds times ISR Year Effective Tax rate	\$58,291				\$55,850		
26	FY 2019 Net Adds times ISR Year Effective Tax rate					\$74,532		
27	Total ISR Property Tax Recovery							\$800

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

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Cumulative Increm. ISR Prop. Tax for FY2019				Cumulative Increm. ISR Prop. Tax for FY2020		
	7 months						
28	Incremental ISR Additions	\$36,400					\$73,725
29	Book Depreciation: base allowance on ISR eligible plant	\$0					\$0
30	Book Depreciation: current year ISR additions	(\$999)					(\$1,101)
31	COR	\$101					\$10,950
32	Net Plant Additions	\$35,502					\$83,573
33	RY Effective Tax Rate	3.28%					3.38%
34	ISR Property Tax Recovery on non-ISR	1.91%					
35	ISR Year Effective Tax Rate	3.23%			3.07%		
36	RY Effective Tax Rate	3.28%	-0.05%		3.38%		
37	RY Effective Tax Rate 7 mos for FY 2019		-0.03% 7 mos				
38	RY Net Plant times rate difference	\$930,873	-0.03%	(\$279)	\$902,404		(2,816)
39	Non-ISR plant times rate difference				(\$2,269)		7
40	FY 2018 Net Incremental times rate difference	\$18,393	1.88%	\$346	\$17,664		543
41	FY 2019 Net Incremental times rate difference	\$35,502	1.88%	\$669	\$33,630		1,033
42	FY 2020 Net Incremental times rate difference				\$83,573		2,567
43	FY 2021 Net Adds times rate difference						
44	Total ISR Property Tax Recovery			\$736			1,334

Line Notes	Line Notes
1(a) - 5(h)	Per Docket No. 4783, FY2019 Rec, Part 2 -Attachment MAL-2, Page 13, Line 1(a)-Line 5(h)
6(a) - 10(a)	= 1 ~ 5(h)
6(b)	Page 15 of 23, Line 1, Column (c)/1000
6(c)	Per Company's Book
6(d)	Line 6(b) + Line 6(c)
6(f), 7(f)	Per Company's Book ×
6(h)	Sum of L6 C(a), L6 C(d), L6 C(f)
7(e)	[Docket 4770, C. Att. 2, Sch 6-ELEC, P2: L (16(b)+ L17(b)) × 5/12+ L (37(b) + 38(b)) × 7/12] + ( (Page 3 of 23, L 6(a) + Page 6 of 23, L 6(a) × 0.0316+ ,Page 9 of 23, L29(f))/1000 +Page 11 of 23, L6(a) × 0.0316 × 0.5/1000
7(g)	Page 15 of 23, Line 8, Column (c)/1000
7(h)	Sum of L7 C(a), L7 C(e), L7 C(f), L7 C(g)
8(h)	6(h)-7(h)
9(h)	Per Company's Book
10(h)	Line 9(h) ÷ 8(h)
11(a) - 27(g)	Docket No. 4783, FY19 Rec, Part 2 -Attachment MAL-2, Page 12, Line 6(a)-Line 30(g)
28(a) - 44(c)	Docket No. 4783, FY19 Rec, Part 2 -Attachment MAL-2, Page 12, Line 31(a)-Line 50(c)
28(f)	Page 11 of 23, Line 4(a) ÷ 1000
29(f)	FY20 depreciation is reflected in the NBY at 38(e)
30(f)	- Page 11 of 23, Line 16(a) ÷ 1000
31(f)	Page 11 of 23, Line 10(a) ÷ 1000
32(f)	Sum of Lines 28(f) through 31(f)
33(f)	Docket No. 4770, R. Rebuttal Att. 1, Sch 7-ELEC, P.2, L.3 (c) / [Sch 6-E, P2, ((L9 - L20) × 5/12+ (L30-L41) × 7/12)]
35(e)	=10(h)
36(e)	=33(f)
36(f)	35(e) -36(e)
37(f)	=36(f)
38(e)	=38(a) × 5-12 + Docket 4770, C. Att. 2, (Sch 6-E, P2, L30 - L41) × 7-12/1000
39(e)	Docket No. 4770, R. Rebuttal Att. 1, Sch 11-ELEC, P.5, L.8(e) + L.8(g)
39(g)	39(e) x37(f)
39(e)	=40(a)-Page 3 of 23, Line 16(c)
40(g)	40(e) x37(f)
41(g)	41(a)- (Page 6 of 23, Line 16(b) + Page 9 of 23, Line 29(f))/1000
41(e)	41(e) x37(f)
42(e)	=32(f)
42(g)	42(e) x37(f)
44(g)	Sum of Lines 38(g) through 43(g)

The Narragansett Electric Company  
d/b/a National Grid  
Electric Infrastructure, Safety, and Reliability (ISR) Plan  
Calculation of Weighted Average Cost of Capital

Line  
No.

	(a)	(b)	(c)	(d)	(e)
Weighted Average Cost of Capital as approved in RIPUC Docket No. 4323 at 35% income tax rate effective April 1, 2013					
	Ratio	Rate	Weighted Rate	Taxes	Return
3 Long Term Debt	49.95%	4.96%	2.48%		2.48%
4 Short Term Debt	0.76%	0.79%	0.01%		0.01%
5 Preferred Stock	0.15%	4.50%	0.01%		0.01%
6 Common Equity	49.14%	9.50%	4.67%	2.51%	7.18%
7	<u>100.00%</u>		<u>7.17%</u>	<u>2.51%</u>	<u>9.68%</u>

8  
9 (d) - Column (c) x 35% divided by (1 - 35%)  
10

Weighted Average Cost of Capital as approved in RIPUC Docket No. 4323 at 21% income tax rate effective January 1, 2018					
	Ratio	Rate	Weighted Rate	Taxes	Return
13 Long Term Debt	49.95%	4.96%	2.48%		2.48%
14 Short Term Debt	0.76%	0.79%	0.01%		0.01%
15 Preferred Stock	0.15%	4.50%	0.01%		0.01%
16 Common Equity	49.14%	9.50%	4.67%	1.24%	5.91%
17	<u>100.00%</u>		<u>7.17%</u>	<u>1.24%</u>	<u>8.41%</u>

18  
19 (d) - Column (c) x 21% divided by (1 - 21%)  
20  
21

Weighted Average Cost of Capital as approved in RIPUC Docket No. 4770 effective September 1, 2018					
	Ratio	Rate	Weighted Rate	Taxes	Return
24 Long Term Debt	48.35%	4.62%	2.23%		2.23%
25 Short Term Debt	0.60%	1.76%	0.01%		0.01%
26 Preferred Stock	0.10%	4.50%	0.00%		0.00%
27 Common Equity	50.95%	9.28%	4.73%	1.26%	5.99%
28	<u>100.00%</u>		<u>6.97%</u>	<u>1.26%</u>	<u>8.23%</u>

29  
30 (d) - Column (c) x 21% divided by (1 - 21%)  
31

32	FY18 Blended Rate	Line 7(e) x 75% + Line 17(e) x 25%			9.36%
34	FY19 Blended Rate	Line 17 x 5 ÷ 12 + Line 28 x 7 ÷ 12			8.31%
36	FY20 and after Rate	Line 28(e)			8.23%

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Incremental Capital Investment**

Line No.			<u>Fiscal Year 2020</u> (a)	<u>In Base Rates Included In Docket No. 4770</u> (b)	<u>Amount to be Included in FY 2020 ISR</u> (c) = (a) - (b)
	<b><u>Non Discretionary Capital</u></b>				
1	FY 2020 Non-Discretionary Capital Additions	Column (a): Att. PCE-1, Section I, Table 2; Column (b): Docket No. 4770, Schedule 11- ELEC, Page 5, Line 5, Col (c) + Col (d)	<b>\$47,765,393</b>	<b>\$13,637,917</b>	\$34,127,476
	<b><u>Discretionary Capital</u></b>				
2	Cumulative FY 2019 Discretionary Capital ADDITIONS	Docket No. 4783 -ISR Plan Reconciliation	\$333,735,665		
3	FY 2020 Discretionary Capital ADDITIONS	Column (a): Att. PCE-1, Section I, Table 2	\$57,144,002		
4	Cumulative Actual Discretionary Capital Additions	Line 2 + Line 3	<u>\$390,879,667</u>		
5	Cumulative FY 2019 Discretionary Capital SPENDING	Docket No. 4783 -ISR Plan Reconciliation	\$381,654,545		
6	FY 2020 Discretionary Capital SPENDING	Column (a): Att. PCE-1, Section II, Table 4	\$57,980,314		
7	Cumulative Actual Discretionary Capital Spending	Line 5 + Line 6	<u>\$439,634,859</u>		
8	Cumulative FY 2019 Approved Discretionary Capital SPENDING	Docket No. 4783 -ISR Plan Reconciliation	\$364,211,536		
9	FY 2020 Approved Discretionary Capital SPENDING	Column (a): Att. PCE-1, Section II, Table 4	\$61,270,000		
10	Cumulative Actual Approved Discretionary Capital Spending	Line 8 + Line 9	<u>\$425,481,536</u>		
11	Cumulative Allowed Discretionary Capital Included in Rate Base	Lesser of Line 4, Line 7, or Line 10	\$390,879,667		
12	Prior Year Cumulative Allowed Discretionary Capital Included in Rate Base	Docket No. 4783 -ISR Plan Reconciliation	<u>\$333,735,665</u>		
13	Total Allowed Discretionary Capital Included in Rate Base Current Year	Line 11 - Line 12	<u>\$57,144,002</u>	<u>\$17,546,667</u>	<u>\$39,597,335</u>
14	<b>Total Allowed Capital Included in Rate Base Current Year</b>	Line 3 + Line 6	<u><b>\$104,909,394</b></u>	<u><b>\$31,184,583</b></u>	<u><b>\$73,724,811</b></u>



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: MELISSA A. LITTLE  
ATTACHMENTS**

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Attachment MAL-2

FY 2019 Electric Infrastructure, Safety and Reliability Plan Revenue Requirement for the five-month period April 1, 2018 through August 31, 2018

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Revenue Requirement Summary for the 5-month period April 1, 2018 through August 31, 2018**

Line No.		As Reconciled Apr~Aug FY 2019 (a)	FY 2019 - Tax Update Apr~Aug FY 2019 (b)	Variance (e) = (c) + (d)
<b><u>Operation and Maintenance (O&amp;M) Expenses:</u></b>				
1	Current Year Vegetation Management (VM)	\$4,057,817	\$4,057,817	\$0
2	Current Year Inspection & Maintenance (I&M)	\$251,277	\$251,277	\$0
3	Current Year Other Programs	\$52,792	\$52,792	\$0
4	Electric Contact Voltage expenses included in RIPUC Docket No. 4323	(\$68,229)	(\$68,229)	\$0
5	<b>Total O&amp;M Expense Component of Revenue Requirement</b>	<b>\$4,293,657</b>	<b>\$4,293,657</b>	<b>\$0</b>
<b><u>Capital Investment:</u></b>				
6	FY 2019 Revenue Requirement on FY 2012 Actual Incremental Capital Investment	\$97,255	\$97,255	\$0
7	FY 2019 Revenue Requirement on FY 2013 Actual Incremental Capital Investment	(\$393,472)	(\$393,472)	\$0
8	FY 2019 Revenue Requirement on FY 2014 Actual Incremental Capital Investment	\$271,208	\$271,208	\$0
9	FY 2019 Revenue Requirement on FY 2015 Actual Capital Investment	\$1,404,557	\$1,404,557	\$0
10	FY 2019 Revenue Requirement on FY 2016 Actual Capital Investment	\$1,395,551	\$1,395,551	\$0
11	FY 2019 Revenue Requirement on FY 2017 Actual Capital Investment	\$1,356,179	\$1,356,179	\$0
12	FY 2019 Revenue Requirement on FY 2018 Actual Capital Investment	\$2,494,752	\$2,494,752	\$0
13	FY 2019 Revenue Requirement on FY 2019 Actual Capital Investment	\$1,757,124	\$1,916,002	\$158,878
14	Subtotal	\$8,383,155	\$8,542,033	\$158,878
15	FY 2019 Property Tax Recovery Adjustment	\$799,626	\$799,626	\$0
16	<b>Total Capital Investment Component of Revenue Requirement</b>	<b>\$9,182,781</b>	<b>\$9,341,659</b>	<b>\$158,878</b>
17	<b>Total Fiscal Year Revenue Requirement</b>	<b>\$13,476,437</b>	<b>\$13,635,315</b>	<b>\$158,878</b>

Column Notes:

(a) As approved per RIPUC Docket No. 4783 Reconciliation Filing, Attachment MAL-1, P 1, Column (c)

Line Notes:

1(b)~4(b) As actual per RIPUC Docket No. 4783 Reconciliation Filing, Attachment MAL-1, P 1, Column (c)  
5 Sum of Lines 1 through 4  
6(b) Page 25 of 35, Line 32(h)×5÷12  
7(b) Page 22 of 35, Line 37(g)×5÷12  
8(b) Page 19 of 35, Line 35(f)×5÷12  
9(b) Page 16 of 35, Line 37(e)×5÷12  
10(b) Page 13 of 35, Line 37(d)×5÷12  
11(b) Page 10 of 35, Line 34(c)×5÷12  
12(b) Page 7 of 35, Line 34(b)×5÷12  
13(b) Page 2 of 35, Line 37(a)  
14 Sum of Lines 6 through 13  
15(b) Page 31 of 35, Line 74(k) × 1,000  
16 Sum of Lines 14 through 15  
17 Line 5 + Line 16

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

Line No.		Fiscal Year 2019 (a)
<u>Capital Investment Allowance</u>		
1	<i>Non-Discretionary Capital</i> Attachment PCE-1, Page 3, Table 1	\$40,183,659
2	<i>Discretionary Capital</i> Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending Page 29 of 35, Line 14	\$67,598,776
3	Total Allowed Capital Included in Rate Base Line 1 + Line 2	\$107,782,435
<u>Depreciable Net Capital Included in Rate Base</u>		
4	Total Allowed Capital Included in Rate Base in Current Year Line 3	\$107,782,435
5	Retirements	1/ \$12,015,754
6	Net Depreciable Capital Included in Rate Base Column (a) = Line 4 - Line 5 ; Column (b) = Prior Year Line 6	\$95,766,681
<u>Change in Net Capital Included in Rate Base</u>		
7	Capital Included in Rate Base Line 3	\$107,782,435
8	Depreciation Expense Per Settlement Agreement Docket No. 4323, excluding General Plant	\$43,031,774
9	Incremental Capital Amount Column (a)= Line 7 - Line 8	\$64,750,661
10	Cost of Removal Attachment PCE-1, Page 4, Table 2	\$7,949,082
11	<b>Total Net Plant in Service</b> Line 9 + Line 10	<b>\$72,699,743</b>
<u>Deferred Tax Calculation:</u>		
12	Composite Book Depreciation Rate As approved per R.I.P.U.C. Docket No. 4323	3.40%
13	Vintage Year Tax Depreciation:	
14	2019 Spend Page 3 of 35, Line 23	\$36,783,359
15	Cumulative Tax Depreciation Prior Year Line 15 + Current Year Line 14	\$36,783,359
16	Book Depreciation Column (a) = Line 6 * Line 12 * 50% ; Column (b) = Line 6 * Line 12	\$1,628,034
17	Cumulative Book Depreciation Prior Year Line 17 + Current Year Line 16	\$1,628,034
18	Cumulative Book / Tax Timer Line 15 - Line 17	\$35,155,325
19	Effective Tax Rate	2/ 21.00%
20	Deferred Tax Reserve Line 18 * Line 19	\$7,382,618
21	Add: FY 2019 Federal NOL incremental utilization Page 33 of 35, Line 12(p)	\$991,622
22	Excess Deferred Tax	\$0
23	Net Deferred Tax Reserve before Proration Adjustment Sum of Lines 20 through 22	\$8,374,240
<u>Rate Base Calculation:</u>		
24	Cumulative Incremental Capital Included in Rate Base Line 11	\$72,699,743
25	Accumulated Depreciation -Line 17	(\$1,628,034)
26	Deferred Tax Reserve -Line 23	(\$8,374,240)
27	Year End Rate Base Sum of Lines 24 through 26	\$62,697,469
<u>Revenue Requirement Calculation:</u>		
28	Average Rate Base before Deferred Tax Proration Adjustment Column (a) = Current Year Line 28 ÷ 2; Column (b) = (Prior Year Line 28 + Current Year Line 28) ÷ 2	\$31,348,735
29	Proration Adjustment Page 4 of 35, Line 41, Column (j)	\$42,768
30	Average ISR Rate Base after Deferred Tax Proration Line 28 + Line 29	\$31,391,502
31	Pre-Tax ROR Page 35 of 35, Line 48, column (e)	8.41%
32	Return and Taxes Line 30 * Line 31	\$2,640,025
33	Book Depreciation Line 16	\$1,628,034
34	Annual Revenue Requirement Line 32 + Line 33	\$4,268,059
35	Revenue Requirement of Plant for 5 months (April 1, 2018 - August 31, 2018) Line 34 x 5/12	\$1,778,358
36	Revenue Requirement of Intangible for 5 months (April 1, 2018 - August 31, 2018) Page 5 of 35, Line 30, Column (c)	\$137,645
37	<b>Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)</b> Line 35 + Line 36	<b>\$1,916,002</b>

1/ Based on actual retirements of capital investment

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2019 Incremental Capital Investments

Line No.		Fiscal Year 2019 (a)	(b)	(c)	(d)	(e)
1	Capital Repairs Deduction					
2	Plant Additions	\$107,782,435				
3	Capital Repairs Deduction Rate	9.68%				
	Capital Repairs Deduction	\$10,433,421				
4	Bonus Depreciation					
5	Plant Additions	\$107,782,435				
6	Plant Additions	\$0				
7	Less Capital Repairs Deduction	\$10,433,421				
8	Plant Additions Net of Capital Repairs Deduction	\$97,349,014				
9	Percent of Plant Eligible for Bonus Depreciation	100.00%				
10	Plant Eligible for Bonus Depreciation	\$97,349,014				
11	Bonus Depreciation Rate (April 2018 - December 2018)	3.50%				
12	Bonus Depreciation Rate (January 2019 - March 2019)	10.70%				
13	Total Bonus Depreciation Rate	14.20%				
	Bonus Depreciation	\$13,818,693				
14	Remaining Tax Depreciation					
15	Plant Additions	\$107,782,435				
16	Plant Additions	\$0				
17	Less Capital Repairs Deduction	\$10,433,421				
18	Less Bonus Depreciation	\$13,818,693				
19	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$83,530,321				
20	20 YR MACRS Tax Depreciation Rates	3.750%				
	Remaining Tax Depreciation	\$3,132,387				
21	FY19 Loss incurred due to retirements	\$1,449,776				
22	Cost of Removal	\$7,949,082				
23	Total Tax Depreciation and Repairs Deduction	\$36,783,359				

MACRS basis:	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039		
Line 18	\$83,530,321	\$3,132,387	\$6,030,054	\$5,577,320	\$5,159,668	\$4,772,087	\$4,414,577	\$4,082,962	\$3,777,241	\$3,727,123	\$3,726,288	\$3,727,123	\$3,726,288	\$3,727,123	\$3,726,288	\$3,726,288	\$3,727,123	\$3,726,288	\$3,727,123	\$3,726,288	\$3,726,288	\$1,863,561	
		3.750%	7.219%	6.677%	6.177%	5.713%	5.285%	4.888%	4.522%	4.462%	4.461%	4.461%	4.462%	4.461%	4.462%	4.461%	4.462%	4.461%	4.462%	4.461%	4.461%	2.231%	100%
		\$36,783,359	\$42,813,413	\$48,390,732	\$53,550,400	\$58,322,487	\$62,737,065	\$66,820,027	\$70,597,268	\$74,324,391	\$78,050,678	\$81,777,801	\$85,504,089	\$89,231,212	\$92,957,499	\$96,684,622	\$100,410,910	\$104,138,033	\$107,864,321	\$111,591,443	\$115,317,731	\$117,181,293	

1/ Capital Repairs percentage is the actual result of FY 2019 tax return  
2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY 2019 tax return  
3/ Actual Loss for FY 2019

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

Line No.	Description	Reference	(a) FY 19
<b>Deferred Tax Subject to Proration</b>			
1	Book Depreciation	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 1, C (b)	\$1,017,686
2	Bonus Depreciation	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 2, C (b)	\$0
3	Remaining MACRS Tax Depreciation	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 3, C (b)	(\$2,269,538)
4	FY18 tax (gain)/loss on retirements	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 4, C (b)	(\$3,492,895)
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	(\$4,744,747)
6	Effective Tax Rate		21.00%
7	Deferred Tax Reserve	Line 5 * Line 6	(\$996,397)
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 8, C (b)	(\$24,816,000)
9	Cost of Removal	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 9, C (b)	(\$11,834,000)
10	Book/Tax Depreciation Timing Difference at Mar 31		\$0
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	(\$36,650,000)
12	Effective Tax Rate		21.00%
13	Deferred Tax Reserve	Line 11 * Line 12	(\$7,696,500)
14	Total Deferred Tax Reserve	Line 7 + Line 13	(\$8,692,897)
15	Net Operating Loss	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 15, C (b)	\$0
16	Net Deferred Tax Reserve	Line 14 + Line 15	(\$8,692,897)
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	(\$4,744,747)
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	(\$36,650,000)
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	(\$41,394,747)
20	Total FY 2019 Federal NOL	RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L 20, 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	(\$996,397)
<b>Proration Calculation</b>			
		(h) <u>Number of Days in Month</u>	(i) <u>Proration Percentage</u>
26	43191	30	91.78% (\$76,208)
27	43221	31	83.29% (\$69,156)
28	43252	30	75.07% (\$62,332)
29	43282	31	66.58% (\$55,280)
30	43313	31	58.08% (\$48,227)
31	43344	30	49.86% (\$41,403)
32	43374	31	41.37% (\$34,351)
33	43405	30	33.15% (\$27,526)
34	43435	31	24.66% (\$20,474)
35	43466	31	16.16% (\$13,422)
36	43497	28	8.49% (\$7,052)
37	43525	31	0.00% \$0
38	Total	365	(\$455,431)
39	Deferred Tax Without Proration	Line 25	(\$996,397)
40	Average Deferred Tax without Proration	Line 25 * 50%	(\$498,198)
41	Proration Adjustment	Line 38 - Line 40	\$42,768

**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 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2019 Intangible Investment**

Line No.	Reference	Item 1 (a)	Item 2 (b)	Total (c) = (a) + (b)
<u>Capital Investment</u>				
1	Start of Rev. Req. Period	Beginning of FY19	04/01/18	04/01/18
2	End of Rev. Req. Period	End of FY19	08/31/18	08/31/18
Volt-Var Optimization for Lincoln Ope. Center				
3	Investment Name	Per Company's Book	Volt-Var Optimization IS	
4	Work Order	Per Company's Book	90000194754	90000194755
5	Total Spend		\$2,140,000	\$1,320,626
6	In ServiceDate	Per Company's Book	06/19/18	07/11/18
7	Book AmortizationPeriod	Per Company's Book	84	84
8	04/01/2018 Book Balance	Line 5 ÷ Line 7 × month to 04/01/2018	\$0	\$0
9	08/31/2018 Book Balance	Line 5 ÷ Line 7 × month to 08/31/2018	\$2,089,048	\$1,289,183
10	Average Book Balance	(Line 8 + Line 9) ÷ 2	\$1,044,524	\$644,591
<u>Deferred Tax Calculation:</u>				
11	Tax Amortization Period	Page 6 of 35	36	36
12	Tax Expensing	Per Tax Department	\$0	\$0
13	Tax Bonus Rate	Per Tax Department	0%	0%
14	Bonus Depreciation	Year 1 = (L. 5 - L. 12) × L. 13, after = 0 (L. 5 - L. 12 - L. 14Y1 × 0; Y2 × 33.33%; Y3 × 72.78%; Y4 × 92.59%; Y5 × 100%)	\$0	\$0
15	04/01/2018 Acc. Tax Balance	(L. 5 - L. 12 - L. 14Y1 × 33.33%; Y2 × 77.78%; Y3 × 92.59%; Y4 × 100%)	\$713,262	\$440,165
16	08/31/2018 Acc. Tax Balance	Y3 × 92.59%; Y4 × 100%)	\$356,631	\$220,082
17	Average Acc. Tax Balance	(Line 15 + Line 16) ÷ 2	\$356,631	\$220,082
18	04/01/2018 Acc. Dep. Balance	Line 5 - Line 8	\$0	\$0
19	08/31/2018 Acc. Dep. Balance	Line 5 - Line 9	\$50,952	\$31,443
20	Average Acc. Dep. Balance	(Line 18 + Line 19) ÷ 2	\$25,476	\$15,722
21	Average Book / Tax Timer	Line 17 - Line 20	\$331,155	\$204,361
22	Effective Tax Rate		21%	21%
23	Deferred Tax Reserve	Line 21 × Line 22	\$69,543	\$42,916
<u>Rate Base Calculation:</u>				
24	Average Book Balance	Line 10	\$1,044,524	\$644,591
25	Deferred Tax Reserve	Line 23	\$69,543	\$42,916
26	Average Rate Base	Line 24 - Line 25	\$974,981	\$601,676
<u>Revenue Requirement Calculation:</u>				
27	Pre-Tax ROR	Page 35 of 35, Line 48, column (e) × 5 ÷ 12	3.50%	3.50%
28	Return and Taxes	Line 26 × Line 27	\$34,165	\$21,084
29	Book Depreciation	Line 9 - Line 8	\$50,952	\$31,443
30	Annual Revenue Requirement	Line 28 + Line 29	\$85,117	\$52,527

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
MACRS Tables For Information Systems**

Line	Annual Rate		Monthly Cumulative Rate				
<u>No.</u>	<u>Year</u>		<u>Year</u>	<u>Period</u>	<u>Rate</u>		
1	Yr 1	33.33%	33.33%	1	1	33.33%	2.78% Yr 1 - Monthly rate
2	Yr 2	44.45%	77.78%	1	2	33.33%	
3	Yr 3	14.81%	92.59%	1	3	33.33%	
4	Net Salvage Value	7.41%	100.00%	1	4	33.33%	
11				1	11	33.33%	
12				1	12	33.33%	
13				2	13	77.78%	3.70% Yr 2 - Monthly rate
25				3	25	92.59%	1.23% Yr 3 - Monthly rate
36				3	36	92.59%	0.62% Yr 3 - Monthly rate
48				4	48	100.00%	
60				5	60	100.00%	
72				6	72	100.00%	
84				7	84	100.00%	
96				8	96	100.00%	
108				9	108	100.00%	
120				10	120	100.00%	
132				11	132	100.00%	
144				12	144	100.00%	
156				13	156	100.00%	
168				14	168	100.00%	
180				15	180	100.00%	
192				16	192	100.00%	
204				17	204	100.00%	
216				18	216	100.00%	
228				19	228	100.00%	
240				20	240	100.00%	
252				21	252	100.00%	
264				22	264	100.00%	
276				23	276	100.00%	
288				24	288	100.00%	
300				25	300	100.00%	

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2018 Actual Incremental Capital Investment**

Line No.		Fiscal Year 2018 (a)	Fiscal Year 2019 (b)
<u>Capital Investment Allowance</u>			
1	Non-Discretionary Capital Per RIPUC Docket No. 4682	\$35,909,398	\$0
2	Discretionary Capital Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending Per RIPUC Docket No. 4682	<u>\$56,750,256</u>	<u>\$0</u>
3	Total Allowed Capital Included in Rate Base Line 1 + Line 2	\$92,659,654	\$0
<u>Depreciable Net Capital Included in Rate Base</u>			
4	Total Allowed Capital Included in Rate Base in Current Year Line 3	\$92,659,654	\$0
5	Retirements 1/	<u>\$15,206,748</u>	<u>\$0</u>
6	Net Depreciable Capital Included in Rate Base Year 1 = Line 4 - Line 5; then = Prior Year Line 6	\$77,452,906	\$77,452,906
<u>Change in Net Capital Included in Rate Base</u>			
7	Capital Included in Rate Base Line 3	\$92,659,654	\$0
8	Depreciation Expense Per Settlement Agreement Docket No. 4323, excluding General Plant	<u>\$43,031,774</u>	<u>\$0</u>
9	Incremental Capital Amount Year 1 = Line 7 - Line 8; then = Prior Year Line 9	\$49,627,880	\$49,627,880
10	Cost of Removal Per RIPUC Docket No. 4682	\$9,979,698	\$9,979,698
11	<b>Total Net Plant in Service</b> Line 9 + Line 10	<b><u>\$59,607,578</u></b>	<b><u>\$59,607,578</u></b>
<u>Deferred Tax Calculation:</u>			
12	Composite Book Depreciation Rate As approved per R.I.P.U.C. Docket No. 4323	3.40%	3.40%
13	Vintage Year Tax Depreciation:		
14	2018 Spend Year 1 = Page 8 of 35, Line 23; then = Page 8 of 35, Column (d), Line 5	\$65,019,515	\$2,969,765
15	Cumulative Tax Depreciation Year 1 = Line 14; then = Prior Year Line 15 + Current Year Line 14	\$65,019,515	\$67,989,280
16	Book Depreciation Year 1 = Line 6 * Line 12 * 50% ; then = Line 6 * Line 12	\$1,316,699	\$2,633,399
17	Cumulative Book Depreciation Year 1 = Line 16; then = Prior Year Line 17 + Current Year Line 16	\$1,316,699	\$3,950,098
18	Cumulative Book / Tax Timer Line 15 - Line 17	\$63,702,816	\$64,039,182
19	Effective Tax Rate 2/	<u>21.00%</u>	<u>21.00%</u>
20	Deferred Tax Reserve Line 18 * Line 19	\$13,377,591	\$13,448,228
21	Less: FY 2018 Federal NOL Page 33 of 35, Line 12(o)	(\$2,998,499)	(\$2,998,499)
22	Excess Deferred Tax Page 34 of 35, Line 7(f)	\$6,688,796	\$6,688,796
23	Net Deferred Tax Reserve Sum of Lines 20 through 22	<u>\$17,067,888</u>	<u>\$17,138,525</u>
<u>Rate Base Calculation:</u>			
24	Cumulative Incremental Capital Included in Rate Base Line 11	\$59,607,578	\$59,607,578
25	Accumulated Depreciation -Line 17	(\$1,316,699)	(\$3,950,098)
26	Deferred Tax Reserve -Line 23	(\$17,067,888)	(\$17,138,525)
27	Year End Rate Base Sum of Lines 24 through 26	<u>\$41,222,990</u>	<u>\$38,518,955</u>
<u>Revenue Requirement Calculation:</u>			
28	Average Rate Base before Deferred Tax Proration Adjustment Year 1 = Current Year Line 27 ÷ 2; then Average of (Prior + Current Year Line 27) (a) = Page 9 of 35, Line 41, Column (j); (b) = Page 9 of 35, Line 41,	\$20,611,495.17	\$39,870,972
29	Proration Adjustment Column (k)	\$433,768	\$10,186
30	Average ISR Rate Base after Deferred Tax Proration Line 28 + Line 29	\$21,045,263	\$39,881,158
31	Pre-Tax ROR (a) = Page 35 of 35, Line 52; (b) = Page 35 of 35, Line 48	9.36%	8.41%
32	Return and Taxes Line 28 * Line 31	\$1,969,837	\$3,354,005
33	Book Depreciation Line 16	\$1,316,699	\$2,633,399
34	<b>Annual Revenue Requirement revised</b> Line 32 + Line 33	<b><u>\$3,286,536</u></b>	<b><u>\$5,987,404</u></b>
35	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018) Line 34 x 5/12		\$2,494,752

1/ Actual Retirements

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2018 Incremental Capital Investments

Line No.		Fiscal Year 2018 (a)	(b)	(c)	(d)
	<u>Capital Repairs Deduction</u>				
1	Plant Additions	\$92,659,654			\$65,019,515
2	Capital Repairs Deduction Rate	9.00%			\$67,989,280
3	Capital Repairs Deduction	1/ \$8,339,369		\$41,138,181	\$70,736,077
	<u>Bonus Depreciation</u>				
4	Plant Additions	\$92,659,654			\$65,019,515
5	Less Capital Repairs Deduction	(\$8,339,369)			\$67,989,280
6	Plant Additions Net of Capital Repairs Deduction	\$84,320,285			\$70,736,077
7	Percent of Plant Eligible for Bonus Depreciation	100.00%			\$73,277,182
8	Plant Eligible for Bonus Depreciation	\$84,320,285			\$75,627,406
9	Bonus depreciation 100% category	2/ 16.38%			\$77,801,559
10	Bonus depreciation 50% category	2/ 17.14%			\$79,812,394
11	Bonus depreciation 40% category	2/ 40% * 44.23%			\$81,672,662
12	Bonus depreciation 0% category	2/ 0% * 5.11%			\$83,508,248
13	Total Bonus Depreciation Rate	51.21%			\$85,343,422
14	Total Bonus Depreciation	\$43,182,104			\$87,179,008
	<u>Remaining Tax Depreciation</u>				
15	Plant Additions	\$92,659,654			\$90,849,768
16	Less Capital Repairs Deduction	(\$8,339,369)			\$92,684,942
17	Less Bonus Depreciation	(\$43,182,104)			\$94,520,527
18	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$41,138,181			\$96,355,702
19	20 YR MACRS Tax Depreciation Rates	3.750%			\$98,191,287
20	Remaining Tax Depreciation	\$1,542,682			\$100,026,462
21	FY18 Loss incurred due to retirements	3/ \$1,975,662			\$101,862,047
22	Cost of Removal	\$9,979,698			\$103,697,222
23	Total Tax Depreciation and Repairs Deduction			100% \$41,138,181	\$104,615,014

1/ Actual Capital Repairs FY2018  
2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY2018 tax return  
3/ Actual Loss for FY2018

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

Line No.	Deferred Tax Subject to Proration	C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (b); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L1, C(c)	(a) FY 18	(b) FY 19	
1	Book Depreciation		\$992,555	\$1,985,110	
2	Bonus Depreciation		(\$26,966,349)	\$0	
3	Remaining MACRS Tax Depreciation		(\$1,139,188)	(\$3,115,135)	
4	FY18 tax (gain)/loss on retirements		(\$1,760,937)	\$0	
5	Cumulative Book / Tax Timer	Sum of Lines 1 through 4	(\$28,873,919)	(\$1,130,025)	
6	Effective Tax Rate		35.00%	21.00%	
7	Deferred Tax Reserve	Line 5 * Line 6	(\$10,105,872)	(\$237,305)	
<b>Deferred Tax Not Subject to Proration</b>					
8	Capital Repairs Deduction		(\$17,498,293)		
9	Cost of Removal		(\$9,646,000)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		\$0		
11	Cumulative Book / Tax Timer	Line 8 + Line 9 + Line 10	(\$27,144,293)		
12	Effective Tax Rate		35.00%		
13	Deferred Tax Reserve	Line 11 * Line 12	(\$9,500,503)		
14	Total Deferred Tax Reserve	Line 7 + Line 13	(\$19,606,374)	(\$237,305)	
15	Net Operating Loss		\$0		
16	Net Deferred Tax Reserve	Line 14 + Line 15	(\$19,606,374)	(\$237,305)	
<b>Allocation of FY 2018 Estimated Federal NOL</b>					
17	Cumulative Book/Tax Timer Subject to Proration	Col (b) = Line 5	(\$28,873,919)		
18	Cumulative Book/Tax Timer Not Subject to Proration	Line 11	(\$27,144,293)		
19	Total Cumulative Book/Tax Timer	Line 17 + Line 18	(\$56,018,212)		
20	Total FY 2018 Federal NOL		\$0		
21	Allocated FY 2018 Federal NOL Not Subject to Proration	(Line 18 / Line 19) * Line 20	\$0		
22	Allocated FY 2018 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		
25	Net Deferred Tax Reserve subject to proration	Line 7 + Line 24	(\$10,105,872)	(\$237,305)	
<b>Proration Calculation</b>					
		(h) Number of Days in Month	(i) Proration Percentage	(j)	(k)
26	April 2017/2018	30	91.78%	(\$772,938)	(\$18,150)
27	May 2017/2018	31	83.29%	(\$701,412)	(\$16,470)
28	June 2017/2018	30	75.07%	(\$632,194)	(\$14,845)
29	July 2017/2018	31	66.58%	(\$560,668)	(\$13,166)
30	August 2017/2018	31	58.08%	(\$489,143)	(\$11,486)
31	September 2017/2018	30	49.86%	(\$419,924)	(\$9,861)
32	October 2017/2018	31	41.37%	(\$348,399)	(\$8,181)
33	November 2017/2018	30	33.15%	(\$279,180)	(\$6,556)
34	December 2017/2018	31	24.66%	(\$207,655)	(\$4,876)
35	January 2018/2019	31	16.16%	(\$136,129)	(\$3,197)
36	February 2018/2019	28	8.49%	(\$71,526)	(\$1,680)
37	March 2018/2019	31	0.00%	\$0	\$0
38	Total	365		(\$4,619,168)	(\$108,467)
39	Deferred Tax Without Proration	Line 25	(\$10,105,872)	(\$237,305)	
40	Average Deferred Tax without Proration	Line 25 * 50%	(\$5,052,936)	(\$118,653)	
41	Proration Adjustment	Line 38 - Line 40	\$433,768	\$10,186	

**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 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2017 Actual Incremental Capital Investment**

Line No.		Fiscal Year 2017 (a)	Fiscal Year 2018 (b)	Fiscal Year 2019 (c)	
<b>Capital Additions Allowance</b>					
<i>Non-Discretionary Capital</i>					
1	Non-Discretionary Additions	Per RIPUC Docket No. 4592	\$28,593,675	\$0	\$0
<i>Discretionary Capital</i>					
2	Lesser of Actual Cumulative Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4592	\$46,895,663	\$0	\$0
3	Total Allowed Capital Included in Rate Base	Line 1 + Line 2	\$75,489,338	\$0	\$0
<b>Depreciable Net Capital Included in Rate Base</b>					
4	Total Allowed Capital Included in Rate Base in Current Year	Line 3	\$75,489,338	\$0	\$0
5	Retirements		\$22,244,993	\$0	\$0
6	Net Depreciable Capital Included in Rate Base	Year 1 = Line 4- Line 5; Then = Prior year Line 6	\$53,244,345	\$53,244,345	\$53,244,345
<b>Change in Net Capital Included in Rate Base</b>					
7	Capital Included in Rate Base	Line 3	\$75,489,338	\$0	\$0
8	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding	\$43,031,774	\$0	\$0
9	Incremental Depreciable Amount	Year 1 = Line 7- Line 8; Then = Prior year Line 9	\$32,457,564	\$32,457,564	\$32,457,564
10	Total Cost of Removal	Per RIPUC Docket No. 4592	\$7,806,949	\$7,806,949	\$7,806,949
11	<b>Total Net Plant in Service</b>	<b>Line 9 + Line 10</b>	<b>\$40,264,513</b>	<b>\$40,264,513</b>	<b>\$40,264,513</b>
<b>Deferred Tax Calculation:</b>					
12	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323	3.40%	3.40%	3.40%
13	Vintage Year Tax Depreciation:				
14	2017 Spend	1 = Page 11 of 35, Line 21; then = Page 11 of 35, Column (d), L	\$56,129,313	\$2,186,135	\$2,022,001
15	Cumulative Tax Depreciation	Year 1 = Line 14; then = Prior Year Line 15 + Current Year	\$56,129,313	\$58,315,448	\$60,337,449
16	Book Depreciation	Year 1 = Line 6 * Line 12 * 50%; then = Line 6 * Line 12	\$905,154	\$1,810,308	\$1,810,308
17	Cumulative Book Depreciation	Year 1 = Line 16; then = Prior Year Line 17 + Current Year	\$905,154	\$2,715,462	\$4,525,770
18	Cumulative Book / Tax Timer	Line 15 - Line 17	\$55,224,159	\$55,599,986	\$55,811,679
19	Effective Tax Rate		35.00%	21.00%	21.000%
20	Deferred Tax Reserve	Line 18 * Line 19	\$19,328,456	\$11,675,997	\$11,720,453
21	Less: FY 2017 Federal NOL	Page 33 of 35, Line 12(n)	\$0	\$0	\$0
22	Excess Deferred Tax	Page 34 of 35, Line 6(f)	\$0	\$7,770,844	\$7,770,844
23	Net Deferred Tax Reserve	Sum of Lines 20 through 22	\$19,328,456	\$19,446,841	\$19,491,297
<b>Rate Base Calculation:</b>					
24	Cumulative Incremental Capital Included in Rate Base	Line 11	\$40,264,513	\$40,264,513	\$40,264,513
25	Accumulated Depreciation	-Line 17	(\$905,154)	(\$2,715,462)	(\$4,525,770)
26	Deferred Tax Reserve	-Line 23	(\$19,328,456)	(\$19,446,841)	(\$19,491,297)
27	Year End Rate Base	Sum of Lines 24 through 26	\$20,030,904	\$18,102,210	\$16,247,447
<b>Revenue Requirement Calculation:</b>					
28	Average Rate Base before Deferred Tax Proration Adjustment	Column (a) = Current Year Line 28 ÷ 2; Column (b) = (Prior Year Line 28 + Current Year Line 28) ÷ 2	\$10,015,452	\$19,066,557	\$17,174,829
29	Proration Adjustment	(a) = N/A (b) = Page 12 of 35, Line 41, Column (k); (c) = Page 12 of 35, Line 41, Column (k)		\$1,332	\$1,418
30	Average ISR Rate Base after Deferred Tax Proration	Line 28 + Line 29	\$10,015,452	\$19,067,889	\$17,176,246
31	Pre-Tax ROR	Page 35 of 35, Line 52, Line (e)	9.68%	9.36%	8.41%
32	Return and Taxes	Line 28 * Line 31	\$969,496	\$1,784,754	\$1,444,522
33	Book Depreciation	Line 16	\$905,154	\$1,810,308	\$1,810,308
34	<b>Annual Revenue Requirement</b>	<b>Line 32 + Line 33</b>	<b>\$1,874,650</b>	<b>\$3,595,062</b>	<b>\$3,254,830</b>
35	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)	Line 34 x 5/12			\$1,356,179

**Line Notes:**

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2017 Incremental Capital Investments

Line No.		Fiscal Year		(b)	(c)	(d)	(e)
		2017	(a)				
<b>Capital Repairs Deduction</b>							
1	Plant Additions		\$75,489,338				
2	Capital Repairs Deduction Rate	1/	20.50%				
3	Capital Repairs Deduction		\$15,475,314		\$30,283,076		
<b>Bonus Depreciation</b>							
4	Plant Additions		\$75,489,338				
5	Less Capital Repairs Deduction		(\$15,475,314)				
6	Plant Additions Net of Capital Repairs Deduction		\$60,014,024				
7	Percent of Plant Eligible for Bonus Depreciation	2/	99.08%				
8	Plant Eligible for Bonus Depreciation		\$59,461,895				
9	Bonus Depreciation Rate (April 2016 - December 2016)		37.50%				
10	Bonus Depreciation Rate (January 2017 - March 2017)		12.50%				
11	Total Bonus Depreciation Rate		50.00%				
12	Bonus Depreciation		\$29,730,948				
<b>Remaining Tax Depreciation</b>							
13	Plant Additions		\$75,489,338				
14	Less Capital Repairs Deductions		(\$15,475,314)				
15	Less Bonus Depreciation		(\$29,730,948)				
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation		\$30,283,076				
17	20 YR MACRS Tax Depreciation Rates		3.750%				
18	Remaining Tax Depreciation		\$1,135,615				
19	FY17 Loss incurred due to retirements	3/	\$1,980,487				
20	Cost of Removal		\$7,806,949				
21	Total Tax Depreciation and Repairs Deduction		\$56,129,313				

20 Year MACRS Depreciation		Line 16	
MACRS basis:	Fiscal Year	(b)	(c)
	2017	3.750%	\$1,135,615
	2018	7.219%	\$2,186,135
	2019	6.677%	\$2,022,001
	2020	6.177%	\$1,870,586
	2021	5.713%	\$1,730,072
	2022	5.285%	\$1,600,461
	2023	4.888%	\$1,480,237
	2024	4.522%	\$1,369,401
	2025	4.462%	\$1,351,231
	2026	4.461%	\$1,350,928
	2027	4.462%	\$1,351,231
	2028	4.461%	\$1,350,928
	2029	4.462%	\$1,351,231
	2030	4.461%	\$1,350,928
	2031	4.462%	\$1,351,231
	2032	4.461%	\$1,350,928
	2033	4.462%	\$1,351,231
	2034	4.461%	\$1,350,928
	2035	4.462%	\$1,351,231
	2036	4.461%	\$1,350,928
	2037	2.231%	\$675,615
		100.000%	\$30,283,076

1/ Capital Repairs percentage is based on the actual results of the FY 2017 tax return.  
2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY2017 tax return  
3/ Actual Loss for FY17

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2017 Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19		
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L1, C(d)	\$2,122,861	\$1,810,308		
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L2, C(d)	\$0	\$0		
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L3, C(d)	(\$2,211,545)	(\$1,967,605)		
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L4, C(d)	\$0	\$0		
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	(\$88,684)	(\$157,297)		
6	Effective Tax Rate	35.00%	21.00%		
7	Deferred Tax Reserve Line 5 * Line 6	(\$31,039)	(\$33,032)		
<b>Deferred Tax Not Subject to Proration</b>					
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L8, C(d)				
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L9, C(d)				
10	Book/Tax Depreciation Timing Difference at 3/31/2017				
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	(\$31,039)	(\$33,032)		
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L15, C(d)				
16	Net Deferred Tax Reserve Line 14 + Line 15	(\$31,039)	(\$33,032)		
<b>Allocation of FY 2018 Estimated Federal NOL</b>					
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (c); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L20, C(d)				
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19) * Line 20				
22	Allocated FY 2018 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	(\$31,039)	(\$33,032)		
<b>Proration Calculation</b>					
	(h) Number of Days in Month	(i) Proration Percentage	(j)	(k)	
26	April 2017/2018	30	91.78%	(\$2,374)	(\$2,526)
27	May 2017/2018	31	83.29%	(\$2,154)	(\$2,293)
28	June 2017/2018	30	75.07%	(\$1,942)	(\$2,066)
29	July 2017/2018	31	66.58%	(\$1,722)	(\$1,833)
30	August 2017/2018	31	58.08%	(\$1,502)	(\$1,599)
31	September 2017/2018	30	49.86%	(\$1,290)	(\$1,373)
32	October 2017/2018	31	41.37%	(\$1,070)	(\$1,139)
33	November 2017/2018	30	33.15%	(\$857)	(\$913)
34	December 2017/2018	31	24.66%	(\$638)	(\$679)
35	January 2018/2019	31	16.16%	(\$418)	(\$445)
36	February 2018/2019	28	8.49%	(\$220)	(\$234)
37	March 2018/2019	31	0.00%	\$0	\$0
38	Total	365		(\$14,187)	(\$15,098)
39	Deferred Tax Without Proration Line 25			(\$31,039)	(\$33,032)
40	Average Deferred Tax without Proration Line 25 * 50%			(\$15,520)	(\$16,516)
41	Proration Adjustment Line 38 - Line 40			\$1,332	\$1,418

**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  
RIPUC Docket No. 4915  
FY 2020 Electric Infrastructure, Safety,  
and Reliability Plan Reconciliation Filing  
Attachment MAL-2  
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**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2016 Actual Incremental Capital Investment**

Line No.			Fiscal Year 2016 (a)	Fiscal Year 2017 (b)	Fiscal Year 2018 (c)	Fiscal Year 2019 (d)
<b>Capital Investment Allowance</b>						
1	Non-Discretionary Capital	Per RIPUC Docket No. 4539	\$35,964,438	\$0	\$0	\$0
2	Work Order Write Off Adjustment	Per Company's books	\$672,272	\$0	\$0	\$0
<b>Discretionary Capital</b>						
3	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending					
4	Work Order Write Off Adjustment	Per RIPUC Docket No. 4539 Per Company's books	\$35,488,464 (\$121,728)	\$0 \$0	\$0 \$0	\$0 \$0
5	Total Allowed Capital Included in Rate Base	Line 1 + Line 2 + Line 3 + Line 4	\$72,003,445	\$0	\$0	\$0
<b>Depreciable Net Capital Included in Rate Base</b>						
6	Total Allowed Capital Included in Rate Base in Current Year	Line 5	\$72,003,445	\$0	\$0	\$0
7	Retirements		\$28,489,814	\$0	\$0	\$0
8	Net Depreciable Capital Included in Rate Base	Year 1 = Line 6 - Line 7; then = Prior Year Line 8	\$43,513,631	\$43,513,631	\$43,513,631	\$43,513,631
<b>Change in Net Capital Included in Rate Base</b>						
9	Capital Included in Rate Base	Line 5	\$72,003,445	\$0	\$0	\$0
10	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant	\$43,031,774	\$0	\$0	\$0
11	Incremental Capital Amount	Year 1 = Line 9 - Line 10; then = Prior Year Line 11	\$28,971,671	\$28,971,671	\$28,971,671	\$28,971,671
12	Cost of Removal	Per RIPUC Docket No. 4539	\$8,192,983	\$8,192,983	\$8,192,983	\$8,192,983
13	Work Order Write Off Adjustment	Per Company's books	(\$19,884)	(\$19,884)	(\$19,884)	(\$19,884)
14	<b>Total Net Plant in Service</b>	<b>Line 11 + Line 12 + Line 13</b>	<b>\$37,144,770</b>	<b>\$37,144,770</b>	<b>\$37,144,770</b>	<b>\$37,144,770</b>
<b>Deferred Tax Calculation:</b>						
15	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323	3.40%	3.40%	3.40%	3.40%
16	Vintage Year Tax Depreciation:					
17	2016 Spend	Year 1 = Page 14 of 35, Line 21; then = Page 14 of 35, Column (d), Line 5	\$60,569,127	\$1,868,699	\$1,728,398	\$1,598,969
18	Cumulative Tax Depreciation	Year 1 = Line 17; then = Prior Year Line 18 + Current Year Line 17	\$60,569,127	\$62,437,826	\$64,166,224	\$65,765,193
19	Book Depreciation	Year 1 = Line 8 * Line 15 * 50%; then = Line 8 * Line 15	\$739,732	\$1,479,463	\$1,479,463	\$1,479,463
20	Cumulative Book Depreciation	Year 1 = Line 19; then = Prior Year Line 20 + Current Year Line 19	\$739,732	\$2,219,195	\$3,698,659	\$5,178,122
21	Cumulative Book / Tax Timer	Line 18 - Line 20	\$59,829,395	\$60,218,631	\$60,467,565	\$60,587,071
22	Effective Tax Rate		35.00%	35.00%	21.00%	21.00%
23	Deferred Tax Reserve	Line 21 * Line 22	\$20,940,288	\$21,076,521	\$12,698,189	\$12,723,285
24	Less: FY 2016 Federal NOL	Page 33 of 35, Line 12(m)	(\$10,693,796)	(\$10,693,796)	(\$10,693,796)	(\$10,693,796)
25	Excess Deferred Tax	Page 34 of 35, Line 5(f)	\$0	\$0	\$8,456,746	\$8,456,746
26	Net Deferred Tax Reserve	Sum of Lines 23 through 25	\$10,246,492	\$10,382,725	\$10,461,139	\$10,486,235
<b>Rate Base Calculation:</b>						
27	Cumulative Incremental Capital Included in Rate Base	Line 14	\$37,144,770	\$37,144,770	\$37,144,770	\$37,144,770
28	Accumulated Depreciation	-Line 20	(\$739,732)	(\$2,219,195)	(\$3,698,659)	(\$5,178,122)
29	Deferred Tax Reserve	-Line 26	(\$10,246,492)	(\$10,382,725)	(\$10,461,139)	(\$10,486,235)
30	Year End Rate Base	Sum of Lines 27 through 29	\$26,158,546	\$24,542,850	\$22,984,972	\$21,480,413
<b>Revenue Requirement Calculation:</b>						
31	Average Rate Base before Deferred Tax Proration Adjustment	Year 1 = Current Year Line 30 ÷ 2; then Average of (Prior + Current Year Line 30)	\$13,079,273	\$25,350,698	\$23,763,911	\$22,232,692
32	Proration Adjustment	(a), (b) = N/A, (c) = Page 15 of 35, Line 41, Column (j); (d) = Page 15 of 35, Line 41, Column (k)			\$5,968	\$1,077
33	Average ISR Rate Base after Deferred Tax Proration	Line 31 + Line 32	\$13,079,273	\$25,350,698	\$23,769,879	\$22,233,770
34	Pre-Tax ROR	Page 35 of 35, Line 52, Line (e)	9.68%	9.68%	9.36%	8.41%
35	Return and Taxes	Line 31 * Line 34	\$1,266,074	\$2,453,948	\$2,224,861	\$1,869,860
36	Book Depreciation	Line 19	\$739,732	\$1,479,463	\$1,479,463	\$1,479,463
37	<b>Annual Revenue Requirement</b>	<b>Line 35 + Line 36</b>	<b>\$2,005,805</b>	<b>\$3,933,411</b>	<b>\$3,704,324</b>	<b>\$3,349,323</b>
38	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)	Line 37 x 5/12				\$1,395,551

1/ Actual Retirements

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2016 Incremental Capital Investments

Line No.		Fiscal Year 2016 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$72,003,445				
2	Capital Repairs Deduction Rate	29.67%				
3	Capital Repairs Deduction	\$21,361,075			\$25,885,847	
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$72,003,445			\$970,719	\$60,569,127
5	Less Capital Repairs Deduction	(\$21,361,075)			\$1,868,699	\$62,437,826
6	Plant Additions Net of Capital Repairs Deduction	\$50,642,370			\$1,728,398	\$64,166,224
7	Percent of Plant Eligible for Bonus Depreciation	97.77%			6.177%	\$65,765,193
8	Plant Eligible for Bonus Depreciation	\$49,513,045			\$1,478,858	\$67,244,051
9	Bonus Depreciation Rate (April 2015 - December 2015)	37.50%			\$1,368,067	\$68,612,118
10	Bonus Depreciation Rate (January 2016 - March 2016)	12.50%			\$1,265,300	\$69,877,419
11	Total Bonus Depreciation Rate	50.00%			\$1,170,558	\$71,047,977
12	Bonus Depreciation	\$24,756,523			\$1,155,026	\$72,203,003
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions	\$72,003,445			\$1,154,768	\$73,357,771
14	Less Capital Repairs Deduction	(\$21,361,075)			\$1,155,026	\$74,512,797
15	Less Bonus Depreciation	(\$24,756,523)			\$1,154,768	\$75,667,565
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$25,885,847			\$1,155,026	\$76,822,591
17	20 YR MACRS Tax Depreciation Rates	3.750%			\$1,154,768	\$77,977,359
18	Remaining Tax Depreciation	\$970,719			\$1,155,026	\$79,132,386
19	FY16 Loss incurred due to retirements	\$5,307,711			\$1,154,768	\$80,287,153
20	Cost of Removal	\$8,173,099			\$1,154,768	\$82,596,947
21	Total Tax Depreciation and Repairs Deduction	\$60,569,127			\$1,155,026	\$83,751,974
					\$1,154,768	\$84,906,741
					\$577,513	\$85,484,255
				100.000%	\$25,885,847	

1/ Capital Repairs percentage is based on the actual results of the FY 2016 tax return.  
2/ Percent of Plant Eligible for Bonus Depreciation is the actual result of FY2016 tax return  
3/ Actual Loss for FY 2016

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2016 Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L1, C(e)	\$1,479,463	\$1,479,463
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L2, C(e)	\$0	\$0
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L3, C(e)	(\$1,876,746)	(\$1,598,969)
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L4, C(e)	\$0	\$0
5	Cumulative Book / Tax Timer	(\$397,283)	(\$119,506)
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	(\$139,049)	(\$25,096)
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L8, C(e)		
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L9, C(e)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
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	(\$139,049)	(\$25,096)
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L15, C(e)		
16	Net Deferred Tax Reserve Line 14 + Line 15	(\$139,049)	(\$25,096)
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (d); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26a of 29, L20, C(e)		
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19 ) * Line 20		
22	Allocated FY 2018 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	(\$139,049)	(\$25,096)
<b>Proration Calculation</b>			
		(h) Number of Days in Month	(i) Proration Percentage
26	April 2017/2018	30	91.78%
27	May 2017/2018	31	83.29%
28	June 2017/2018	30	75.07%
29	July 2017/2018	31	66.58%
30	August 2017/2018	31	58.08%
31	September 2017/2018	30	49.86%
32	October 2017/2018	31	41.37%
33	November 2017/2018	30	33.15%
34	December 2017/2018	31	24.66%
35	January 2018/2019	31	16.16%
36	February 2018/2019	28	8.49%
37	March 2018/2019	31	0.00%
38	Total	365	
			(j) (k)
			(\$10,635) (\$1,919)
			(\$9,651) (\$1,742)
			(\$8,698) (\$1,570)
			(\$7,714) (\$1,392)
			(\$6,730) (\$1,215)
			(\$5,778) (\$1,043)
			(\$4,794) (\$865)
			(\$3,841) (\$693)
			(\$2,857) (\$516)
			(\$1,873) (\$338)
			(\$984) (\$178)
			\$0 \$0
			(\$63,556) (\$11,471)
39	Deferred Tax Without Proration	Line 25	(\$139,049) (\$25,096)
40	Average Deferred Tax without Proration	Line 25 * 50%	(\$69,524) (\$12,548)
41	Proration Adjustment	Line 38 - Line 40	\$5,968 \$1,077

**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  
RIPUC Docket No. 4915  
FY 2020 Electric Infrastructure, Safety,  
and Reliability Plan Reconciliation Filing  
Attachment MAL-2  
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**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2015 Actual Incremental Capital Investment**

Line No.			Fiscal Year 2015 (a)	Fiscal Year 2016 (b)	Fiscal Year 2017 (c)	Fiscal Year 2018 (d)	Fiscal Year 2019 (e)
<b>Capital Investment Allowance</b>							
1	Non-Discretionary Capital	Per RIPUC Docket No. 4473	\$22,246,664	\$0	\$0	\$0	\$0
2	Work Order Write Off Adjustment	Per Company's books	(\$268,138)				
<b>Discretionary Capital</b>							
3	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4473	\$54,410,377	\$0	\$0	\$0	\$0
4	Work Order Write Off Adjustment	Per Company's books	(\$48,499)				
5	Total Allowed Capital Included in Rate Base	Line 1 + Line 2 + Line 3 + Line 4	\$76,340,403	\$0	\$0	\$0	\$0
<b>Depreciable Net Capital Included in Rate Base</b>							
6	Total Allowed Capital Included in Rate Base in Current Year	Line 5	\$76,340,403	\$0	\$0	\$0	\$0
7	Retirements		\$15,666,095	\$0	\$0	\$0	\$0
8	Net Depreciable Capital Included in Rate Base	Year 1 = Line 6 - Line 7; then = Prior Year Line 8	\$60,674,308	\$60,674,308	60,674,308	60,674,308	60,674,308
<b>Change in Net Capital Included in Rate Base</b>							
9	Capital Included in Rate Base	Line 5	\$76,340,403	\$0	\$0	\$0	\$0
10	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant	\$43,031,774	\$0	\$0	\$0	\$0
11	Incremental Capital Amount	Year 1 = Line 9 - Line 10; then = Prior Year Line 11	\$33,308,629	\$33,308,629	\$33,308,629	\$33,308,629	\$33,308,629
12	Cost of Removal	Docket No. 4473 FY15 Reconciliation, Att. JHP-1, Page 4, Table 2	\$6,988,398	\$6,988,398	\$6,988,398	\$6,988,398	\$6,988,398
13	Work Order Write Off Adjustment	Per Company's books	\$ 22,398.01	\$22,398	\$22,398	\$22,398	\$22,398
14	<b>Total Net Plant in Service</b>	<b>Line 11 + Line 12 + Line 13</b>	<b>\$40,319,425</b>	<b>\$40,319,425</b>	<b>\$40,319,425</b>	<b>\$40,319,425</b>	<b>\$40,319,425</b>
<b>Deferred Tax Calculation:</b>							
15	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323	3.40%	3.40%	3.40%	3.40%	3.40%
16	Vintage Year Tax Depreciation:						
17	2015 Spend	Year 1 = Page 17 of 35, Line 22; then = Page 17 of 35, Column (d), Line 5	\$71,871,022	\$2,120,892	\$1,961,656	\$1,814,760	\$1,678,440
18	Cumulative Tax Depreciation	Year 1 = Line 17; then = Prior Year Line 18 + Current Year Line 17	\$71,871,022	\$73,991,914	75,953,570	77,768,330	79,446,770
19	Book Depreciation	Year 1 = Line 8 * Line 15 * 50%; then = Line 8 * Line 15	\$1,031,463	\$2,062,926	\$2,062,926	\$2,062,926	\$2,062,926
20	Cumulative Book Depreciation	Year 1 = Line 19; then = Prior Year Line 20 + Current Year Line 19	\$1,031,463	\$3,094,390	\$5,157,316	\$7,220,243	\$9,283,169
21	Cumulative Book / Tax Timer	Line 18 - Line 20	\$70,839,559	\$70,897,524	\$ 70,796,254	\$ 70,548,087	\$ 70,163,601
22	Effective Tax Rate		35.00%	35.00%	35.00%	21.00%	21.00%
23	Deferred Tax Reserve	Line 21 * Line 22	\$24,793,846	\$24,814,134	\$24,778,689	\$14,815,098	\$14,734,356
24	Less: FY 2015 Federal NOL	Page 33 of 35, Line 12(l)	(\$8,148,936)	(\$8,148,936)	(\$8,148,936)	(\$8,148,936)	(\$8,148,936)
25	Excess Deferred Tax	C (a) through (c) = n/a; Column (d) = Page 34 of 35, Line 4(f)	\$0	\$0	\$0	\$9,885,418	\$9,885,418
26	Net Deferred Tax Reserve	Sum of Lines 23 through 25	\$16,644,909	\$16,665,197	\$16,629,752	\$16,551,580	\$16,470,838
<b>Rate Base Calculation:</b>							
27	Cumulative Incremental Capital Included in Rate Base	Line 14	\$40,319,425	\$40,319,425	\$40,319,425	\$40,319,425	\$40,319,425
28	Accumulated Depreciation	- Line 20	(\$1,031,463)	(\$3,094,390)	(\$5,157,316)	(\$7,220,243)	(\$9,283,169)
29	Deferred Tax Reserve	- Line 26	(\$16,644,909)	(\$16,665,197)	(\$16,629,752)	(\$16,551,580)	(\$16,470,838)
30	Year End Rate Base	Sum of Lines 27 through 29	\$22,643,053	\$20,559,839	\$18,532,357	\$16,547,603	\$14,565,418
<b>Revenue Requirement Calculation:</b>							
31	Average Rate Base before Deferred Tax Proration Adjustmen	Year 1 = Current Year Line 30 ÷ 2; then Average of (Prior + Current Year Line 30) (a) ~ (c) = N/A, (d) = Page 18 of 35, Line 41, Column (j); (e) = Page 18 of 35,	\$11,321,526.47	\$21,601,446	\$19,546,098	\$17,539,980	\$15,556,511
32	Proration Adjustment	Line 41, Column (k)				(\$3,728)	(\$3,466)
33	Average ISR Rate Base after Deferred Tax Proration	Line 31 + Line 32	\$11,321,526	\$21,601,446	\$19,546,098	\$17,536,252	\$15,553,045
34	Pre-Tax ROR	Column (a) through (c) = Page 35 of 35, Line 38; Column (d) = Page 35 of 35,	9.68%	9.68%	9.68%	9.36%	8.41%
35	Return and Taxes	Line 52; Column (e)	\$1,095,924	\$2,091,020	\$1,892,062	\$1,641,393	\$1,308,011
36	Book Depreciation	Line 31 * Line 34	\$1,031,463	\$2,062,926	\$2,062,926	\$2,062,926	\$2,062,926
37	<b>Annual Revenue Requirement</b>	<b>Line 35 + Line 36</b>	<b>\$2,127,387</b>	<b>\$4,153,946</b>	<b>\$3,954,989</b>	<b>\$3,704,320</b>	<b>\$3,370,938</b>
38	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)	Line 37 x 5/12					\$1,404,557

1/ Actual Retirements

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2015 Incremental Capital Investments

Line No.		Fiscal Year 2015 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$76,340,403				
2	Capital Repairs Deduction Rate	1/ 23.10%				
3	Capital Repairs Deduction	\$17,634,633			\$29,379,302	
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$76,340,403	Line 1	3.750%	\$1,101,724	\$71,871,022
5	Less Capital Repairs Deduction	(\$17,634,633)	- Line 3	7.219%	\$2,120,892	\$73,991,914
6	Plant Additions Net of Capital Repairs Deduction	\$58,705,770	Line 4 + Line 5	6.677%	\$1,961,656	\$75,953,570
7	Percent of Plant Eligible for Bonus Depreciation	99.91%	Per Tax Department	6.177%	\$1,814,760	\$77,768,329
8	Plant Eligible for Bonus Depreciation	\$58,652,935	Line 6 * Line 7	5.713%	\$1,678,440	\$79,446,769
9	Bonus Depreciation Rate (April 2014 - December 2014)	37.50%	1 * 75% * 50%	5.285%	\$1,552,696	\$80,999,465
10	Bonus Depreciation Rate (January 2015 - March 2015)	12.50%	1 * 25% * 50%	4.888%	\$1,436,060	\$82,435,525
11	Total Bonus Depreciation Rate	50.00%	Line 9 + Line 10	4.522%	\$1,328,532	\$83,764,057
12	Bonus Depreciation	\$29,326,468	Line 8 * Line 11	4.462%	\$1,310,904	\$85,074,962
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions	\$76,340,403	Line 1	4.461%	\$1,310,611	\$86,385,573
14	Less Capital Repairs Deduction	(\$17,634,633)	- Line 3	4.462%	\$1,310,904	\$87,696,477
15	Less Bonus Depreciation	(\$29,326,468)	- Line 12	4.462%	\$1,310,904	\$90,317,992
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$29,379,302	Sum of Line 13 through Line 15	4.462%	\$1,310,904	\$92,939,507
17	20 YR MACRS Tax Depreciation Rates	3.750%	Per IRS Publication 946	4.461%	\$1,310,611	\$94,250,118
18	Remaining Tax Depreciation	\$1,101,724	Line 16 * Line 17	4.462%	\$1,310,904	\$95,561,022
19	481(a) adjustment for partial retirements	\$14,395,754	Per Tax Department	4.461%	\$1,310,611	\$96,871,633
20	FY15 Loss incurred due to retirements	\$2,401,647	Per Tax Department	4.462%	\$1,310,904	\$98,182,538
21	Cost of Removal	\$7,010,796	Page 16 of 35, Line 12 + Line 13	4.461%	\$1,310,611	\$99,493,148
22	Total Tax Depreciation and Repairs Deduction	\$71,871,022	Sum of Lines 3, 12, 18, 19, 20, and 21	2.231%	\$655,452	\$100,148,600
				100.000%	\$29,379,302	

1/ Capital Repairs percentage is based on the actual results of the FY 2015 tax return.

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2015 Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L1, C(f)	\$2,062,926	\$2,062,926
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L2, C(f)	\$0	\$0
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L3, C(f)	(\$1,814,760)	(\$1,678,440)
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L4, C(f)	\$0	\$0
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	\$248,166	\$384,486
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	\$86,858	\$80,742
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L8, C(f)		
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L9, C(f)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
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	\$86,858	\$80,742
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L15, C(f)		
16	Net Deferred Tax Reserve Line 14 + Line 15	\$86,858	\$80,742
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L20, C(f)		
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19 ) * Line 20		
22	Allocated FY 2018 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	\$86,858	\$80,742
<b>Proration Calculation</b>			
		(h) Number of Days in Month	(i) Proration Percentage
26	April 2017/2018	30	91.78%
27	May 2017/2018	31	83.29%
28	June 2017/2018	30	75.07%
29	July 2017/2018	31	66.58%
30	August 2017/2018	31	58.08%
31	September 2017/2018	30	49.86%
32	October 2017/2018	31	41.37%
33	November 2017/2018	30	33.15%
34	December 2017/2018	31	24.66%
35	January 2018/2019	31	16.16%
36	February 2018/2019	28	8.49%
37	March 2018/2019	31	0.00%
38	Total	365	
			(j) \$6,643
			(k) \$5,604
			\$5,434
			\$4,819
			\$4,204
			\$3,609
			\$2,994
			\$2,231
			\$1,785
			\$1,170
			\$1,088
			\$615
			\$0
			\$0
39	Deferred Tax Without Proration Line 25	\$86,858	\$80,742
40	Average Deferred Tax without Proration Line 25 * 50%	\$43,429	\$40,371
41	Proration Adjustment Line 38 - Line 40	(\$3,728)	(\$3,466)

**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  
RIPUC Docket No. 4915  
FY 2020 Electric Infrastructure, Safety,  
and Reliability Plan Reconciliation Filing  
Attachment MAL-2  
Page 19 of 35

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

Line No.			Fiscal Year 2014 (a)	Fiscal Year 2015 (b)	Fiscal Year 2016 (c)	Fiscal Year 2017 (d)	Fiscal Year 2018 (e)	Fiscal Year 2019 (f)
<b>Capital Investment Allowance</b>								
1	Non-Discretionary Capital	Per RIPUC Docket No. 4382	\$6,923,860	\$0	\$0	\$0	\$0	\$0
2	Work Order Write Off Adjustment	Per Company's books	(\$472,942)					
<b>Discretionary Capital</b>								
3	Lesser of Actual Cumulative Non-Discretionary Capital Additions or Spending, or Approved Spending	Per RIPUC Docket No. 4382	\$6,400,406	\$0	\$0	\$0	\$0	\$0
4	Work Order Write Off Adjustment	Per Company's books	(\$8,965)					
5	Total Allowed Capital Included in Rate Base	Sum of Line 1 through Line 4	\$12,842,359	\$0	\$0	\$0	\$0	\$0
<b>Depreciable Net Capital Included in Rate Base</b>								
6	Total Allowed Capital Included in Rate Base in Current Year	Line 5	\$12,842,359	\$0	\$0	\$0	\$0	\$0
7	Retirements	Page 28 of 35, Line 9(c)	1/ (\$4,165,367)	\$0	\$0	\$0	\$0	\$0
8	Net Depreciable Capital Included in Rate Base	Year 1 = Line 7 - Line 8; then = Prior Year Line 9	\$17,007,726	17,007,726	17,007,726	17,007,726	17,007,726	17,007,726
<b>Change in Net Capital Included in Rate Base</b>								
9	Capital Included in Rate Base	Line 5	\$12,842,359	\$0	\$0	\$0	\$0	\$0
10	Depreciation Expense	Per Settlement Agreement Docket No. 4323, excluding General Plant	2/ \$7,173,397	\$0	\$0	\$0	\$0	\$0
11	Incremental Capital Amount	Year 1 = Line 9 - Line 10; then = Prior Year Line 11	\$5,668,962	\$5,668,962	\$5,668,962	\$5,668,962	\$5,668,962	\$5,668,962
12	Total Cost of Removal	Page 28 of 35, Line 6(c)	(\$887,841)	(\$887,841)	(\$887,841)	(\$887,841)	(\$887,841)	(\$887,841)
13	Work Order Write Off Adjustment	Page 28 of 35, Line 6(c)	(\$37,062)	(\$37,062)	(\$37,062)	(\$37,062)	(\$37,062)	(\$37,062)
14	<b>Total Net Plant in Service</b>	<b>Line 11 + Line 12 + Line 13</b>	<b>\$4,744,059</b>	<b>\$4,744,059</b>	<b>\$4,744,059</b>	<b>\$4,744,059</b>	<b>\$4,744,059</b>	<b>\$4,744,059</b>
<b>Deferred Tax Calculation:</b>								
15	Composite Book Depreciation Rate	As approved per R.I.P.U.C. Docket No. 4323	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%
16	Vintage Year Tax Depreciation:							
17	2014 Spend	Year 1 = Page 20 of 35, Line 20; then = Page 20 of 35, Column (d), Line 5	\$7,826,326	\$306,845	\$283,808	\$262,555	\$242,832	\$224,640
18	Cumulative Tax Depreciation	Year 1 = Line 17; then = Prior Year Line 18 + Current Year Line 17	\$7,826,326	\$8,133,171	\$8,416,979	\$8,679,534	\$8,922,366	\$9,147,006
19	Book Depreciation	Year 1 = Line 8 * Line 15 * 50%; then = Line 8 * Line 15	\$289,131	\$578,263	\$578,263	\$578,263	\$578,263	\$578,263
20	Cumulative Book Depreciation	Year 1 = Line 19; then = Prior Year Line 20 + Current Year Line 19	\$289,131	\$867,394	\$1,445,657	\$2,023,919	\$2,602,182	\$3,180,445
21	Cumulative Book / Tax Timer	Line 18 - Line 20	\$7,537,194	\$7,265,777	\$6,971,322	\$6,655,614	\$6,320,184	\$5,966,562
22	Effective Tax Rate		35.00%	35.00%	35.00%	35.00%	21.00%	21.00%
23	Deferred Tax Reserve	Line 21 * Line 22	\$2,638,018	\$2,543,022	\$2,439,963	\$2,329,465	\$1,327,239	\$1,252,978
24	Less: FY 2014 Federal NOL	Page 33 of 35, Line 12(k)	(\$1,200,808)	(\$1,200,808)	(\$1,200,808)	(\$1,200,808)	(\$1,200,808)	(\$1,200,808)
25	Excess Deferred Tax	Page 34 of 35, Line 3(f)	\$0	\$0	\$0	\$0	\$896,566	\$896,566
26	Net Deferred Tax Reserve	Sum of Lines 23 through 25	\$1,437,210	\$1,342,214	\$1,239,155	\$1,128,657	\$1,022,996	\$948,736
<b>Rate Base Calculation:</b>								
27	Cumulative Incremental Capital Included in Rate Base	Line 14	\$4,744,059	\$4,744,059	\$4,744,059	\$4,744,059	\$4,744,059	\$4,744,059
28	Accumulated Depreciation	-Line 20	(\$289,131)	(\$867,394)	(\$1,445,657)	(\$2,023,919)	(\$2,602,182)	(\$3,180,445)
29	Deferred Tax Reserve	-Line 26	(\$1,437,210)	(\$1,342,214)	(\$1,239,155)	(\$1,128,657)	(\$1,022,996)	(\$948,736)
30	Year End Rate Base	Sum of Lines 27 through 29	\$3,017,717	\$2,534,451	\$2,059,247	\$1,591,482	\$1,118,880	\$614,878
<b>Revenue Requirement Calculation:</b>								
31	Average Rate Base before Deferred Tax Proration Adjustment	Year 1 = note 4/ * Current Year Line 30; then = Average of (Prior + Current Year Line 30)	4/ \$670,654	\$2,776,084	\$2,296,849	\$1,825,365	\$1,355,181	\$866,879
32	Proration Adjustment	(a) - (d) = N/A, (e) = Page 21 of 35, Line 41, Column (j), (f) = Page 21 of 35, Line 41, Column (k)					(\$5,039)	(\$3,187)
30	Average ISR Rate Base after Deferred Tax Proration	Line 28 + Line 29	\$670,654	\$2,776,084	\$2,296,849	\$1,825,365	\$1,350,142	\$863,692
32	Pre-Tax ROR	Column (a) through (d) = Page 35 of 35, Line 38; Column (e) = Page 35 of 35, Line 52; Column (f) Page 35 of 35 Line 48, Column (e)	9.68%	9.68%	9.68%	9.68%	9.36%	8.41%
33	Return and Taxes	Line 31 * Line 32	\$64,919	\$268,725	\$222,335	\$176,695	\$126,373	\$72,636
34	Book Depreciation	Line 19	\$289,131	\$578,263	\$578,263	\$578,263	\$578,263	\$578,263
35	<b>Annual Revenue Requirement</b>	<b>Line 33 + Line 34</b>	<b>\$354,051</b>	<b>\$846,988</b>	<b>\$800,598</b>	<b>\$754,958</b>	<b>\$704,636</b>	<b>\$650,899</b>
36	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)	Line 35 x 5/12						\$271,208

**Line notes**

- 1/ Actual Retirements
- 2/ Depreciation Expense has been prorated for 2 months (February - March 2014)
- 3/ The federal Income Tax rate changed from 35% to 21% on January 1, 2018 per the Tax Cuts and Jobs Act of 2017
- 4/ 23.23% per RIPUC Docket No. 4382 (FY 2014 Elec ISR reconciliation), Attachment WRR-1-Revised, Page 12.

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2014 Incremental Capital Investments

Line No.		Fiscal Year 2014 (a)	(b)	(c)	(d)	(e)
	<u>Capital Repairs Deduction</u>					
1	Plant Additions	\$12,842,359				
2	Capital Repairs Deduction Rate	1/ 34.46%				
3	Capital Repairs Deduction	\$4,425,477			\$4,250,525	
	<u>Bonus Depreciation</u>					
4	Plant Additions	\$12,842,359				\$7,826,326
5	Less Capital Repairs Deduction	(\$4,425,477)				\$8,133,171
6	Plant Additions Net of Capital Repairs Deduction	\$8,416,882				\$8,416,979
7	Percent of Plant Eligible for Bonus Depreciation	99.00%				\$8,679,534
8	Plant Eligible for Bonus Depreciation	\$8,332,713				\$8,922,366
9	Bonus Depreciation Rate (April 2013 - December 2013)	37.50%				\$9,147,006
10	Bonus Depreciation Rate (January 2014 - March 2014)	12.50%				\$9,354,772
11	Total Bonus Depreciation Rate	50.00%				\$9,546,981
12	Bonus Depreciation	\$4,166,357				\$9,736,639
	<u>Remaining Tax Depreciation</u>					
13	Plant Additions	\$12,842,359				\$10,115,913
14	Less Capital Repairs Deduction	(\$4,425,477)				\$10,305,529
15	Less Bonus Depreciation	(\$4,166,357)				\$10,495,188
16	Remaining Plant Additions Subject to 20 YR MACRS Tax Depreciation	\$4,250,525				\$10,684,804
17	20 YR MACRS Tax Depreciation Rates	3.750%				\$10,874,462
18	Remaining Tax Depreciation	\$159,395				\$11,064,078
19	Cost of Removal	(\$924,903)				\$11,443,352
20	Total Tax Depreciation and Repairs Deduction	\$7,826,326				\$11,633,011
				100.000%	\$4,250,525	\$11,917,456

1/ Capital Repairs percentage is based on the FY 2014 tax return.

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2014 Incremental Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L1, C(g)	\$578,263	\$578,263
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L2, C(g)	\$0	\$0
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L3, C(g)	(\$242,832)	(\$224,640)
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L4, C(g)	\$0	\$0
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	\$335,430	\$353,622
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	\$117,401	\$74,261
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L8, C(g)		
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L9, C(g)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
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	\$117,401	\$74,261
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (e); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L15, C(f)		
16	Net Deferred Tax Reserve Line 14 + Line 15	\$117,401	\$74,261
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (f); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L20, C(g)		
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19 ) * Line 20		
22	Allocated FY 2018 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	\$117,401	\$74,261
<b>Proration Calculation</b>			
		(h) Number of Days in Month	(i) Proration Percentage
26	April 2017/2018	30	91.78%
27	May 2017/2018	31	83.29%
28	June 2017/2018	30	75.07%
29	July 2017/2018	31	66.58%
30	August 2017/2018	31	58.08%
31	September 2017/2018	30	49.86%
32	October 2017/2018	31	41.37%
33	November 2017/2018	30	33.15%
34	December 2017/2018	31	24.66%
35	January 2018/2019	31	16.16%
36	February 2018/2019	28	8.49%
37	March 2018/2019	31	0.00%
38	Total	365	
			(j) \$8,979
			(k) \$5,154
			\$8,148
			\$7,344
			\$6,513
			\$5,682
			\$4,878
			\$4,047
			\$3,243
			\$2,412
			\$1,581
			\$831
			\$0
			\$0
			\$53,661
			\$33,943
39	Deferred Tax Without Proration Line 25		\$117,401
40	Average Deferred Tax without Proration Line 25 * 50%		\$58,700
41	Proration Adjustment Line 38 - Line 40		(\$5,039)

**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 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2013 Actual Incremental Capital Investment

Line No.		Fiscal Year 2013 (a)	Fiscal Year 2014 (b)	Fiscal Year 2015 (c)	Fiscal Year 2016 (d)	Fiscal Year 2017 (e)	Fiscal Year 2018 (f)	Fiscal Year 2019 (g)
1	Capital Additions Allowance							
2	None-Discretionary Capital							
3	Non-Discretionary Additions							
4	Work Order Write Off Adjustment							
5	Discretionary Capital							
6	Lesser of Actual Discretionary Capital Additions or Spending or Approved Spending							
7	Work Order Write Off Adjustment							
8	Total Allowed Capital Included in Rate Base in Current Year							
9	Depreciable Net Capital Included in Rate Base							
10	Total Allowed Capital Included in Rate Base in Current Year							
11	Retirements							
12	Net Depreciable Capital Included in Rate Base							
13	Change in Net Capital Included in Rate Base							
14	Capital Included in Rate Base							
15	Depreciation Expense							
16	Incremental Capital Amount							
17	Total Cost of Removal							
18	Work Order Write Off Adjustment							
19	<b>Total Net Plant in Service</b>							
20	Deferred Tax Calculation:							
21	Composite Book Depreciation Rate							
22	Tax Depreciation							
23	Cumulative Tax Depreciation							
24	Book Depreciation							
25	Cumulative Book Depreciation							
26	Cumulative Book / Tax Timer							
27	Effective Tax Rate							
28	Deferred Tax Reserve							
29	Less: FY 2013 Federal NOL							
30	Excess Deferred Tax							
31	Net Deferred Tax Reserve							
32	Rate-Base Calculation:							
33	Cumulative Incremental Capital Included in Rate Base							
34	Accumulated Depreciation							
35	Deferred Tax Reserve							
36	Year End Rate Base							
37	Revenue Requirement Calculation:							
38	Average Rate Base before Deferred Tax Promotion Adjustment							
39	Promotion Adjustment							
40	Average ISR Rate Base after Deferred Tax Promotion							
41	Pre-Tax ROR							
42	Return and Taxes							
43	Book Depreciation							
44	Property Taxes							
45	<b>Annual Revenue Requirement</b>							
46	Revenue Requirement for 5 months (April 1, 2018 - August 31, 2018)							
47	Line 37 x 5/12							
48	Line 45 - Line 46							
49	Line 47 - Line 46							
50	Line 48 - Line 46							
51	Line 49 - Line 46							
52	Line 50 - Line 46							
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183	Line 181 - Line 46							
184	Line 182 - Line 46							
185	Line 183 - Line 46							

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2013 Incremental Capital Investments

	Fiscal Year 2013		(b)	(c)	(d)	(e)
	(a)					
1	Capital Repairs Deduction					
2	Plant Additions	(\$7,819,012)				
3	Capital Repairs Deduction Rate	12.59%				
	Capital Repairs Deduction	1/ (\$984,414)			(\$3,417,299)	
4	Bonus Depreciation					
5	Plant Additions	Line 1 (\$7,819,012)				
6	Less Capital Repairs Deduction	- Line 3 \$984,414				
7	Plant Additions Net of Capital Repairs Deduction	Line 4 + Line 5 (\$6,834,598)				
8	Percent of Plant Eligible for Bonus Depreciation	100.00%				
9	Plant Eligible for Bonus Depreciation	Line 6 * Line 7 (\$6,834,598)				
10	Bonus Depreciation Rate (April 2012 - December 2012)	1 * 75% * 50%				
11	Bonus Depreciation Rate (January 2013 - March 2013)	1 * 25% * 50%				
12	Total Bonus Depreciation Rate	12.50%				
	Bonus Depreciation	50.00% (\$3,417,299)				
13	Remaining Tax Depreciation					
14	Plant Additions	Line 1 (\$7,819,012)				
15	Less Capital Repairs Deduction	- Line 3 \$984,414				
	Less Bonus Depreciation	- Line 12 \$3,417,299				
	Remaining Plant Additions Subject to 20 YR MACRS Tax					
16	Depreciation	Sum of Line 13 through Line 15 (\$3,417,299)				
17	20 YR MACRS Tax Depreciation Rates	Per IRS Publication 946 3.750%				
18	Remaining Tax Depreciation	Line 16 * Line 17 (\$128,149)				
19	Cost of Removal	Page 22 of 35, Line 12 + Line 13 (\$2,001,810)				
20	Total Tax Depreciation and Repairs Deduction	Sum of Lines 3, 12, 18, 19 (\$6,531,672)				
1/ 20	Capital Repairs percentage is based on the FY 2013 tax return.					

20 Year MACRS Depreciation		(b)	(c)	(d)	(e)
MACRS bas	Line 16				
Fiscal Year					
2013	3.750%			(\$128,149)	(\$6,531,672)
2014	7.219%			(\$246,695)	(\$6,778,367)
2015	6.677%			(\$228,173)	(\$7,006,540)
2016	6.177%			(\$211,087)	(\$7,217,627)
2017	5.713%			(\$195,230)	(\$7,412,857)
2018	5.285%			(\$180,604)	(\$7,593,461)
2019	4.888%			(\$167,038)	(\$7,760,499)
2020	4.522%			(\$154,530)	(\$7,915,029)
2021	4.462%			(\$152,480)	(\$8,067,509)
2022	4.461%			(\$152,446)	(\$8,219,954)
2023	4.462%			(\$152,480)	(\$8,372,434)
2024	4.461%			(\$152,446)	(\$8,524,880)
2025	4.462%			(\$152,480)	(\$8,677,360)
2026	4.461%			(\$152,446)	(\$8,829,806)
2027	4.462%			(\$152,480)	(\$8,982,285)
2028	4.461%			(\$152,446)	(\$9,134,731)
2029	4.462%			(\$152,480)	(\$9,287,211)
2030	4.461%			(\$152,446)	(\$9,439,657)
2031	4.462%			(\$152,480)	(\$9,592,137)
2032	4.461%			(\$152,446)	(\$9,744,582)
2033	2.231%			(\$76,240)	(\$9,820,822)
	100.000%			(\$3,417,299)	

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2013 Incremental Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L1, C(h)	(\$464,370)	(\$464,370)
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L2, C(h)	\$0	\$0
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L3, C(h)	\$180,604	\$167,038
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L4, C(h)	\$0	\$0
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	(\$283,766)	(\$297,333)
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	(\$99,318)	(\$62,440)
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L8, C(h)		
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L9, C(h)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
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	(\$99,318)	(\$62,440)
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L15, C(h)		
16	Net Deferred Tax Reserve Line 14 + Line 15	(\$99,318)	(\$62,440)
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (g); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L20, C(h)		
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19) * Line 20		
22	Allocated FY 2018 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	(\$99,318)	(\$62,440)
<b>Proration Calculation</b>			
		(h) Number of Days in Month	(i) Proration Percentage
26	April 2017/2018	30	91.78%
27	May 2017/2018	31	83.29%
28	June 2017/2018	30	75.07%
29	July 2017/2018	31	66.58%
30	August 2017/2018	31	58.08%
31	September 2017/2018	30	49.86%
32	October 2017/2018	31	41.37%
33	November 2017/2018	30	33.15%
34	December 2017/2018	31	24.66%
35	January 2018/2019	31	16.16%
36	February 2018/2019	28	8.49%
37	March 2018/2019	31	0.00%
38	Total	365	
			(j) (\$7,596)
			(k) (\$4,776)
			(\$6,893)
			(\$4,334)
			(\$6,213)
			(\$3,906)
			(\$5,510)
			(\$3,464)
			(\$4,807)
			(\$3,022)
			(\$4,127)
			(\$2,595)
			(\$3,424)
			(\$2,153)
			(\$2,744)
			(\$1,725)
			(\$2,041)
			(\$1,283)
			(\$1,338)
			(\$841)
			(\$703)
			(\$442)
			\$0
			\$0
			(\$45,396)
			(\$28,540)
39	Deferred Tax Without Proration Line 25	(\$99,318)	(\$62,440)
40	Average Deferred Tax without Proration Line 25 * 50%	(\$49,659)	(\$31,220)
41	Proration Adjustment Line 38 - Line 40	\$4,263	\$2,680

**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 Electric ISR Revenue Requirement Reconciliation  
FY 2019 Revenue Requirement on FY 2012 Actual Incremental Capital Investment

Line No.	Fiscal Year 2012 (a)	Fiscal Year 2013 (b)	Fiscal Year 2014 (c)	Fiscal Year 2015 (d)	Fiscal Year 2016 (e)	Fiscal Year 2017 (f)	Fiscal Year 2018 (g)	Fiscal Year 2019 (h)
1	(\$4,019,686)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	\$4,163,942	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	\$144,256	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	\$144,256	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	\$19,938	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	\$124,318	\$124,318	\$124,318	\$124,318	\$124,318	\$124,318	\$124,318	\$124,318
7	\$144,256	\$144,256	\$144,256	\$144,256	\$144,256	\$144,256	\$144,256	\$144,256
8	(\$771,131)	(\$771,131)	(\$771,131)	(\$771,131)	(\$771,131)	(\$771,131)	(\$771,131)	(\$771,131)
9	<b>(\$626,875)</b>							
10	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%
11	(\$654,965)	\$2,107	\$1,949	\$1,803	\$1,667	\$1,542	\$1,427	\$1,320
12	(\$654,965)	(\$652,858)	(\$650,909)	(\$649,107)	(\$647,439)	(\$645,897)	(\$644,471)	(\$643,151)
13	(\$2,113)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)
14	(\$2,113)	(\$6,340)	(\$10,567)	(\$14,794)	(\$19,021)	(\$23,247)	(\$27,474)	(\$31,701)
15	(\$652,852)	(\$646,518)	(\$640,342)	(\$634,313)	(\$628,419)	(\$622,650)	(\$616,996)	(\$611,450)
16	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
17	(\$228,498)	(\$226,281)	(\$224,120)	(\$222,009)	(\$219,947)	(\$217,927)	(\$215,949)	(\$213,992)
18	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)	(\$3,434,992)
19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	(\$3,663,490)	(\$3,661,274)	(\$3,659,112)	(\$3,657,002)	(\$3,654,939)	(\$3,652,920)	(\$3,651,139)	(\$3,649,974)
21	(\$626,875)	(\$626,875)	(\$626,875)	(\$626,875)	(\$626,875)	(\$626,875)	(\$626,875)	(\$626,875)
22	\$2,113	\$6,340	\$10,567	\$14,794	\$19,021	\$23,247	\$27,474	\$31,701
23	\$3,663,490	\$3,661,274	\$3,659,112	\$3,657,002	\$3,654,939	\$3,652,920	\$3,651,139	\$3,649,974
24	\$3,038,729	\$3,040,739	\$3,042,804	\$3,044,921	\$3,047,085	\$3,049,292	\$3,051,738	\$3,054,800
25	\$1,519,364	\$3,039,734	\$3,041,771	\$3,043,862	\$3,046,003	\$3,048,188	\$3,050,515	\$3,053,269
26	\$0	\$0	\$0	\$0	\$0	\$0	\$85	\$50
27	\$1,519,364	\$3,039,734	\$3,041,771	\$3,043,862	\$3,046,003	\$3,048,188	\$3,050,600	\$3,053,319
28	9.30%	9.84%	9.68%	9.68%	9.68%	9.68%	9.36%	8.41%
29	\$141,301	\$299,110	\$294,443	\$294,646	\$294,853	\$295,065	\$285,536	\$256,784
30	(\$2,113)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)	(\$4,227)
31	\$0	(\$21,523)	(\$22,710)	(\$24,344)	(\$23,626)	(\$21,108)	(\$19,457)	(\$19,146)
32	<b>\$139,188</b>	<b>\$273,360</b>	<b>\$267,506</b>	<b>\$266,075</b>	<b>\$267,000</b>	<b>\$269,730</b>	<b>\$261,852</b>	<b>\$233,411</b>
33								\$97,255

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

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Tax Depreciation and Repairs Deduction on FY2012 Incremental Capital Investments

Line No.		Fiscal Year 2012 (a)	(b)	(c)	(d)
	<u>Capital Repairs Deduction</u>				
1	Plant Additions	\$144,256			
2	Capital Repairs Deduction Rate	21.05%			
3	Capital Repairs Deduction	\$30,366		Line 16	\$29,184
	<u>Bonus Depreciation</u>				
4	Plant Additions	\$144,256			
5	Less Capital Repairs Deduction	(\$30,366)			
6	Plant Additions Net of Capital Repairs Deduction	\$113,890			
7	Percent of Plant Eligible for Bonus Depreciation	85.00%			
8	Plant Eligible for Bonus Depreciation	\$96,807			
9	Bonus Depreciation Rate (April 2011 - December 2011)	75.00%			
10	Bonus Depreciation Rate (January 2012 - March 2012)	12.50%			
11	Total Bonus Depreciation Rate	87.50%			
12	Bonus Depreciation	\$84,706			
	<u>Remaining Tax Depreciation</u>				
13	Plant Additions	\$144,256			
14	Less Capital Repairs Deduction	(\$30,366)			
15	Less Bonus Depreciation	(\$84,706)			
	Remaining Plant Additions Subject to 20 YR MACRS Tax				
16	Depreciation	\$29,184			
17	20 YR MACRS Tax Depreciation Rates	3.750%			
18	Remaining Tax Depreciation	\$1,094			
19	Cost of Removal	(\$771,131)			
20	Total Tax Depreciation and Repairs Deduction	(\$654,965)			
				100.000%	\$29,184

1/ Per Docket 4307 FY 2013 Electric ISR Reconciliation Filing at Attachment WRR-1, Page 8, Line 2  
2/ Since not all property additions qualify for bonus depreciation and because a project must be started after the beginning of the

The Narragansett Electric Company  
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FY 2020 Electric Infrastructure, Safety,  
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Attachment MAL-2  
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**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Calculation of Net Deferred Tax Reserve Proration on FY 2012 Incremental Capital Investment**

Line No.	Deferred Tax Subject to Proration	(a) FY 18	(b) FY 19
1	Book Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L1, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L1, C(j)	(\$4,227)	(\$4,227)
2	Bonus Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L2, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L2, C(j)	\$0	\$0
3	Remaining MACRS Tax Depreciation C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L3, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L3, C(j)	(\$1,427)	(\$1,320)
4	FY18 tax (gain)/loss on retirements C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L4, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L4, C(j)	\$0	\$0
5	Cumulative Book / Tax Timer Sum of Lines 1 through 4	(\$5,653)	(\$5,547)
6	Effective Tax Rate	35.00%	21.00%
7	Deferred Tax Reserve Line 5 * Line 6	(\$1,979)	(\$1,165)
<b>Deferred Tax Not Subject to Proration</b>			
8	Capital Repairs Deduction C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L8, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L8, C(j)		
9	Cost of Removal C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L9, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L9, C(j)		
10	Book/Tax Depreciation Timing Difference at 3/31/2017		
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	(\$1,979)	(\$1,165)
15	Net Operating Loss C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L15, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L15, C(j)		
16	Net Deferred Tax Reserve Line 14 + Line 15	(\$1,979)	(\$1,165)
<b>Allocation of FY 2018 Estimated Federal NOL</b>			
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 2018 Federal NOL C (a) = RIPUC Docket No. 4682, Reconciliation Filing, Attachment MAL-1, P 24 of 26, L20, C (h); C (b) = RIPUC Docket No. 4783, Compliance Section 5, Attachment 1, P 26b of 29, L20, C(j)		
21	Allocated FY 2018 Federal NOL Not Subject to Proration (Line 18 / Line 19) * Line 20		
22	Allocated FY 2018 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	(\$1,979)	(\$1,165)
<b>Proration Calculation</b>			
		(h) <u>Number of Days in Month</u>	(i) <u>Proration Percentage</u>
26	April 2017/2018	30	91.78%
27	May 2017/2018	31	83.29%
28	June 2017/2018	30	75.07%
29	July 2017/2018	31	66.58%
30	August 2017/2018	31	58.08%
31	September 2017/2018	30	49.86%
32	October 2017/2018	31	41.37%
33	November 2017/2018	30	33.15%
34	December 2017/2018	31	24.66%
35	January 2018/2019	31	16.16%
36	February 2018/2019	28	8.49%
37	March 2018/2019	31	0.00%
38	Total	365	
			(j)      (k)
			(\$151)    (\$89)
			(\$137)    (\$81)
			(\$124)    (\$73)
			(\$110)    (\$65)
			(\$96)     (\$56)
			(\$82)     (\$48)
			(\$68)     (\$40)
			(\$55)     (\$32)
			(\$41)     (\$24)
			(\$27)     (\$16)
			(\$14)     (\$8)
			\$0         \$0
			(\$904)    (\$532)
39	Deferred Tax Without Proration Line 25	(\$1,979)	(\$1,165)
40	Average Deferred Tax without Proration Line 25 * 50%	(\$989)	(\$582)
41	Proration Adjustment Line 38 - Line 40	\$85	\$50

**Column Notes:**  
(i) Sum of remaining days in the year (Col (h)) ÷ 365  
)&(k) Current Year Line 25 ÷ 12 \* Current Month Col (i)

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

Line No.		Actual Fiscal Year 2012 (a)	Actual Fiscal Year 2013 (b)	Fiscal Year 2014 (c)
<b><u>Capital Investment</u></b>				
1	ISR - Eligible Capital Investment	\$48,946,456	\$44,331,141	\$56,129,551
1a	Work Order Write Off Adjustment	\$0	(\$784,153)	(\$481,907)
2	ISR - Eligible Capital Additions included in Rate Base per R.I.P.U.C. Docket No. 4323	\$48,802,200	\$51,366,341	\$42,805,284
3	Incremental ISR Capital Investment	\$144,256	(\$7,819,353)	\$12,842,360
<b><u>Cost of Removal</u></b>				
4	ISR - Eligible Cost of Removal	\$5,807,869	\$5,179,941	\$5,007,992
4a	Work Order Write Off Adjustment	\$0	(\$106,751)	(\$37,062)
5	ISR - Eligible Cost of Removal in Rate Base per R.I.P.U.C. Docket No. 4323	\$6,579,000	\$7,075,000	\$5,895,833
6	Incremental Cost of Removal	(\$771,131)	(\$2,001,810)	(\$924,903)
<b><u>Retirements</u></b>				
7	ISR - Eligible Retirements/Actual	\$7,740,446	\$14,255,714	\$3,299,874
8	ISR - Eligible Retirements/Estimated	\$7,720,508	\$8,416,779	\$7,465,242
9	Incremental Retirements	\$19,938	\$5,838,935	(\$4,165,367)

Col (a)=FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b) = FY 2013 ISR Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconciliation Filing Docket No. 4382

Per Company's books

Schedule MDL-3-ELEC Page 53, Docket No. 4323; Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Col (c)= Line Note 3(e)

Line 1 + Line 1a - Line 2

Col (a)=FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b)= FY 2013 Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconciliation Filing Docket No. 4382

Per Company's books

Workpaper MDL-19-ELEC Page 2, Docket No. 4323; Col (a)= Line Note 1(a); Col (b)= Line Note 2(b); Line Note 3(e)

Line 4 + Line 4a - Line 5

Col (a)= FY 2012 ISR Reconciliation Filing Docket No. 4218; Col (b) = FY 2013 ISR Reconciliation Filing Docket No. 4307; Col (c) = FY 2014 ISR Reconciliation Filing Docket No. 4382

Col (a)= FY 2012 ISR Proposal Filing Docket No. 4218; Col (b)= FY 2013 ISR Proposal Filing Docket No. 4307; Col (c) = Line 2 (c) \* 17.44% Retirement rate per Docket 4323 (Workpaper MDL-19-ELEC Page 3)

Line 7 - Line 8

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2019 Capital Investment**

Line No.	<b><u>Discretionary Capital</u></b>		<b><u>Actual FY 2019</u></b> (a)
1	Cumulative FY 2018 Discretionary Capital ADDITIONS	Docket No. 4682 FY18 Reconciliation, Attachment MAL-1, Page 17 of 26, Line 3	\$262,676,263
2	FY 2019 Discretionary Capital ADDITIONS	Attachment PCE-1, Page 3, Table 1	<u>\$71,059,402</u>
3	Cumulative Actual Discretionary Capital Additions	Line 1 + Line 2	\$333,735,665
4	Cumulative FY 2018 Discretionary Capital SPENDING	Docket No. 4682 FY18 Reconciliation, Attachment MAL-1, Page 17 of 26, Line 6	\$308,569,636
5	FY 2019 Discretionary Capital SPENDING	Attachment PCE-1, Page 5, Table 3	<u>\$73,084,909</u>
6	Cumulative Actual Discretionary Capital Spending	Line 4 + Line 5	\$381,654,545
7	Cumulative FY 2018 Approved Discretionary Capital SPENDING	Docket No. 4682 FY18 Reconciliation, Attachment MAL-1, Page 17 of 26, Line 9	\$294,123,536
8	FY 2019 Approved Discretionary Capital SPENDING	Attachment PCE-1, Page 5, Table 3	<u>\$70,088,000</u>
9	Cumulative Actual Approved Discretionary Capital Spending	Line 7 + Line 8	\$364,211,536
10	Cumulative Allowed Discretionary Capital Included in Rate Base	Lesser of Line 3, Line 6, or Line 9	\$333,735,665
11	Prior Year Cumulative Allowed Discretionary Capital Included in Rate Base	Docket No. 4682 FY18 Reconciliation, Attachment MAL-1, Page 17 of 26, Line 10	<u>\$262,676,263</u>
12	Total Allowed Discretionary Capital Included in Rate Base Current Year	Line 10 - Line 11	\$71,059,402
13	Intangible Asset included in Total Allowed Discretionary Capital	Page 5 of 35, Line 5, Column (c)	<u>\$3,460,626</u>
14	<b>Total Allowed Discretionary Capital Included in non-Intangible Rate Base Current Year</b>	Line 12 - Line 13	<u><b>\$67,598,776</b></u>

The Narragansett Electric Company  
d/b/a National Grid  
RIPUC Docket No. 4915  
FY 2020 Electric Infrastructure, Safety,  
and Reliability Plan Reconciliation Filing  
Attachment MAL-2  
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The Narragansett Electric Company  
d/b/a National Grid  
FY 2018 ISR Property Tax Recovery Adjustment  
(000s)

Line	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
1	Plant In Service	\$1,338,470	\$9,275	\$1,885	\$11,160	\$550	\$1,370,180	\$618,789	\$751,391	\$27,502	3.66%
2	Accumulated Depn	\$611,570				\$550	\$618,789				
3	Net Plant	\$746,900			\$7,498	\$550	(\$828)	\$751,391			
4	Property Tax Expense	\$29,743									
5	Effective Prop tax Rate	3.98%									3.66%
<b>Effective tax Rate Calculation</b>											
6	Plant In Service	\$1,370,180	\$76,340	\$33	\$76,374	(\$18,011)	\$1,428,543	\$640,166	\$788,377		
7	Accumulated Depn	\$618,789				(\$18,011)	(\$6,988)				
8	Net Plant	\$751,391			\$46,376	(\$6,988)	\$788,377				
9	Property Tax Expense	\$27,502									
10	Effective Prop tax Rate	3.66%									4.13%
<b>Effective tax Rate Calculation</b>											
11	Plant In Service	\$1,428,543	\$72,003	\$7,636	\$79,639	(\$29,506)	\$1,478,677	\$650,689	\$827,988		
12	Accumulated Depn	\$640,166				(\$29,506)	(\$8,193)				
13	Net Plant	\$788,377			\$48,221	(\$8,193)	\$827,988				
14	Property Tax Expense	\$32,549									
15	Effective Prop tax Rate	4.13%									3.81%
<b>Property Tax Recovery Calculation</b>											
16	ISR Additions	\$9,275				\$76,340	72,003				
17	Book Depreciation - base allowance on ISR eligible plant	(\$7,173)				(\$43,032)	(43,032)				
18	Book Depreciation - current year ISR additions	(\$324)				(\$1,031)	(740)				
19	COR	\$828				\$6,988	8,193				
20	Net Plant Additions	\$2,605				\$39,266	36,425				
21	RY Effective Tax Rate	3.98%				3.98%	3.98%				
22	ISR Property Tax Recovery on FY 2014 vintage investment		\$104				\$102				89
23	ISR Property Tax Recovery on FY 2015 vintage investment						\$1,564				1,524
24	ISR Property Tax Recovery on FY 2016 vintage investment										1,451
25	ISR Year Effective Tax Rate	3.66%									3.81%
26	RY Effective Tax Rate	3.98%									3.98%
27	RY Effective Tax Rate 2 mos for FY 2014	-0.32%									-0.17%
28	RY Net Plant times 2 mo rate	-0.05%									
29	FY 2014 Net Adds times ISR Year Effective Tax rate	-0.32%	(\$401)								(1,256)
30	FY 2015 Net Adds times ISR Year Effective Tax rate										(4)
31	FY 2016 Net Adds times ISR Year Effective Tax rate										(64)
32	Total Property Tax due to rate differential		(\$409)								(1,324)
32	Total ISR Property Tax Recovery		(\$306)								1,740
33	As Approved in RIPUC Docket No. 4682		(\$306)								1,193
34	New Adjustment		0								546
35	As Approved in RIPUC Docket No. 4539		(\$304)								1,192
36	Work Order White Off Adjustment in 4786		(2)								2



The Narragansett Electric Company  
d/b/a National Grid  
FY 2018 ISR Property Tax Recovery Adjustment (continued)  
(000s)

	(a)	(b)	(c)
<b>Property Tax Recovery Calculation</b>			
<b>Cumulative Increm. ISR Prop. Tax for FY 2019</b>			
			<b>7 months</b>
77	ISR Additions	\$36,400	
78	Book Depreciation: base allowance on ISR eligible plant	\$0	
79	Book Depreciation: current year ISR additions	(\$999)	
80	COR	\$10	
81	Net Plant Additions	\$35,502	
82	RY Effective Tax Rate	3.28%	
83	ISR Property Tax Recovery on FY 2018 Net Incremental		\$352
84	ISR Property Tax Recovery on FY 2019 Net Incremental	1.91%	\$679
85	ISR Property Tax Recovery on FY 2020 Net Incremental		
86	ISR Property Tax Recovery on FY 2021 vintage investment		
87	ISR Year Effective Tax Rate	3.23%	
88	RY Effective Tax Rate	3.28%	
89	RY Effective Tax Rate 7 mos for FY 2019	-0.05%	
90	RY Net Plant times Rate Difference	* -0.03% 7 mos	
91	FY 2018 Net Incremental times 7 mo rate difference	930,873	(\$279)
92	FY 2019 Net Incremental times 7 mo rate difference	18,393	(86)
93	FY 2020 Net Incremental times rate difference	35,502	(\$11)
94	FY 2021 Net Adds times rate difference		
95	Total Property Tax due to rate differential		(\$295)
96	Total ISR Property Tax Recovery		\$736

**Column Notes**

(c) Lines 6, 11 and 37 revised based on PowerPlan report  
(f) Lines 6, 7, 11, 12, 37, 38, 42 and 43 revised based on PowerPlan report  
(a),(d),(e)&(h) Lines 6 through 15 and Lines 37 through 46, Recalculated based on the revised (c) and (f)

**Line Notes**

1(a) - 5(a) Per RY cost of service in Compliance filing Attachment 2 at Docket No. 4323  
1(b) - 5(b) Per FY 2017 Electric ISR Compliance Filing per Docket 4592  
6 - 15 Columns (b) and (g), as in FY 2018 Electric ISR Reconciliation Filing Docket 4682  
16(a) - 32(k) Recalculated based on updated Column (c), (f), and (h)  
33, 35& 36 As approved in FY 2018 ISR Reconciliation RIPUC Docket No. 4682  
34 Line 32 - Line 33  
37 - 46 Columns (b) and (g), as in FY 2018 Electric ISR Reconciliation Filing Docket 4682  
47(a) Line 42(b)  
47(b) Page 3 of 35, Line 1+Page 5 of 35, Line 5(c)  
47(c) Per Company's books  
47(d) Line 47(b) + Line 47(c)  
47(f) Page 2 of 35, Line 5  
47(h) Line 47(a) + Line 47(d) + Line 47(f)  
48(a) Per Line 43(h)  
48(e) (Docket 4323 RY depr allowance of \$44,986 + (L 11(d)+(f))<comp depr rate of 3.40% + (L 6(d)+(f))<comp depr rate of 3.40% + (L 11(d)+(f))<comp depr rate of 3.40% + (L 37(d)+(f))<comp depr rate of 3.40% + (L 42(d)+(f))<comp depr rate of 3.40% + (L 47(d)+(f))<comp depr rate of 3.40%>50%)-5-12+(Docket 4770 RY depr allowance of \$50,128 + Att. MAL-2, Page 2, Line 6<comp depr rate of 3.16% + Att. MAL-2, Page 4, Line 6<comp depr rate of 3.16% >50%)\*7-12  
48(f) 42(f)

**Line Notes**

48(g) Per Company's books  
48(h) Line 48(a) + Line 48(e) + Line 48(f) + Line 48(g)  
49(a) Line 44(b)  
50(a) Line 49(b) + Line 51(b)  
50(b) Per Company's books  
51(a) Line 46(b)  
51(b) Line 50(b) + Line 49(b)  
52(a) - 74(c) Per FY 2017 Electric ISR Compliance Filing per Docket 4592  
52(e) - 74(e) Per FY 2018 Electric ISR Compliance Filing per Docket 4682  
52(f) Line 47(b)  
53(f) Per Page 2 of 35, Line 8  
54(f) Per Page 2 of 35, Line 16  
55(f) Line 48(g)  
56(f) Sum of Lines 52 through 55  
57(f) Line 5(a)  
58(f) Line 57(f) + 5 + 12  
58(k) Line 58(f) + Line 67(f)  
59(k) Line 58(f) + Line 68(f)  
60(k) Line 58(f) + Line 69(f)  
61(k) Line 58(f) + Line 70(f)

**Line Notes**

62(k) Line 58(f) + Line 72(f)  
63(k) Line 58(f) + Line 73(f)  
63(f) Line 51(h)  
64(f) Line 5(a)  
64(f) Line 63(f) - Line 64(f)  
65(f) Line 64(f) + 5 + 12  
66(f) Line 3(a)  
67(f) Line 67(e) - (Line 16(b)+Line 1(f))\*3.40%  
68(f) Line 68(e) - (Line 16(f)+Line 6(f))\*3.40%  
69(f) Line 69(e) - (Line 16(f)+Line 11(f))\*3.40%  
70(f) Line 70(e) - (Line 52(b)+Line 37(f))\*3.40%  
72(f) Line 70(e) - (Line 52(b)+Line 37(f))\*3.40%  
73(f) Line 56(f)  
66(f) - 72(f) Line 65(f)  
66(k) - 72(k) Lines 66 through 72, Col (f) + 65(f)  
73(k) Sum of Lines 66(k) through 72(k)  
74(k) Sum of Lines 58(k) through 63(k) + Line 73(k)  
75 As in FY 2018 ISR Reconciliation Docket No. 4682  
76 Line 74 - Line 75  
77(a) - 96(e) Attachment MAL-2, Page 13 of 15, Line 31(a), ~ Line 50(e)

The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR 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															
2	Total Base Rate Plant DIT Provision															
3	Incremental FY 12	(\$228,498)	(\$226,281)	(\$224,120)	(\$222,009)	(\$219,947)	(\$216,147)	(\$214,982)	\$13,279,050	\$4,353,286	(\$1,659,926)	\$0	\$0	\$0	\$0	\$0
4	Incremental FY 13		(\$2,013,121)	(\$1,937,607)	(\$2,045,965)	(\$1,957,316)	(\$1,773,731)	(\$1,711,291)	(\$228,498)	\$2,217	\$2,161	\$2,110	\$2,063	\$2,019	\$1,781	\$1,165
5	Incremental FY 14			\$2,763,658	\$2,543,022	\$2,439,963	\$2,223,804	\$2,149,544		(\$2,013,121)	\$75,514	(\$108,358)	\$88,649	\$94,199	\$89,386	\$62,440
6	FY 2015				\$24,793,846	\$24,814,134	\$24,778,689	\$24,619,774			\$2,763,058	\$24,793,846	(\$103,059)	(\$110,498)	(\$105,661)	(\$74,261)
7	FY 2016					\$20,940,288	\$21,154,935	\$21,180,031				\$20,288	\$20,288	(\$35,445)	(\$78,172)	(\$80,742)
8	FY 2017						\$19,446,841	\$19,491,297				\$20,940,288	\$19,328,456	\$136,232	\$78,414	\$25,096
8	FY 2018						\$20,066,387	\$20,137,024						\$19,328,456	\$118,386	\$44,456
9	FY 2019							\$7,382,618						\$20,066,387	\$20,066,387	\$70,657
10	TOTAL Plant DIT Provision	(\$228,498)	(\$2,239,403)	\$601,331	\$25,068,893	\$46,017,122	\$65,432,086	\$85,602,607	\$13,050,552	\$2,342,381	\$1,200,808	\$24,467,561	\$20,948,229	\$19,414,964	\$20,170,521	\$7,431,409
11	Distribution-related NOL (NOL Utilization)															
12	Lesser of Distribution-related NOL or DIT Provision															
13	Total NOL (NOL Utilization)															
14	NOL recovered in transmission rates															
15	Distribution-related NOL (NOL Utilization)															

10(b) Per Dkt 4323 Compliance filing Attachment 1, Page 64 of 71, Line 19(c) less Line 19(a)  
10(i)-(k) Per Dkt 4323 Compliance filing Attachment 1, Page 70 of 71, Lines 32, 42, and 48  
3(a)-(g) ADIT per vintage year ISR revenue requirement calculations  
3(h)-(n) Year over year change in ADIT shown in Cols (a) through (e)  
10 Sum of Lines 2 through 9  
11 Line 15  
12 Lesser of Line 10 or 11  
13 Per Tax Department  
14 Quarterly average transmission plant allocator per Integrated Facilities Agreement (IFA) \* Line 13  
15 Line 13 - Line 14

**The Narragansett Electric Company  
d/b/a National Grid  
FY 2020 Electric ISR Revenue Requirement Reconciliation  
Excess Deferred Taxes**

Line No.	Vintage Year	Cumulative Book	Cumulative Book	Difference (c) = (b)-(a)	Pro-Rated Change as of 12/31/17 (d)= (c) * 75%	Cumulative Timing	Excess Deferred
		Tax Timing Difference at 3/31/17 (a)	Tax Timing Difference at 3/31/18 (b)			Difference through 12/31/17 (e) = (a) + (d)	Taxes at 12/31/17 (f) = (e) * 14%
1	2012	(\$622,650)	(\$616,996)	\$5,653	\$4,240	(\$618,410)	(\$86,577)
2	2013	(\$5,323,191)	(\$5,039,425)	\$283,766	\$212,824	(\$5,110,367)	(\$715,451)
3	2014	\$6,655,614	\$6,320,184	(\$335,430)	(\$251,573)	\$6,404,042	\$896,566
4	2015	\$70,796,254	\$70,548,087	(\$248,166)	(\$186,125)	\$70,610,129	\$9,885,418
5	2016	\$60,218,631	\$60,467,565	\$248,935	\$186,701	\$60,405,332	\$8,456,746
6	2017	\$55,224,159	\$55,599,986	\$375,827	\$281,870	\$55,506,029	\$7,770,844
7	2018	\$0	\$63,702,816	\$63,702,816	\$47,777,112	\$47,777,112	\$6,688,796

**Line Notes**

1(a)	Page 16, Line 15(f)
1(b)	Page 16, Line 15(h)
2(a)	Page 14, Line 17(e)
2(b)	Page 14, Line 17(g)
3(a)	Page 12, Line 18(d)
3(b)	Page 12, Line 18(f)
4(a)	Page 10 Line 18(c)
4(b)	Page 10, Line 18(e)
5(a)	Page 8, Line 18(b)
5(b)	Page 8, Line 18(d)
6(a)	Page 6, Line 18(a)
6(b)	Page 6, Line 18(b)
7(b)	Page 4, Line 18(a)

The Narragansett Electric Company  
d/b/a National Grid  
Electric Infrastructure, Safety, and Reliability (ISR) Plan  
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. 4065				
2		(a)	(b)	(c)	(d)
3		Ratio	Rate	Weighted Rate	Taxes
4	Long Term Debt	52.08%	5.30%	2.76%	
5	Short Term Debt	4.98%	1.60%	0.08%	
6	Preferred Stock	0.19%	4.50%	0.01%	
7	Common Equity	42.75%	9.80%	4.19%	2.26%
8		<u>100.00%</u>		<u>7.04%</u>	<u>2.26%</u>
9					9.30%
10	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4065 (Settlement)				
11		Ratio	Rate	Weighted Rate	Taxes
12	Long Term Debt	46.05%	5.30%	2.44%	
13	Short Term Debt	4.98%	1.60%	0.08%	
14	Preferred Stock	0.19%	4.50%	0.01%	
15	Common Equity	48.78%	9.80%	4.78%	2.57%
16		<u>100.00%</u>		<u>7.31%</u>	<u>2.57%</u>
17					9.88%
18	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323				
19		Ratio	Rate	Weighted Rate	Taxes
20	Long Term Debt	49.95%	4.96%	2.48%	
21	Short Term Debt	0.76%	0.79%	0.01%	
22	Preferred Stock	0.15%	4.50%	0.01%	
23	Common Equity	49.14%	9.50%	4.67%	2.51%
24		<u>100.00%</u>		<u>7.17%</u>	<u>2.51%</u>
25					9.68%
26		<b>Tax-Effectuated</b>		<b>Blended Tax-Effectuated</b>	
27	R.I.P.U.C. Docket No. 4065	<u>9.88%</u>	Apr 12 - Jan 13	<u>8.23%</u>	
28	R.I.P.U.C. Docket No. 4323	<u>9.68%</u>	Feb 13 - Mar 13	<u>1.61%</u>	
29				<u>9.84%</u>	
30					
31	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323 at 35% income tax rate				
32		(a)	(b)	(c)	(d)
33		Ratio	Rate	Weighted Rate	Taxes
34	Long Term Debt	49.95%	4.96%	2.48%	
35	Short Term Debt	0.76%	0.79%	0.01%	
36	Preferred Stock	0.15%	4.50%	0.01%	
37	Common Equity	49.14%	9.50%	4.67%	2.51%
38		<u>100.00%</u>		<u>7.17%</u>	<u>2.51%</u>
39					9.68%
40	(d) - Column (c) x 35% divided by (1 - 35%)				
41					
42	Weighted Average Cost of Capital as approved in R.I.P.U.C. Docket No. 4323 at 21% income tax rate				
43		Ratio	Rate	Weighted Rate	Taxes
44	Long Term Debt	49.95%	4.96%	2.48%	
45	Short Term Debt	0.76%	0.79%	0.01%	
46	Preferred Stock	0.15%	4.50%	0.01%	
47	Common Equity	49.14%	9.50%	4.67%	1.24%
48		<u>100.00%</u>		<u>7.17%</u>	<u>1.24%</u>
49					8.41%
50	(d) - Column (c) x 21% divided by (1 - 21%)				
51					
52				FY18 Blended Rate	9.36%
53				Line 17(e) x 75% + Line 27(e) x 25%	



**PRE-FILED DIRECT TESTIMONY**

**OF**

**ADAM S. CRARY**

**August 3, 2020**

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1 **I. Introduction and Qualifications**

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

3 A. My name is Adam S. Crary, and my business address is 40 Sylvan Road, Waltham,  
4 Massachusetts 02451.

5

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

7 A. I am a Senior Analyst for Electric Pricing, New England in the Strategy and Regulation  
8 Department of National Grid USA Service Company, Inc. This department provides  
9 rate-related support to The Narragansett Electric Company d/b/a National Grid (the  
10 “Company” or “National Grid”).

11

12 **Q. Please describe your educational background and training.**

13 A. In 1995, I graduated from Berklee College of Music in Boston, MA with a Bachelor of  
14 Music degree.

15

16 **Q. Please describe your professional experience.**

17 A. For approximately eight years between 2000 and 2014, I was employed by Computer  
18 Sciences Corporation as a Pricing Analyst for their Managed Hosting and Cloud  
19 Computing business divisions, respectively. I began my employment as a Senior Pricing  
20 Analyst with National Grid in June 2014.

21

1 **Q. Have you testified previously before Rhode Island Public Utilities Commission**  
2 **(“PUC”)?**

3 A. Yes, I have submitted pre-filed testimony and testified at evidentiary hearings in several  
4 PUC dockets, including RIPUC No. 5031, Residential Assistance Recovery Filing,  
5 RIPUC, No. 4770, Performance Incentive Factor Filing, and RIPUC No. 4995, FY 2021  
6 Electric Infrastructure, Safety, and Reliability (“ISR”) Plan, as well as the FY2020 ISR  
7 Plan in this docket.

8

9 **II. Purpose of Testimony**

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

11 A. My testimony presents the proposed CapEx and O&M Reconciling Factors, as those  
12 terms are defined in the Company’s Infrastructure, Safety, and Reliability Provision,  
13 R.I.P.U.C. No. 2199 effective September 1, 2018 (“ISR Provision”), resulting from the  
14 reconciliation of actual costs and revenue associated with the Fiscal Year (“FY”) 2020  
15 ISR Plan (“ISR Plan” or “Plan”). In support of the proposed factors, my testimony  
16 presents the following:

- 17 • the results of the annual reconciliation of the actual FY 2020 capital investment  
18 (“CapEx”) revenue requirement and the Operation and Maintenance (“O&M”)  
19 expense to the actual revenue billed;
- 20 • the status of the FY 2018 CapEx and O&M reconciliations;
- 21 • the status of the FY 2019 CapEx and O&M reconciliations;

- 1           • the calculation of the proposed CapEx and O&M Reconciling Factors to be
- 2           effective October 1, 2020; and
- 3           • the typical bill impacts related to the proposed reconciling factors.

4

5 **Q. How is your testimony organized?**

6 A. My testimony is organized as follows:

- 7           • Section III presents the Summary of FY 2020 CapEx and O&M Reconciliations;
- 8           • Section IV presents the results of the FY 2020 CapEx Revenue and the Actual
- 9           CapEx Revenue Requirement Reconciliation, the calculation of the proposed
- 10          CapEx Reconciling Factors, and the status of the refund and recovery of the FY
- 11          2018 and FY 2019 CapEx over and under-recovery reconciliation balances,
- 12          respectively;
- 13          • Section V presents the results of the FY 2020 O&M Revenue and Expense
- 14          Reconciliation, the calculation of the proposed O&M Reconciling Factor, and the
- 15          status of the refunds of the FY 2018 O&M and FY 2019 O&M over-recovery
- 16          reconciliation balances; and
- 17          • Section VI presents the rate class bill impact analysis.

18

19 **III. Summary of FY 2020 Capex and O&M Reconciliations**

20 **Q. Please summarize the results of the FY 2020 CapEx and O&M reconciliations.**

21 A. A summary of the results of the FY 2020 CapEx and O&M reconciliations is presented in

1 Attachment ASC-1. Pursuant to the ISR Provision, the annual reconciliations compare  
2 the actual revenue billed during the Plan year through the approved CapEx and O&M  
3 Factors to the actual CapEx and O&M revenue requirement. The calculation of the  
4 actual revenue requirement is presented in the testimony of Company Witness Melissa A.  
5 Little. As reflected in Attachment ASC-1, the result of the CapEx reconciliation is an  
6 under-recovery of approximately \$4.9 million; the result of the O&M reconciliation is an  
7 under-recovery of approximately \$0.2 million.

8  
9 **Q. Please briefly summarize the operation of the tariff provision that enables the**  
10 **Company to recover certain costs through the ISR Plan.**

11 A. In accordance with the ISR Provision, the Company is allowed to recover the revenue  
12 requirement related to capital investments through CapEx Factors and to recover certain  
13 expenditures for Inspection and Maintenance (“I&M”) and Vegetation Management  
14 (“VM”) activities through O&M Factors.

15  
16 In the ISR Plan filing for the upcoming year, the Company determines the CapEx  
17 Factors, which are designed to recover the revenue requirement on the forecasted capital  
18 investment for the ISR Plan’s investment year plus cumulative capital investment in prior  
19 years’ ISR Plans and determines the O&M Factors based on the forecasted O&M  
20 expense for the Plan year. On an annual basis, the Company is required to reconcile the  
21 annual CapEx revenue requirement on actual cumulative ISR capital investment and the

1 actual O&M expense incurred to actual billed revenue generated from the CapEx Factors  
2 and the O&M Factors. The over or under-recovered balances resulting from the CapEx  
3 and O&M reconciliations are either credited to or recovered from customers through the  
4 CapEx Reconciling Factors and the O&M Reconciling Factor, respectively.

5  
6 **IV. Capex Reconciliation and Proposed Capex Reconciling Factors**

7 **Q. What is the result of the CapEx reconciliation for FY 2020?**

8 A. The FY 2020 CapEx reconciliation by rate class is presented in Attachment ASC-2, page  
9 1. Line (5) represents the CapEx revenue billed during the period April 1, 2019 through  
10 March 31, 2020 of approximately \$5.9 million. Line (4) reflects the CapEx revenue  
11 requirement on actual cumulative ISR capital investment of approximately \$10.8 million.  
12 Line (6) identifies the under-recovery by rate class of the CapEx revenue requirement,  
13 which totals approximately \$4.9 million.

14  
15 **Q. Why has the Company prepared the CapEx reconciliation by rate class?**

16 A. The ISR Provision requires that the CapEx Reconciling Factors be calculated as class-  
17 specific per-kWh factors designed to recover or credit the under- or over-recovery of the  
18 actual Cumulative Revenue Requirement, as allocated to each rate class by the Rate Base  
19 Allocator, for the prior fiscal year. The Rate Base Allocator is the percentage of total rate  
20 base allocated to each rate class determined in the most recently-approved allocated cost  
21 of service study. Page 1, Line (4) of Attachment ASC-2 shows the allocation of the

1 CapEx revenue requirement to each rate class based upon the Rate Base Allocator  
2 approved in the Company's 2017 general rate case in Docket No. 4770.

3  
4 **Q. Please describe the results of the rate class reconciliation.**

5 A. As shown in Attachment ASC-2, page 1, the allocated FY 2020 revenue requirement on  
6 actual cumulative capital investment (Line (4)) is subtracted from the CapEx Factor  
7 revenue billed for each rate class (Line (5)), resulting in the net under-recovery of  
8 approximately \$4.9 million (Line (6)). The detail of the CapEx revenue billed for each  
9 rate class is provided in Attachment ASC-2, page 2.

10  
11 **Q. Please describe the amounts included on Line (7) of Attachment ASC-2.**

12 A. The amounts presented on Page 1, Line (7) reflect the final balance of the over-recovery  
13 resulting from the FY 2018 CapEx reconciliation. The net refund of the FY 2018 CapEx  
14 reconciliation balance is presented on page 3. Of the \$3.8 million net over-recovery for  
15 FY 2018 to be credited to customers via CapEx Reconciling Factors approved by the  
16 PUC, the Company credited \$3.6 million from October 1, 2018 through September 30,  
17 2019. The remaining balance is a net over-recovery amount of approximately \$0.2  
18 million, as shown on Line (7), Column (a). As described in Docket No. 4682, the  
19 Company is including each rate class' residual balance associated with the remaining net  
20 over-recovery balance of the FY 2018 deferral as an adjustment to the FY 2020 CapEx

21

1 reconciliation balance, to ensure the Company does not over-credit or under-credit  
2 customers any amounts associated with the FY 2018 Plan.

3  
4 **Q. How is the Company proposing to recover the FY 2020 CapEx net under-recovery?**

5 A. The Company is proposing to implement a CapEx Reconciling Factor for each rate class  
6 that is consistent with the results of the rate class reconciliation. The calculation of the  
7 proposed CapEx Reconciling Factors is presented in Attachment ASC-2, page 1. The  
8 over or under-recovery by rate class on Line (8) is divided by each rate class' forecasted  
9 kWh deliveries for the period October 1, 2020 through September 30, 2021 on Line (9).  
10 The class-specific CapEx Reconciling Factors are shown on Line (10).

11  
12 **Q. Is the Company providing the status of the net under-recovery from the FY 2019**  
13 **CapEx reconciliation?**

14 A. Yes. The status of the FY 2019 CapEx reconciliation net under-recovery balance is  
15 presented in Attachment ASC-2, page 4. As of June 30, 2020, the balance reflects a  
16 remaining net under-recovery of approximately \$1.2 million, which the Company will  
17 continue to recover from customers through September 30, 2020.

18  
19 **Q. How will the Company propose to credit or recover any residual balances as of**  
20 **September 30, 2020?**

21 A. Pursuant to the ISR Provision, the amount approved for recovery or refund through the

1 CapEx Reconciling Factors is subject to reconciliation. Therefore, the Company will  
2 present the final reconciliation of balances from the FY 2019 CapEx reconciliation in the  
3 FY 2021 ISR Plan Reconciliation Filing and include each rate class' residual balance  
4 from the FY 2019 CapEx reconciliation with the balances resulting from the FY 2021  
5 CapEx reconciliation and will propose CapEx Reconciling Factors on the total.

6  
7 **V. O&M Reconciliation and Proposed O&M Reconciling Factor**

8 **Q. What is the result of the O&M reconciliation for FY 2020?**

9 A. The O&M reconciliation for FY 2020 is presented in Attachment ASC-3, page 1. Line  
10 (1) shows the actual O&M expense for FY 2020 of approximately \$11.5 million, which is  
11 supported in the testimony of Company Witnesses Ms. Patricia Easterly and Ms. Little.  
12 Line (2) shows O&M revenue billed through the O&M Factors from April 1, 2019  
13 through March 31, 2020 of approximately \$11.3 million. Line (3) shows the difference  
14 of approximately \$0.2 million, representing an under-recovery of actual O&M expense.

15  
16 **Q. Please describe the amount included on Line (4).**

17 A. The amount presented on Line (4) reflects the remaining balance of the over-recovery  
18 resulting from the FY 2018 O&M reconciliation. The crediting to customers of the over-

19

1 recovery is presented on page 3. Of the \$200,962 over-recovery that formed the basis for  
2 the O&M Reconciling Factor approved by the PUC, the Company credited customers  
3 \$146,267 from October 1, 2018 through September 30, 2019, leaving \$54,695 to be  
4 credited to customers. As described in Docket No. 4682, the Company is including the  
5 residual balance with the FY 2020 O&M reconciliation balance.

6  
7 **Q. Is the Company providing the O&M Factor revenue?**

8 A. Yes. Attachment ASC-3, page 2 presents the O&M Factor revenue billed by month.

9  
10 **Q. What is the proposed O&M Reconciling Factor?**

11 A. The proposed O&M Reconciling Factor is calculated on Attachment ASC-3, page 1. The  
12 total under-recovery of \$172,390 on Line (5) is divided by the forecasted kWhs during  
13 the refund period, October 1, 2020 through September 30, 2021, on Line (6), resulting in  
14 a factor of 0.002¢ per kWh on Line (7). Pursuant to the ISR Provision, the O&M  
15 Reconciling Factor is a uniform per-kWh factor.

16  
17 **Q. Is the Company providing the status of the over-recovery of the FY 2019 O&M  
18 reconciliation?**

19 A. Yes. The status of the balance from the FY 2019 O&M reconciliation is presented in  
20 Attachment ASC-3, page 4. As of June 30, 2020, there is a remaining over-recovery

21

1 balance of approximately \$0.2 million, which the Company will continue to credit to  
2 customers through September 30, 2020.

3  
4 **Q. How does the Company propose to credit or recover the residual balance at**  
5 **September 30, 2020?**

6 A. Pursuant to the ISR Provision, the amount approved for recovery or refund through the  
7 O&M Reconciling Factor is subject to reconciliation. Therefore, the Company will  
8 present the final reconciliation of the balance from the FY 2019 O&M reconciliation in  
9 the FY 2021 ISR Reconciliation Filing and include the residual balance of the FY 2019  
10 O&M reconciliation with the results of the FY 2021 O&M reconciliation and will  
11 propose an O&M Reconciling Factor on the total.

12  
13 **VI. Typical Bill Analysis**

14 **Q. Is the Company providing a typical bill analysis to illustrate the impact of the**  
15 **proposed rates on each of the Company's rate classes?**

16 A. Yes. The typical bill analysis illustrating the monthly bill impact of the proposed rate  
17 changes for each rate class is provided in Attachment ASC-4. The impact of the  
18 proposed CapEx Reconciling Factor and the proposed O&M Reconciling Factor on a  
19 typical residential customer receiving Standard Offer Service and using 500 kWhs per  
20 month is an increase of \$0.17, or approximately 0.2%, from \$110.51 to \$110.68.

21

1 **VII. Summary of Retail Delivery Rates**

2 **Q. Is the Company providing a proposed Summary of Retail Delivery Rates, R.I.P.U.C.**  
3 **No. 2095, reflecting the reconciling factors proposed in this filing?**

4 A. No, not at this time. Concurrent with this filing, the Company is submitting its Pension  
5 and Post-retirement Benefits Other than Pension Adjustment Factor (“PAF”) filing in  
6 which the Company will propose a PAF, effective October 1, 2020. The Company has  
7 also submitted a Renewable Energy (“RE”) Growth Factor Filing with proposed factors  
8 also effective October 1, 2020. The Company will file a Summary of Retail Delivery  
9 Rates tariff reflecting all rates proposed for October 1, 2020 in compliance with the  
10 PUC’s orders in this proceeding, and the PAF and the RE Growth proceedings.

11

12 **VIII. Conclusion**

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

14 A. Yes.



**List of Attachments**

- Attachment ASC-1 FY2020 ISR Plan Annual Reconciliation Summary
- Attachment ASC-2 CapEx Reconciliations and Proposed CapEx Reconciling Factors
- Attachment ASC-3 O&M Reconciliations and Proposed O&M Reconciling Factor
- Attachment ASC-4 Typical Bill Analysis



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: ADAM S. CRARY  
ATTACHMENTS**

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Attachment ASC-1

FY2020 ISR Plan Annual Reconciliation Summary

FY 2020 ISR Plan Annual Reconciliation Summary

	<u>CapEx</u>	<u>O&amp;M</u>	<u>Total</u>
	(a)	(b)	(c)
(1) Actual Revenue Requirement	\$10,855,545	\$11,516,290	\$22,371,835
(2) Revenue Billed	<u>\$5,936,480</u>	<u>\$11,289,205</u>	<u>\$17,225,685</u>
(3) Total Over/(Under) Recovery	(\$4,919,065)	(\$227,085)	(\$5,146,150)

- (1) Column (a) per Attachment MAL-1, Page 1, Line (11), Column (b)  
Column (b) per Attachment MAL-1, Page 1, Line (4), Column (b)  
Column (c) sum of columns (a) and (b)
- (2) Column (a) per Attachment ASC-2, page 1, Line (5); Column (b) per Attachment ASC-3, page 1, line (2)
- (3) Line (2) - Line (1)



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: ADAM S. CRARY  
ATTACHMENTS**

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Attachment ASC-2

CapEx Reconciliations and Proposed CapEx Reconciling Factors

Proposed CapEx Reconciling Factors  
 For Fiscal Year 2020 ISR Plan  
 For the Recovery (Refund) Period October 1, 2020 through September 30, 2021

	Total (a)	Residential A-16 / A-60 (b)	Small C&I C-06 (c)	General C&I G-02 (d)	200 kW Demand B-32 / G-32 (e)	Lighting S-05/S-06 S-10/S-14 (g)	Propulsion X-01 (h)
(1) Actual FY2020 Capital Investment Revenue Requirement	\$10,855,545						
(2) Total Rate Base (\$000s)	\$729,512	\$404,995	\$75,009	\$117,155	\$123,849	\$8,296	\$208
(3) Rate Base as Percentage of Total	100.00%	55.52%	10.28%	16.06%	16.98%	1.14%	0.03%
(4) Allocated Actual FY2020 Capital Investment Revenue Requirement	\$10,855,545	\$6,026,551	\$1,116,176	\$1,743,332	\$1,842,942	\$123,449	\$3,095
(5) CapEx Revenue Billed	\$5,936,480	\$3,350,815	\$588,512	\$936,008	\$1,040,199	\$20,252	\$694
(6) Total Over (Under) Recovery for FY 2020	(\$4,919,065)	(\$2,675,736)	(\$527,664)	(\$807,324)	(\$802,743)	(\$103,197)	(\$2,401)
(7) Remaining Over (Under) For FY 2018	\$216,876	(\$13,176)	(\$19,380)	\$5,849	\$59,898	\$183,325	\$360
(8) Total Over (Under) Recovery	(\$4,702,189)	(\$2,688,912)	(\$547,044)	(\$801,475)	(\$742,845)	\$80,128	(\$2,041)
(9) Forecasted kWhs - October 1, 2020 through September 30, 2021	6,951,182,260	2,881,110,911	621,270,041	1,202,219,630	2,173,281,749	51,248,416	22,051,513
(10) Proposed Class-specific CapEx Reconciling Factor (Charge) per kWh	\$0.00093	\$0.00088	\$0.00066	\$0.00066	\$0.00034	(\$0.00156)	\$0.00009

(1) per Attachment MAL-1, Page 1, Line (11), Column (b)  
 (2) RIPUC 4770/4780, Compliance Attachment 6, (Schedule 1A), page 1, Line 9  
 (3) Line (2) ÷ Line (2) Total Column  
 (4) Line (1) Total Column x Line (3)  
 (5) per page 2, Columns (c)  
 (6) Line (5) - Line (4)  
 (7) per page 3, Lines (6)  
 (8) Line (6) + Line (7)  
 (9) per Company forecasts  
 (10) -1 x [Line (8) ÷ Line (9)], truncated to 5 decimal places

Fiscal Year 2020 CapEx Reconciliation  
For the Period April 1, 2019 through March 31, 2020  
For the Recovery/Refund Period October 1, 2019 through September 30, 2020

**CapEx Revenue By Rate Class:**

Month	Residential A-16 / A-60			Small C&I C-06			General C&I G-02			Demand B-32 / G-32		
	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)
(1) Apr-19	\$40,392	(\$45,693)	\$86,085	\$9,179	(\$11,434)	\$20,613	\$17,629	(\$11,438)	\$29,067	(\$24,155)	\$37,887	
May-19	\$119,527	(\$110,656)	\$230,183	\$21,481	(\$26,104)	\$47,585	\$45,971	(\$28,649)	\$74,620	(\$51,504)	\$77,343	
Jun-19	\$126,264	(\$13,872)	\$240,136	\$22,363	(\$7,494)	\$49,857	\$50,439	(\$28,780)	\$79,219	(\$53,263)	\$83,939	
Jul-19	\$177,232	(\$159,915)	\$337,147	\$26,178	(\$30,455)	\$56,633	\$52,052	(\$33,375)	\$85,427	(\$61,532)	\$99,818	
Aug-19	\$224,886	(\$203,199)	\$428,085	\$30,375	(\$35,392)	\$65,767	\$52,340	(\$38,324)	\$90,664	(\$66,948)	\$101,730	
Sep-19	\$171,164	(\$154,359)	\$325,523	\$26,178	(\$30,922)	\$57,100	\$50,539	(\$33,380)	\$83,919	(\$59,464)	\$95,429	
Oct-19	\$226,725	\$595	\$226,130	\$44,454	\$1,656	\$42,798	\$87,426	\$9,134	\$78,292	(\$8,013)	\$79,243	
Nov-19	\$354,750	\$135,014	\$219,736	\$71,597	\$33,780	\$37,817	\$125,929	\$52,692	\$73,237	\$50,052	\$86,678	
Dec-19	\$441,299	\$167,548	\$273,751	\$80,395	\$38,831	\$41,564	\$130,547	\$58,186	\$72,361	\$50,774	\$78,703	
Jan-20	\$527,662	\$200,364	\$327,298	\$98,238	\$45,531	\$52,707	\$146,703	\$66,392	\$80,311	\$23,169	\$31,208	
Feb-20	\$417,189	\$158,443	\$258,746	\$85,647	\$39,874	\$45,773	\$132,095	\$57,173	\$74,922	\$55,405	\$55,629	
Mar-20	\$410,031	\$155,750	\$254,281	\$83,179	\$41,173	\$42,006	\$130,132	\$56,755	\$73,377	\$53,666	\$99,584	
Apr-20	\$231,676	\$87,962	\$143,714	\$49,021	\$20,729	\$28,292	\$69,740	\$29,148	\$40,592	\$29,085	\$89,008	
Total	\$3,468,797	\$1,179,982	\$3,350,815	\$648,285	\$59,773	\$588,512	\$1,091,542	\$155,534	\$936,008	(\$62,728)	\$1,040,199	

Lighting  
S-05/S-06/S-10/S-14

Propulsion  
X-01

Month	Lighting S-05/S-06/S-10/S-14			Propulsion X-01		
	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)	Total Revenue (a)	CapEx Rec Factor Revenue (b)	Base Revenue (c)
(1) Apr-19	(\$16,963)	(\$20,015)	\$3,052	(\$1,645)	(\$1,645)	\$0
May-19	(\$37,555)	(\$40,474)	\$2,919	(\$4,225)	(\$4,359)	\$134
Jun-19	(\$35,367)	(\$38,526)	\$3,159	(\$4,298)	(\$4,448)	\$150
Jul-19	(\$37,977)	(\$42,045)	\$4,068	(\$3,762)	(\$3,893)	\$131
Aug-19	(\$41,546)	(\$45,125)	\$3,579	(\$4,325)	(\$4,477)	\$152
Sep-19	(\$43,645)	(\$47,405)	\$3,760	(\$4,089)	(\$4,232)	\$143
Oct-19	\$23,370	(\$10,159)	\$33,529	(\$4,117)	(\$4,376)	(\$741)
Nov-19	(\$49,386)	(\$17,830)	(\$31,556)	(\$2,022)	(\$2,092)	\$70
Dec-19	(\$17,999)	(\$9,462)	(\$8,537)	(\$1,920)	(\$2,052)	\$132
Jan-20	(\$22,142)	(\$18,211)	(\$3,931)	(\$2,214)	(\$2,366)	\$152
Feb-20	(\$9,339)	(\$10,761)	\$1,422	(\$2,225)	(\$2,378)	\$153
Mar-20	(\$3,743)	(\$8,843)	\$5,100	(\$2,391)	(\$2,555)	\$164
Apr-20	(\$5,097)	(\$8,785)	\$3,688	(\$785)	(\$839)	\$54
Total	(\$297,389)	(\$317,641)	\$20,252	(\$38,018)	(\$38,712)	\$694

- (1) Reflects revenue associated with consumption on and after April 1
- (2) Reflects revenue associated with consumption prior to April 1
- (a) from monthly revenue reports per page 3 and page 4
- (b) Column (a) - Column (b)
- (c) Column (a) - Column (b)



Fiscal Year 2019 CapEx Reconciliation of Under Recovery  
For the Period April 1, 2018 through March 31, 2019  
For the Recovery Period October 1, 2019 through September 30, 2020

	Residential A-16 / A-60			Small C&I C-06			General C&I G-02			200 kW Demand B-32 / G-32		
	(a)	(b)	(c)	(b)	(c)	(c)	(b)	(c)	(b)	(c)	(c)	
(1) Beginning Over(Under) Recovery	\$123,530	87,611,246	(\$2,013,964)	22,026,389	\$16,300	43,654,750	79,513,121	\$25,320	185,379,242	\$21,469	\$611,178)	
(2) CapEx Reconciling Factors	\$251,616	190,160,577	\$0.00071	45,648,843	\$33,780	90,847,607	185,379,242	\$52,692	188,052,049	\$50,052	\$0.00027	
(3)	\$303,825	235,983,264		52,473,683	\$38,831	100,320,108	188,052,049	\$58,186	185,809,730	\$50,774		
	\$314,879	282,202,675		61,528,845	\$45,531	114,468,573	85,809,730	\$66,392	205,205,156	\$23,169		
	\$297,756	223,159,014		53,883,902	\$39,874	98,574,412	198,762,996	\$57,173	198,762,996	\$53,666		
	\$295,946	219,366,338		55,639,390	\$41,173	97,853,006	205,205,156	\$56,755	193,429,114	\$55,405		
	\$282,455	222,465,066		50,299,441	\$37,222	90,241,978	183,233,317	\$52,340	184,419,383	\$49,793		
	\$277,011	217,442,927		47,515,698	\$35,162	80,854,270	184,419,383	\$46,895		\$0		
	\$288,723	226,821,420		48,577,343	\$35,947	87,178,918		\$0		\$0		
	\$0	-		-	\$0	-		\$0		\$0		
	\$0	-		-	\$0	-		\$0		\$0		
	\$0	-		-	\$0	-		\$0		\$0		
(4) Total	\$2,435,741		\$1,352,700		\$323,820			\$466,317		\$406,027		
(5) Ending Over(Under) Recovery	(\$1,173,712)		(\$661,264)		(\$120,910)			(\$259,889)		(\$205,151)		

	Lighting S-05/S-06/S-10/S-14			Propulsion X-01		
	(b)	(c)	(c)	(b)	(c)	(c)
(1) Beginning Over(Under) Recovery	\$161,927	\$24,698	\$24,698	903,427	(\$985)	(\$985)
(2) CapEx Reconciling Factors	(\$0.00293)	(\$0.00109)	(\$0.00109)	1,919,069	(\$2,092)	(\$2,092)
(3)				1,882,372	(\$2,052)	(\$2,052)
				2,170,306	(\$2,366)	(\$2,366)
				2,181,537	(\$2,378)	(\$2,378)
				2,344,364	(\$2,555)	(\$2,555)
				1,382,797	(\$1,507)	(\$1,507)
				473,155	(\$516)	(\$516)
				476,935	(\$520)	(\$520)
				-	\$0	\$0
				-	\$0	\$0
				-	\$0	\$0
(4) Total	(\$98,152)	(\$14,971)	(\$14,971)			
(5) Ending Over(Under) Recovery	\$63,775	\$9,727	\$9,727			

- (1) per RIPUC, Docket No. 4783, Attachment REP-2 page 1, line (8)
- (2) per RIPUC, Docket No. 4783, Attachment REP-2 page 1, line (10)
- (3) prorated for usage on and after October 1, 2019
- (4) prorated for usage prior to October 1, 2020
- (5) sum of kWhs & revenue
- (6) Line (1) + Line (5)

- (a) sum of Column (b) from each rate
- (b) from Company revenue report
- (c) Column (b) x CapEx Reconciling Factor



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: ADAM S. CRARY  
ATTACHMENTS**

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Attachment ASC-3

O&M Reconciliations and Proposed O&M Reconciling Factor

Fiscal Year 2020 Operation & Maintenance Reconciliation and Proposed Factor  
Reconciliation of O&M Revenue and Actual O&M Revenue Requirement  
For Fiscal Year 2020 ISR Plan  
For the Recovery (Refund) Period October 1, 2020 through September 30, 2021

(1)	Actual FY 2020 O&M Revenue Requirement	\$11,516,290
(2)	O&M Revenue Billed	<u>\$11,289,205</u>
(3)	Total Over (Under) Recovery for FY 2020	(\$227,085)
(4)	Remaining Over (Under) For FY 2018	<u>\$54,695</u>
(5)	Total Over (Under) Recovery	(\$172,390)
(6)	Forecasted kWhs - October 1, 2020 through September 30, 2021	<u>6,951,182,260</u>
(7)	Proposed O&M Reconciling Factor per kWh	\$0.00002

- (1) per Attachment MAL-1, Page 1, Line (4), Column (e)
- (2) per Page 2
- (3) Line (2) - Line (1)
- (4) per page 3 Line (4)
- (5) Line (3) + Line (4)
- (6) per Company forecast
- (7)  $[\text{Line (5)} \div \text{Line (6)}] \times -1$ , truncated to 5 decimal places

Fiscal Year 2020 Operations & Maintenance Reconciliation  
For the Period April 1, 2019 through March 31, 2020  
For the Recovery/Refund Period October 1, 2019 through September 30, 2020

**O&M Factor Revenue:**

	<u>Month</u>	O&M <u>Revenue</u> (a)	Prior Period Reconciliation Factor <u>Revenue</u> (b)	Base O&M <u>Revenue</u> (c)
(1)	Apr-19	\$322,041	(\$7,706)	\$329,747
	May-19	\$812,285	(\$10,650)	\$822,935
	Jun-19	\$830,500	(\$10,949)	\$841,449
	Jul-19	\$1,064,707	(\$13,624)	\$1,078,331
	Aug-19	\$1,283,814	(\$16,112)	\$1,299,926
	Sep-19	\$1,042,538	(\$13,307)	\$1,055,845
	Oct-19	\$774,744	(\$24,701)	\$799,445
	Nov-19	\$782,431	(\$41,603)	\$824,034
	Dec-19	\$859,697	(\$46,555)	\$906,252
	Jan-20	\$957,198	(\$44,192)	\$1,001,390
	Feb-20	\$861,318	(\$46,934)	\$908,252
	Mar-20	\$841,906	(\$46,159)	\$888,065
(2)	Apr-20	<u>\$507,250</u>	<u>(\$26,284)</u>	<u>\$533,534</u>
	Total	\$10,940,429	(\$348,776)	\$11,289,205

- (1) Reflects kWhs consumed on and after April 1  
(2) Reflects kWhs consumed prior to April 1
- (a) from monthly revenue reports  
(b) per page 3 and page 4  
(c) Column (a) - Column (b)

Fiscal Year 2018 O&M Reconciliation of Over Recovery  
For the Period April 1, 2017 through March 31, 2018  
For the Recovery Period October 1, 2018 through September 30, 2019

		<u>Total</u>			
(1)	Over (Under) Recovery	\$200,962			
(2)	O&M Reconciling Factor	(\$0.00002)			
		<u>Total kWhs</u>	<u>Total Revenue</u>		
		(a)	(b)		
	Oct-18	247,687,272	(\$4,954)		
	Nov-18	538,841,231	(\$10,777)		
	Dec-18	606,304,493	(\$12,126)		
	Jan-19	638,390,517	(\$12,768)		
	Feb-19	607,192,348	(\$12,144)		
	Mar-19	591,845,970	(\$11,837)		
	Apr-19	551,776,369	(\$11,036)		
	May-19	532,497,283	(\$10,650)		
	Jun-19	547,453,610	(\$10,949)		
	Jul-19	681,180,510	(\$13,624)		
	Aug-19	805,595,151	(\$16,112)		
	Sep-19	665,371,727	(\$13,307)		
	Oct-19	299,149,355	<u>(\$5,983)</u>		
(3)	Total	7,313,285,836	(\$146,267)		
(4)	Over (Under) Recovery			\$54,695	

(1) per RIPUC. Docket No. 4682, Attachment ASC-3 page 1, line (5)

(2) per RIPUC. Docket No. 4682, Attachment ASC-3 page 1, line (7)

(3) sum of kWhs & revenue

(4) Line (1) + Line (3)

(a) per Company Records

(b) Line (2) x Column (a)

Fiscal Year 2019 O&M Reconciliation of Over Recovery  
For the Period April 1, 2018 through March 31, 2019  
For the Recovery Period October 1, 2019 through September 30, 2020

		<u>Total</u>			
(1)	Over (Under) Recovery	\$626,839			
(2)	O&M Reconciling Factor	(\$0.00008)			
		<u>Total kWhs</u>	<u>Total Revenue</u>		
		(a)	(b)		
		Oct-19	233,974,563	(\$18,718)	
		Nov-19	520,040,516	(\$41,603)	
		Dec-19	581,940,800	(\$46,555)	
		Jan-20	552,395,633	(\$44,192)	
		Feb-20	586,676,671	(\$46,934)	
		Mar-20	576,984,020	(\$46,159)	
		Apr-20	563,202,565	(\$45,056)	
		May-20	532,381,826	(\$42,591)	
		Jun-20	550,239,973	(\$44,019)	
		Jul-20	-	\$0	
		Aug-20	-	\$0	
		Sep-20	-	\$0	
		Oct-20	-	<u>\$0</u>	
(3)	Total	4,697,836,567		(\$375,827)	
(4)	Over (Under) Recovery			\$251,012	

(1) per RIPUC. Docket No. 4783, Attachment REP-3 page 1, line (5)

(2) per RIPUC. Docket No. 4783, Attachment REP-3 page 1, line (7)

(3) sum of kWhs & revenue

(4) Line (1) + Line (3)

(a) per Company Records

(b) Line (2) x Column (a)



**THE NARRAGANSETT ELECTRIC COMPANY  
d/b/a NATIONAL GRID  
R.I.P.U.C. DOCKET NO. 4915  
FY 2020 ELECTRIC INFRASTRUCTURE, SAFETY, AND RELIABILITY PLAN  
ANNUAL RECONCILIATION FILING  
WITNESS: ADAM S. CRARY  
ATTACHMENTS**

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Attachment ASC-4

Typical Bill Analysis

The Narragansett Electric Company  
Calculation of Monthly Typical Bill  
Total Bill Impact of Proposed  
Rates Applicable to A-16 Rate Customers

Monthly kWh (a)	Rates Effective July 1, 2020			Proposed Rates effective October 1, 2020			\$ Increase (Decrease)			Increase (Decrease) % of Total Bill			Percentage of Customers (r)	
	Delivery Services (b)	Supply Services (c)	GET (d)	Delivery Services (f)	Supply Services (g)	GET (h)	Delivery Services (j) = (f) - (b)	Supply Services (k) = (g) - (c)	GET (l) = (h) - (d)	Delivery Services (m) = (j) / (e)	Supply Services (o) = (g) / (e)	GET (p) = (h) / (e)		Total (q) = (m) / (e)
150	\$25.47	\$12.45	\$1.58	\$25.51	\$12.45	\$1.58	\$0.04	\$0.00	\$0.00	0.1%	0.0%	0.0%	0.1%	30.7%
300	\$42.23	\$24.90	\$2.80	\$42.33	\$24.90	\$2.80	\$0.10	\$0.00	\$0.00	0.1%	0.0%	0.0%	0.1%	12.9%
400	\$53.41	\$33.20	\$3.61	\$53.54	\$33.20	\$3.61	\$0.13	\$0.00	\$0.00	0.1%	0.0%	0.0%	0.1%	11.6%
500	\$64.59	\$41.50	\$4.42	\$64.75	\$41.50	\$4.42	\$0.16	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	9.6%
600	\$75.76	\$49.79	\$5.23	\$75.95	\$49.79	\$5.24	\$0.19	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	19.0%
700	\$86.94	\$58.09	\$6.04	\$87.16	\$58.09	\$6.05	\$0.22	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	6.8%
1,200	\$142.82	\$99.59	\$10.10	\$143.21	\$99.59	\$10.12	\$0.39	\$0.00	\$0.02	0.2%	0.0%	0.0%	0.2%	2.3%
2,000	\$232.24	\$165.98	\$16.59	\$232.88	\$165.98	\$16.62	\$0.64	\$0.00	\$0.03	0.2%	0.0%	0.0%	0.2%	

Rates Effective July 1, 2020 (s)

Proposed Rates effective October 1, 2020 (t)

Line Item on Bill

(1) Distribution Customer Charge	\$6.00													
(2) LIHEAP Enhancement Charge	\$0.80													
(3) Renewable Energy Growth Program Charge	\$1.90													
(4) Distribution Charge (per kWh)	\$0.04496			\$0.04496										
(5) Operating & Maintenance Expense Charge	\$0.00212			\$0.00212										
(6) Operating & Maintenance Expense Reconciliation Factor	(\$0.00008)			\$0.00002										
(7) CapEx Factor Charge	\$0.00396			\$0.00396										
(8) CapEx Reconciliation Factor	\$0.00071			\$0.00093										
(9) Revenue Decoupling Adjustment Factor	\$0.00118			\$0.00118										
(10) Pension Adjustment Factor	(\$0.00005)			(\$0.00005)										
(11) Storm Fund Replenishment Factor	\$0.00288			\$0.00288										
(12) Acreage Management Adjustment Factor	\$0.00015			\$0.00015										
(13) Performance Incentive Factor	\$0.00005			\$0.00005										
(14) Low Income Discount Recovery Factor	\$0.00176			\$0.00176										
(15) Long-term Contracting for Renewable Energy Charge	\$0.00931			\$0.00931										
(16) Net Metering Charge	\$0.00266			\$0.00266										
(17) Base Transmission Charge	\$0.03096			\$0.03096										
(18) Transmission Adjustment Factor	(\$0.00189)			(\$0.00189)										
(19) Transmission Uncollectible Factor	\$0.00038			\$0.00038										
(20) Base Transition Charge	(\$0.00074)			(\$0.00074)										
(21) Transition Adjustment	(\$0.00008)			(\$0.00008)										
(22) Energy Efficiency Program Charge	\$0.01353			\$0.01353										
(23) Standard Offer Service Base Charge	\$0.07497			\$0.07497										
(24) SOS Adjustment Factor	(\$0.00294)			(\$0.00294)										
(25) SOS Administrative Cost Adjustment Factor	\$0.00230			\$0.00230										
(26) Renewable Energy Standard Charge	\$0.00866			\$0.00866										

Line Item on Bill	Customer Charge	LIHEAP Enhancement Charge	RE Growth Program	Distribution Energy Charge	Renewable Energy Distribution Charge	Transmission Charge	Transition Charge	Energy Efficiency Programs	Supply Services Energy Charge
(27) Customer Charge	\$6.00								
(28) LIHEAP Enhancement Charge	\$0.80								
(29) RE Growth Program	\$1.90								
(30) Transmission Charge	\$0.02945								
(31) Distribution Energy Charge	\$0.05764								
(32) Transition Charge	(\$0.00082)								
(33) Energy Efficiency Programs	\$0.01353								
(34) Renewable Energy Distribution Charge	\$0.01197								
(35) Supply Services Energy Charge	\$0.08299								

Column (s): per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service Rates, R.I.P.U.C. No. 2096, effective 7/1/2020  
Column (t): Line (6) per ASC-3, Page 1 Line (5), Line (8) per ASC-2, Page 1, Line (10), all other rates per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020

The Narragansett Electric Company  
Calculation of Monthly Typical Bill  
Total Bill Impact of Proposed  
Rates Applicable to A-60 Rate Customers

Monthly kWh	Rates Effective July 1, 2020				Proposed Rates effective October 1, 2020				\$ Increase (Decrease) % of Total Bill				Percentage of Customers of Customers (v)			
	Delivery Services (b)	Supply Services (c)	Low Income Discount (d) = [(b)+(c)] x .25	Total (e) = (b) + (c) + (d)	Delivery Services (h)	Supply Services (i)	Low Income Discount (j) = [(h)+(i)] x .25	Total (m) = (h) + (i) + (j)	Delivery Services (o) = [(b)+(d)] - [(h)+(j)]	Supply Services (p) = (i) - (c)	GET (r) = (m) - (o) - (p)	Total (q) = (o) + (p) + (r)		Delivery Services (s) = (o) ± (c)	Supply Services (t) = (p) ± (i)	GET (u) = (q) ± (r)
150	\$23.20	\$12.45	(\$8.91)	\$26.74	\$23.25	\$12.45	(\$8.93)	\$26.77	\$1.12	\$0.03	\$0.00	\$0.01	0.1%	0.0%	0.1%	32.1%
300	\$39.70	\$24.90	(\$16.15)	\$48.45	\$39.80	\$24.90	(\$16.18)	\$48.52	\$2.02	\$0.07	\$0.00	\$0.00	0.1%	0.0%	0.1%	15.4%
400	\$50.70	\$33.20	(\$20.98)	\$62.92	\$50.83	\$33.20	(\$21.01)	\$63.02	\$2.63	\$0.10	\$0.00	\$0.01	0.2%	0.0%	0.2%	12.5%
500	\$61.71	\$41.50	(\$25.80)	\$77.41	\$61.87	\$41.50	(\$25.84)	\$77.53	\$3.23	\$0.12	\$0.00	\$0.00	0.1%	0.0%	0.1%	9.6%
600	\$72.71	\$49.79	(\$30.63)	\$91.87	\$72.90	\$49.79	(\$30.67)	\$92.02	\$3.83	\$0.15	\$0.00	\$0.00	0.2%	0.0%	0.2%	7.2%
700	\$83.71	\$58.09	(\$35.45)	\$106.35	\$83.93	\$58.09	(\$35.51)	\$106.51	\$4.44	\$0.16	\$0.00	\$0.01	0.1%	0.0%	0.2%	16.4%
1,200	\$138.71	\$99.39	(\$59.58)	\$178.72	\$139.10	\$99.39	(\$59.67)	\$179.02	\$7.46	\$0.30	\$0.00	\$0.01	0.2%	0.0%	0.2%	5.2%
2,000	\$226.72	\$165.98	(\$98.18)	\$294.52	\$227.36	\$165.98	(\$98.34)	\$307.29	\$12.29	\$0.48	\$0.00	\$0.02	0.2%	0.0%	0.2%	1.6%

Rates Effective July 1, 2020

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.04486	\$0.04486
\$0.00212	\$0.00212
\$0.00068	\$0.00068
\$0.00396	\$0.00396
\$0.00071	\$0.00071
\$0.00018	\$0.00018
\$0.00005	\$0.00005
\$0.00288	\$0.00288
\$0.00015	\$0.00015
\$0.00005	\$0.00005
\$0.00000	\$0.00000
\$0.00931	\$0.00931
\$0.00266	\$0.00266
\$0.03096	\$0.03096
\$0.00189	\$0.00189
\$0.00038	\$0.00038
\$0.00074	\$0.00074
\$0.00008	\$0.00008
\$0.07497	\$0.07497
\$0.00294	\$0.00294
\$0.00230	\$0.00230
\$0.00866	\$0.00866

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.02945	\$0.02945
\$0.05588	\$0.05588
\$0.00082	\$0.00082
\$0.01353	\$0.01353
\$0.01197	\$0.01197
\$0.08299	\$0.08299
25%	25%

Proposed Rates effective October 1, 2020

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.04486	\$0.04486
\$0.00212	\$0.00212
\$0.00068	\$0.00068
\$0.00396	\$0.00396
\$0.00071	\$0.00071
\$0.00018	\$0.00018
\$0.00005	\$0.00005
\$0.00288	\$0.00288
\$0.00015	\$0.00015
\$0.00005	\$0.00005
\$0.00000	\$0.00000
\$0.00931	\$0.00931
\$0.00266	\$0.00266
\$0.03096	\$0.03096
\$0.00189	\$0.00189
\$0.00038	\$0.00038
\$0.00074	\$0.00074
\$0.00008	\$0.00008
\$0.07497	\$0.07497
\$0.00294	\$0.00294
\$0.00230	\$0.00230
\$0.00866	\$0.00866

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.02945	\$0.02945
\$0.05588	\$0.05588
\$0.00082	\$0.00082
\$0.01353	\$0.01353
\$0.01197	\$0.01197
\$0.08299	\$0.08299
25%	25%

Column (w): per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020  
Column (x): Line (6) per ASC-3, Page 1, Line (5), Line (8) per ASC-2, Page 1, Line (10); all other rates per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020

The Narragansett Electric Company  
Calculation of Monthly Typical Bill  
Total Bill Impact of Proposed  
Rates Applicable to A-60 Rate Customers

Monthly kWh	Rates Effective July 1, 2020				Proposed Rates effective October 1, 2020				\$ Increase (Decrease) % of Total Bill				Percentage of Customers of Customers (v)					
	Delivery Services (b)	Supply Services (c)	Low Income Discount (d) = [(b)+(c)] x .30	Total GET (e) = (b) + (c) + (d)	Delivery Services (h)	Supply Services (i)	Low Income Discount (j) = [(h)+(i)] x .30	Total GET (k) = (h) + (i) + (j)	Delivery Services (m) = [(b)+(d)] - (h)	Supply Services (n) = (i) - (c)	GET (p) = (k) - (j)	Total (q) = (m) + (n) + (p)		Delivery Services (r) = (m) ÷ [(b)+(d)]	Supply Services (s) = (n) ÷ (i)	GET (t) = (p) ÷ (k)	Total (u) = (q) ÷ (e)	
150	\$23.20	\$12.45	(\$10.70)	\$24.95	\$23.25	\$12.45	(\$10.71)	\$24.99	\$1.04	\$26.03	\$0.04	\$0.00	\$0.00	0.2%	0.0%	0.0%	0.2%	32.1%
300	\$39.70	\$24.90	(\$19.38)	\$45.22	\$39.80	\$24.90	(\$19.41)	\$45.29	\$1.89	\$47.18	\$0.07	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	15.4%
400	\$50.70	\$33.20	(\$25.17)	\$58.73	\$50.83	\$33.20	(\$25.21)	\$58.82	\$2.45	\$61.27	\$0.09	\$0.00	\$0.00	0.1%	0.0%	0.0%	0.1%	12.5%
500	\$61.71	\$41.50	(\$30.96)	\$72.25	\$61.87	\$41.50	(\$31.01)	\$72.36	\$3.02	\$75.38	\$0.11	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	9.6%
600	\$72.71	\$49.79	(\$36.75)	\$85.75	\$72.90	\$49.79	(\$36.81)	\$85.88	\$3.58	\$89.46	\$0.13	\$0.00	\$0.01	0.1%	0.0%	0.0%	0.2%	7.2%
700	\$83.71	\$58.09	(\$42.54)	\$99.26	\$83.93	\$58.09	(\$42.61)	\$99.41	\$4.14	\$103.55	\$0.15	\$0.00	\$0.00	0.1%	0.0%	0.0%	0.1%	16.4%
1,200	\$138.71	\$99.39	(\$71.49)	\$166.81	\$139.10	\$99.39	(\$71.61)	\$167.08	\$6.96	\$174.04	\$0.27	\$0.00	\$0.01	0.2%	0.0%	0.0%	0.2%	5.2%
2,000	\$226.72	\$165.98	(\$117.81)	\$274.89	\$227.36	\$165.98	(\$118.00)	\$275.34	\$11.47	\$286.81	\$0.45	\$0.00	\$0.02	0.2%	0.0%	0.0%	0.2%	1.6%

Rates Effective July 1, 2020

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.0486	\$0.0486
\$0.00212	\$0.00212
(\$0.0008)	(\$0.0008)
\$0.00396	\$0.00396
\$0.00071	\$0.00071
(\$0.00018)	(\$0.00018)
(\$0.00005)	(\$0.00005)
\$0.00288	\$0.00288
\$0.00015	\$0.00015
\$0.00005	\$0.00005
\$0.00000	\$0.00000
\$0.00931	\$0.00931
\$0.00266	\$0.00266
\$0.03996	\$0.03996
(\$0.00189)	(\$0.00189)
\$0.00038	\$0.00038
(\$0.00074)	(\$0.00074)
(\$0.0008)	(\$0.0008)
\$0.01353	\$0.01353
\$0.07497	\$0.07497
(\$0.00294)	(\$0.00294)
\$0.00230	\$0.00230
\$0.00866	\$0.00866

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.02945	\$0.02945
\$0.05588	\$0.05588
(\$0.00082)	(\$0.00082)
\$0.01353	\$0.01353
\$0.01197	\$0.01197
\$0.08299	\$0.08299
30%	30%

Proposed Rates effective October 1, 2020

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.0486	\$0.0486
\$0.00212	\$0.00212
(\$0.0008)	(\$0.0008)
\$0.00396	\$0.00396
\$0.00071	\$0.00071
(\$0.00018)	(\$0.00018)
(\$0.00005)	(\$0.00005)
\$0.00288	\$0.00288
\$0.00015	\$0.00015
\$0.00005	\$0.00005
\$0.00000	\$0.00000
\$0.00931	\$0.00931
\$0.00266	\$0.00266
\$0.03996	\$0.03996
(\$0.00189)	(\$0.00189)
\$0.00038	\$0.00038
(\$0.00074)	(\$0.00074)
(\$0.0008)	(\$0.0008)
\$0.01353	\$0.01353
\$0.07497	\$0.07497
(\$0.00294)	(\$0.00294)
\$0.00230	\$0.00230
\$0.00866	\$0.00866

(w)	(x)
\$4.00	\$4.00
\$0.80	\$0.80
\$1.90	\$1.90
\$0.02945	\$0.02945
\$0.05588	\$0.05588
(\$0.00082)	(\$0.00082)
\$0.01353	\$0.01353
\$0.01197	\$0.01197
\$0.08299	\$0.08299
30%	30%

Column (w): per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service Rates, R.I.P.U.C. No. 2096, effective 7/1/2020  
Column (x): Line (6) per ASC-3, Page 1, Line (5), Line (8) per ASC-2, Page 1, Line (10); all other rates per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service Rates, R.I.P.U.C. No. 2096, effective 7/1/2020

The Narragansett Electric Company  
 Calculation of Monthly Typical Bill  
 Total Bill Impact of Proposed  
 Rates Applicable to C-06 Rate Customers

Monthly kWh (a)	Rates Effective July 1, 2020			Proposed Rates effective October 1, 2020			\$ Increase (Decrease)			Increase (Decrease) % of Total Bill			Percentage of Customers (n)
	Delivery Services (b)	Supply Services (c)	Total (e)	Delivery Services (b)	Supply Services (c)	Total (e)	Delivery Services (f)	Supply Services (g)	Total (i)	Delivery Services (j)	Supply Services (k)	Total (m)	
250	\$40.64	\$19.41	\$62.55	\$40.70	\$19.41	\$62.61	\$0.06	\$0.00	\$0.06	0.1%	0.0%	0.1%	56.3%
500	\$67.53	\$38.82	\$110.78	\$67.65	\$38.82	\$110.91	\$0.12	\$0.00	\$0.13	0.1%	0.0%	0.1%	16.9%
1,000	\$121.31	\$77.64	\$207.24	\$121.55	\$77.64	\$207.49	\$0.24	\$0.00	\$0.25	0.1%	0.0%	0.1%	8.1%
1,500	\$175.09	\$116.46	\$303.70	\$175.45	\$116.46	\$304.07	\$0.36	\$0.00	\$0.37	0.1%	0.0%	0.1%	5.0%
2,000	\$228.87	\$155.28	\$400.16	\$229.35	\$155.28	\$400.66	\$0.48	\$0.00	\$0.50	0.1%	0.0%	0.1%	13.6%

Rates Effective July 1, 2020

Proposed Rates effective October 1, 2020

Line Item on Bill

(1) Distribution Customer Charge	(o)	\$10.00	(p)	\$10.00	Customer Charge
(2) LIHEAP Enhancement Charge	\$0.80	\$0.80	\$0.80	LIHEAP Enhancement Charge	
(3) Renewable Energy Growth Program Charge	\$2.95	\$2.95	\$2.95	RE Growth Program	
(4) Distribution Charge (per kWh)	\$0.04400	\$0.04400	\$0.04400		
(5) Operating & Maintenance Expense Charge	\$0.00212	\$0.00212	\$0.00212		
(6) Operating & Maintenance Expense Reconciliation Factor	(\$0.00008)	(\$0.00008)	(\$0.00002)		
(7) CapEx Factor Charge	\$0.00339	\$0.00339	\$0.00339		
(8) CapEx Reconciliation Factor	\$0.00074	\$0.00074	\$0.00088		
(9) Revenue Decoupling Adjustment Factor	\$0.00118	\$0.00118	\$0.00118	Distribution Energy Charge	
(10) Pension Adjustment Factor	(\$0.00005)	(\$0.00005)	(\$0.00005)		
(11) Storm Fund Replenishment Factor	\$0.00288	\$0.00288	\$0.00288		
(12) Arrearage Management Adjustment Factor	\$0.00015	\$0.00015	\$0.00015		
(13) Performance Incentive Factor	\$0.00005	\$0.00005	\$0.00005		
(14) Low Income Discount Recovery Factor	\$0.00176	\$0.00176	\$0.00176		
(15) Long-term Contracting for Renewable Energy Charge	\$0.00931	\$0.00931	\$0.00931	Renewable Energy Distribution Charge	
(16) Net Metering Charge	\$0.00266	\$0.00266	\$0.00266		
(17) Base Transmission Charge	\$0.03110	\$0.03110	\$0.03110		
(18) Transmission Adjustment Factor	(\$0.00467)	(\$0.00467)	(\$0.00467)	Transmission Charge	
(19) Transmission Uncollectible Factor	\$0.00031	\$0.00031	\$0.00031		
(20) Base Transition Charge	(\$0.00074)	(\$0.00074)	(\$0.00074)	Transition Charge	
(21) Transition Adjustment	(\$0.00008)	(\$0.00008)	(\$0.00008)	Energy Efficiency Programs	
(22) Energy Efficiency Program Charge	\$0.01353	\$0.01353	\$0.01353		
(23) Standard Offer Service Base Charge	\$0.06580	\$0.06580	\$0.06580		
(24) SOS Adjustment Factor	\$0.00094	\$0.00094	\$0.00094	Supply Services Energy Charge	
(25) SOS Administrative Cost Adjustment Factor	\$0.00224	\$0.00224	\$0.00224		
(26) Renewable Energy Standard Charge	\$0.00866	\$0.00866	\$0.00866		

Line Item on Bill

(27) Customer Charge	\$10.00	\$10.00
(28) LIHEAP Enhancement Charge	\$0.80	\$0.80
(29) RE Growth Program	\$2.95	\$2.95
(30) Transmission Charge	\$0.02674	\$0.02674
(31) Distribution Energy Charge	\$0.05614	\$0.05614
(32) Transition Charge	(\$0.00082)	(\$0.00082)
(33) Energy Efficiency Programs	\$0.01353	\$0.01353
(34) Renewable Energy Distribution Charge	\$0.01197	\$0.01197
(35) Supply Services Energy Charge	\$0.07764	\$0.07764

Column (o): per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020

Column (p): Line (6) per ASC-3, Page 1 Line (5), Line (8) per ASC-2, Page 1, Line (10); all other rates per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020

FY2020 Electric Infrastructure, Safety, and Reliability Plan Reconciliation Filing

The Narragansett Electric Company  
Calculation of Monthly Typical Bill  
Total Bill Impact of Proposed  
Rates Applicable to G&Z Rate Customers

Rates Effective July 1, 2020			Proposed Rates effective October 1, 2020			\$ Increase (Decrease)			Increase (Decrease) % of Total Bill				
kW	Monthly Power Hours Use kWh	Delivery Services (b)	Supply Services (c)	GET (d)	Total (e)	Delivery Services (f)	Supply Services (g)	GET (h)	Total (i)	Delivery Services (j)	Supply Services (k)	GET (l)	Total (m)
20	200	\$522.11	\$310.56	\$34.69	\$867.36	\$522.83	\$310.56	\$34.72	\$868.11	\$0.72	\$0.00	\$0.03	\$0.75
50	200	\$1,160.45	\$776.40	\$80.70	\$2,017.55	\$1,162.25	\$776.40	\$80.78	\$2,019.43	\$1.80	\$0.00	\$0.08	\$1.88
100	200	\$2,224.35	\$1,552.80	\$157.38	\$3,934.53	\$2,227.95	\$1,552.80	\$157.53	\$3,938.28	\$3.60	\$0.00	\$0.15	\$3.75
150	200	\$3,288.25	\$2,329.20	\$234.06	\$5,851.51	\$3,293.65	\$2,329.20	\$234.29	\$5,857.14	\$5.40	\$0.00	\$0.23	\$5.63
20	300	\$613.99	\$465.84	\$44.99	\$1,124.82	\$615.07	\$465.84	\$45.04	\$1,125.95	\$1.08	\$0.00	\$0.05	\$1.13
50	300	\$1,390.15	\$1,164.60	\$106.45	\$2,661.20	\$1,392.85	\$1,164.60	\$106.56	\$2,664.01	\$2.70	\$0.00	\$0.11	\$2.81
100	300	\$2,683.75	\$2,329.20	\$208.87	\$5,221.82	\$2,689.15	\$2,329.20	\$209.10	\$5,227.45	\$5.40	\$0.00	\$0.23	\$5.63
150	300	\$3,977.35	\$3,493.80	\$311.30	\$7,782.45	\$3,985.45	\$3,493.80	\$311.64	\$7,900.89	\$8.10	\$0.00	\$0.34	\$8.44
20	400	\$705.87	\$621.12	\$55.29	\$1,382.28	\$707.31	\$621.12	\$55.35	\$1,383.78	\$1.44	\$0.00	\$0.06	\$1.50
50	400	\$1,619.85	\$1,452.80	\$132.19	\$3,304.84	\$1,623.45	\$1,452.80	\$132.34	\$3,308.59	\$3.60	\$0.00	\$0.15	\$3.75
100	400	\$3,143.15	\$3,105.60	\$260.36	\$6,509.11	\$3,150.35	\$3,105.60	\$260.66	\$6,516.61	\$7.20	\$0.00	\$0.30	\$7.50
150	400	\$4,666.45	\$4,658.40	\$388.54	\$9,713.39	\$4,677.25	\$4,658.40	\$388.99	\$9,724.64	\$10.80	\$0.00	\$0.45	\$11.25
20	500	\$797.75	\$776.40	\$65.59	\$1,639.74	\$799.55	\$776.40	\$65.66	\$1,641.61	\$1.80	\$0.00	\$0.07	\$1.87
50	500	\$1,849.55	\$1,941.00	\$157.94	\$3,948.49	\$1,854.05	\$1,941.00	\$158.13	\$3,953.18	\$4.50	\$0.00	\$0.19	\$4.69
100	500	\$3,602.55	\$3,882.00	\$311.86	\$7,796.41	\$3,611.55	\$3,882.00	\$312.23	\$7,905.78	\$9.00	\$0.00	\$0.37	\$9.37
150	500	\$5,355.55	\$5,823.00	\$465.77	\$11,644.32	\$5,369.05	\$5,823.00	\$466.34	\$11,658.39	\$13.50	\$0.00	\$0.57	\$14.07
20	600	\$889.63	\$931.68	\$75.89	\$1,897.20	\$891.79	\$931.68	\$75.98	\$1,899.45	\$2.16	\$0.00	\$0.09	\$2.25
50	600	\$2,079.25	\$2,329.20	\$183.69	\$4,592.14	\$2,084.65	\$2,329.20	\$183.91	\$4,597.76	\$5.40	\$0.00	\$0.22	\$5.62
100	600	\$4,061.95	\$4,658.40	\$363.35	\$9,083.70	\$4,072.75	\$4,658.40	\$363.80	\$9,094.95	\$10.80	\$0.00	\$0.45	\$11.25
150	600	\$6,044.65	\$6,987.60	\$543.01	\$13,575.26	\$6,060.85	\$6,987.60	\$543.69	\$13,592.14	\$16.20	\$0.00	\$0.68	\$16.88

Proposed Rates effective October 1, 2020

Rates Effective July 1, 2020

Line Item on Bill	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
(1) Distribution Customer Charge			\$145.00		\$145.00								
(2) LIHEAP Enhancement Charge			\$0.80		\$0.80								
(3) Renewable Energy Growth Program Charge			\$27.95		\$27.95								
(4) Base Distribution Demand Charge (per kW > 10kW)			\$67.5		\$67.5								
(5) CapEx Factor Demand Charge (per kW > 10kW)			\$0.97		\$0.97								
(6) Distribution Charge (per kWh)			\$0.00465		\$0.00465								
(7) Operating & Maintenance Expense Charge			\$0.00169		\$0.00169								
(8) Revenue & Maintenance Expense Reconciliation Factor			(\$0.00008)		(\$0.00008)								
(9) CapEx Reconciliation Factor			\$0.00058		\$0.00058								
(10) Revenue Decoupling Adjustment Factor			\$0.00118		\$0.00118								
(11) Pension Adjustment Factor			(\$0.00005)		(\$0.00005)								
(12) Storm Fund Replenishment Factor			\$0.00288		\$0.00288								
(13) Average Management Adjustment Factor			\$0.00015		\$0.00015								
(14) Performance Incentive Factor			\$0.00005		\$0.00005								
(15) Low Income Discount Recovery Factor			\$0.00176		\$0.00176								
(16) Non-term Contracting for Renewable Energy Charge			\$0.00974		\$0.00974								
(17) Net Metering Charge			\$0.00264		\$0.00264								
(18) Base Transmission Charge			\$4.37		\$4.37								
(19) Base Transmission Charge			\$0.01214		\$0.01214								
(20) Transmission Unavailable Factor			(\$0.00369)		(\$0.00369)								
(21) Transmission Unavailable Factor			\$0.00030		\$0.00030								
(22) Base Transmission Charge			(\$0.00074)		(\$0.00074)								
(23) Transmission Adjustment			(\$0.00008)		(\$0.00008)								
(24) Energy Efficiency Program Charge			\$0.01353		\$0.01353								
(25) Standard Offer Service Base Charge			\$0.06580		\$0.06580								
(26) SOS Adjustment Factor			\$0.00094		\$0.00094								
(27) SOS Administrative Cost Adjustment Factor			\$0.00224		\$0.00224								
(28) Renewable Energy Standard Charge			\$0.00866		\$0.00866								
Line Item on Bill													
(29) Customer Charge			\$145.00		\$145.00								
(31) LIHEAP Enhancement Charge			\$0.80		\$0.80								
(30) RE Growth Program			\$27.95		\$27.95								
(32) Transmission Adjustment			\$0.00845		\$0.00845								
(33) Distribution Energy Charge			\$0.01281		\$0.01281								
(34) Distribution Demand Charge			\$7.72		\$7.72								
(35) Transmission Demand Charge			\$4.37		\$4.37								
(34) Transition Charge			(\$0.00082)		(\$0.00082)								
(35) Energy Efficiency Programs			\$0.01353		\$0.01353								
(36) Renewable Energy Distribution Charge			\$0.01197		\$0.01197								
(37) Supply Services Energy Charge			\$0.07764		\$0.07764								

Column (a) per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020  
Column (b) per Summary of Retail Delivery Service Rates, R.I.P.U.C. No. 2095 effective 7/1/2020, and Summary of Rates Standard Offer Service tariff, R.I.P.U.C. No. 2096, effective 7/1/2020

The Narragansett Electric Company  
Calculation of Monthly Typical Bill  
Total Bill Impact of Proposed  
Rates Applicable to C-12 Rate Customers

AW	Monthly Power Hours Use	KWh	Rates Effective July 1, 2020				Proposed Rates Effective October 1, 2020				\$ Increase (Decrease)				Increase (Decrease) % of Total Bill			
			Delivery Services	Supply Services	GET	Total	Delivery Services	Supply Services	GET	Total	Delivery Services	Supply Services	GET	Total	Delivery Services	Supply Services	GET	Total
200	200	40,000	\$4,153.31	\$2,556.80	\$279.59	\$6,989.70	\$4,160.11	\$2,556.80	\$279.87	\$6,996.78	\$6.80	\$0.00	\$0.28	\$7.08	0.1%	0.0%	0.0%	0.1%
750	200	150,000	\$15,286.41	\$9,588.00	\$1,086.43	\$25,960.84	\$15,311.91	\$9,588.00	\$1,087.50	\$26,987.41	\$25.50	\$0.00	\$1.07	\$26.57	0.1%	0.0%	0.0%	0.1%
1,000	200	200,000	\$20,346.91	\$12,784.00	\$1,380.45	\$34,511.36	\$20,380.91	\$12,784.00	\$1,381.87	\$35,546.78	\$35.00	\$0.00	\$1.42	\$35.42	0.1%	0.0%	0.0%	0.1%
1,500	200	300,000	\$30,467.91	\$19,176.00	\$2,068.50	\$51,712.41	\$30,518.91	\$19,176.00	\$2,070.62	\$53,765.53	\$51.00	\$0.00	\$2.12	\$53.12	0.1%	0.0%	0.0%	0.1%
2,000	200	400,000	\$40,588.91	\$25,569.60	\$2,757.00	\$68,915.51	\$40,649.91	\$25,569.60	\$2,759.17	\$70,978.68	\$61.00	\$0.00	\$2.17	\$63.17	0.1%	0.0%	0.0%	0.1%
2,500	200	500,000	\$50,709.91	\$31,960.00	\$3,444.58	\$86,114.49	\$50,770.91	\$31,960.00	\$3,446.12	\$88,203.03	\$61.00	\$0.00	\$2.54	\$63.54	0.1%	0.0%	0.0%	0.1%
3,000	200	600,000	\$60,830.91	\$38,352.00	\$4,129.65	\$104,312.56	\$60,891.91	\$38,352.00	\$4,131.25	\$106,375.16	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
3,500	200	700,000	\$70,951.91	\$44,744.00	\$4,814.72	\$120,510.63	\$71,012.91	\$44,744.00	\$4,816.32	\$122,573.23	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
4,000	200	800,000	\$81,072.91	\$51,136.00	\$5,509.85	\$137,718.76	\$81,133.91	\$51,136.00	\$5,511.45	\$139,781.36	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
4,500	200	900,000	\$91,193.91	\$57,528.00	\$6,205.00	\$155,926.91	\$91,250.91	\$57,528.00	\$6,206.60	\$157,994.51	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
5,000	200	1,000,000	\$101,314.91	\$63,920.00	\$6,899.15	\$175,134.06	\$101,371.91	\$63,920.00	\$6,900.75	\$177,202.66	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
5,500	200	1,100,000	\$111,435.91	\$70,312.00	\$7,594.30	\$195,342.21	\$111,492.91	\$70,312.00	\$7,595.90	\$197,410.81	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
6,000	200	1,200,000	\$121,556.91	\$76,704.00	\$8,289.45	\$218,550.36	\$121,613.91	\$76,704.00	\$8,291.05	\$220,518.96	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
6,500	200	1,300,000	\$131,677.91	\$83,096.00	\$8,984.60	\$243,768.51	\$131,734.91	\$83,096.00	\$8,986.20	\$245,836.11	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
7,000	200	1,400,000	\$141,798.91	\$89,488.00	\$9,679.75	\$270,987.66	\$141,855.91	\$89,488.00	\$9,681.35	\$273,055.26	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
7,500	200	1,500,000	\$151,919.91	\$95,880.00	\$10,374.90	\$300,206.81	\$151,976.91	\$95,880.00	\$10,376.50	\$302,274.41	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
8,000	200	1,600,000	\$162,040.91	\$102,272.00	\$11,070.05	\$330,425.96	\$162,097.91	\$102,272.00	\$11,071.65	\$332,494.61	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
8,500	200	1,700,000	\$172,161.91	\$108,664.00	\$11,765.20	\$361,645.11	\$172,218.91	\$108,664.00	\$11,766.80	\$363,713.71	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
9,000	200	1,800,000	\$182,282.91	\$115,056.00	\$12,460.35	\$393,864.26	\$182,339.91	\$115,056.00	\$12,461.95	\$395,932.81	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
9,500	200	1,900,000	\$192,403.91	\$121,448.00	\$13,155.50	\$427,083.41	\$192,460.91	\$121,448.00	\$13,157.10	\$429,151.51	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
10,000	200	2,000,000	\$202,524.91	\$127,840.00	\$13,850.65	\$461,302.56	\$202,581.91	\$127,840.00	\$13,852.25	\$463,370.66	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
10,500	200	2,100,000	\$212,645.91	\$134,232.00	\$14,545.80	\$496,521.71	\$212,702.91	\$134,232.00	\$14,547.40	\$498,589.81	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
11,000	200	2,200,000	\$222,766.91	\$140,624.00	\$15,241.00	\$532,741.91	\$222,823.91	\$140,624.00	\$15,242.60	\$534,810.01	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
11,500	200	2,300,000	\$232,887.91	\$147,016.00	\$15,936.15	\$569,962.06	\$232,944.91	\$147,016.00	\$15,937.75	\$572,038.11	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
12,000	200	2,400,000	\$243,008.91	\$153,408.00	\$16,631.30	\$608,182.21	\$243,065.91	\$153,408.00	\$16,632.90	\$610,258.31	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
12,500	200	2,500,000	\$253,129.91	\$159,800.00	\$17,326.45	\$647,402.36	\$253,186.91	\$159,800.00	\$17,328.05	\$649,480.41	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
13,000	200	2,600,000	\$263,250.91	\$166,192.00	\$18,021.60	\$687,622.51	\$263,307.91	\$166,192.00	\$18,023.20	\$691,558.51	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
13,500	200	2,700,000	\$273,371.91	\$172,584.00	\$18,716.75	\$728,842.66	\$273,428.91	\$172,584.00	\$18,718.35	\$733,630.66	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
14,000	200	2,800,000	\$283,492.91	\$179,000.00	\$19,411.90	\$770,062.81	\$283,549.91	\$179,000.00	\$19,413.50	\$775,708.81	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
14,500	200	2,900,000	\$293,613.91	\$185,416.00	\$20,107.05	\$812,282.96	\$293,670.91	\$185,416.00	\$20,108.65	\$817,357.01	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
15,000	200	3,000,000	\$303,734.91	\$191,832.00	\$20,802.20	\$855,503.11	\$303,791.91	\$191,832.00	\$20,803.80	\$860,931.11	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
15,500	200	3,100,000	\$313,855.91	\$198,248.00	\$21,497.35	\$899,723.26	\$313,912.91	\$198,248.00	\$21,498.95	\$905,502.26	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
16,000	200	3,200,000	\$323,976.91	\$204,664.00	\$22,192.50	\$944,943.41	\$324,033.91	\$204,664.00	\$22,194.15	\$951,337.41	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
16,500	200	3,300,000	\$334,097.91	\$211,080.00	\$22,887.65	\$991,163.56	\$334,154.91	\$211,080.00	\$22,889.25	\$997,173.56	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
17,000	200	3,400,000	\$344,218.91	\$217,496.00	\$23,582.80	\$1,037,383.71	\$344,275.91	\$217,496.00	\$23,584.40	\$1,043,403.71	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
17,500	200	3,500,000	\$354,339.91	\$223,912.00	\$24,277.95	\$1,082,603.86	\$354,396.91	\$223,912.00	\$24,280.00	\$1,089,493.86	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
18,000	200	3,600,000	\$364,460.91	\$230,328.00	\$24,973.10	\$1,128,824.01	\$364,517.91	\$230,328.00	\$24,975.15	\$1,136,419.01	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
18,500	200	3,700,000	\$374,581.91	\$236,744.00	\$25,668.25	\$1,175,044.16	\$374,638.91	\$236,744.00	\$25,670.30	\$1,183,814.16	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
19,000	200	3,800,000	\$384,702.91	\$243,160.00	\$26,363.40	\$1,221,264.31	\$384,759.91	\$243,160.00	\$26,365.45	\$1,231,009.31	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
19,500	200	3,900,000	\$394,823.91	\$249,576.00	\$27,058.55	\$1,267,484.46	\$394,810.91	\$249,576.00	\$27,057.60	\$1,277,792.46	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
20,000	200	4,000,000	\$404,944.91	\$256,000.00	\$27,753.70	\$1,313,704.61	\$404,901.91	\$256,000.00	\$27,751.75	\$1,329,956.61	\$61.00	\$0.00	\$2.60	\$63.60	0.1%	0.0%	0.0%	0.1%
20,000	600	12,000,000	\$790,224.91	\$767,040.00	\$64,886.64	\$1,622,151.55	\$792,264.91	\$767,040.00	\$64,971.04	\$1,634,275.55	\$2,040.00	\$0.00	\$85.00	\$3,125.00	0.1%	0.0%	0.0%	0.1%

Line Item on Bill

Proposed Rates Effective October 1, 2020

Rates Effective July 1, 2020

Line Item on Bill	Customer Charge	Line Item on Bill	Customer Charge
(1) Distribution Customer Charge	\$1,000.00	(1) Distribution Customer Charge	\$1,000.00
(2) LIHEAP Enhancement Charge	\$0.80	(2) LIHEAP Enhancement Charge	\$0.80
(3) Renewable Energy Growth Program Charge	\$221.11	(3) Renewable Energy Growth Program Charge	\$221.11
(4) Carbon Dioxide Charge (per kWh - 2008 kW)	\$0.04	(4) Carbon Dioxide Charge (per kWh - 2008 kW)	\$0.04
(5) Carbon Dioxide Charge (per kWh - 2016 kW)	\$0.04	(5) Carbon Dioxide Charge (per kWh - 2016 kW)	\$0.04
(6) Distribution Charge (per kWh)	\$0.00418	(6) Distribution Charge (per kWh)	\$0.00418
(7) Operating & Maintenance Expense Charge	\$0.00086	(7) Operating & Maintenance Expense Charge	\$0.00086
(8) Operating & Maintenance Expense Reconciliation Factor	(\$0.00008)	(8) Operating & Maintenance Expense Reconciliation Factor	(\$0.00008)
(9) CapEx Reconciliation Factor	\$0.00027	(9) CapEx Reconciliation Factor	\$0.00027
(10) Revenue Decoupling Adjustment Factor	\$0.00018	(10) Revenue Decoupling Adjustment Factor	\$0.00018
(11) Pension Adjustment Factor	(\$0.00005)	(11) Pension Adjustment Factor	(\$0.00005)
(12) Storm Fund Replenishment Factor	\$0.00288	(12) Storm Fund Replenishment Factor	\$0.00288
(13) Average Management Adjustment Factor	\$0.00015	(13) Average Management Adjustment Factor	\$0.00015
(14) Force Majeure Adjustment Factor	\$0.00015	(14) Force Majeure Adjustment Factor	\$0.00015
(15) Losses Due to Recovery Factor	\$0.00076	(15) Losses Due to Recovery Factor	\$0.00076
(16) Long-term Contracting for Renewable Energy Charge	\$0.00931	(16) Long-term Contracting for Renewable Energy Charge	\$0.00931
(17) Net Metering Charge	\$0.00266	(17) Net Metering Charge	\$0.00266
(18) Transmission Demand Charge	\$4.47	(18) Transmission Demand Charge	\$4.47
(19) Base Transmission Charge	\$0.01264	(19) Base Transmission Charge	\$0.01264
(20) Transmission Adjustment Factor	(\$0.00070)	(20) Transmission Adjustment Factor	(\$0.00070)
(21) Transmission Uncollectible Factor	\$0.00034	(21) Transmission Uncollectible Factor	\$0.00034
(22) Base Transition Charge	(\$0.00074)	(22) Base Transition Charge	(\$0.00074)
(23) Energy Efficiency Program Charge	(\$0.00008)	(23) Energy Efficiency Program Charge	(\$0.00008)
(24) Supply Efficiency Program Charge	\$0.		