The Narragansett Electric Co. d/b/a National Grid's Proposed Power Sector Transformation (PST) Vision and Implementation Plan

Docket 4780

Request for Information

Requesting Party: New Energy Rhode Island (NERI)

To: National Grid

Request No.: NERI-3

Date of Request: February 27, 2018 **Response Due Date:** March 20, 2018

Subject/Panel: AMF (Book 1, Chapter 4; Technical Conference 02/08/18; Pre-filed

testimony; Work Papers)

1. Explain the Company's statement in Chapter 4, p. 2, that "Exploring the use of open integration standards and protocols and outsourcing key system components where it makes sense to minimize the risk of premature obsolescence and ensure maximum technology agility in the future."

Response can be found on Bates page(s) 1.

2. In relation to the frequency of reporting intervals (4 hours for electric, 8 hours for gas customers), has the Company undertaken an analysis of the added costs that would be incurred if the Rhode Island AMF stakeholder process concluded that a more frequent reporting interval is desirable in Rhode Island?

Response can be found on Bates page(s) 2.

3. Is there any overlap between the Company's proposed AMF, SCADA, ADMS, operational data management, and / or the 5G initiative that has been overseen by the Division? If yes, are there any duplicative functionalities or costs?

Response can be found on Bates page(s) 3.

- 4. Reference Chapter 4, p. 23, Section 6.2.
 - a. How much will the Company charge customers who wish to opt out of the AMF program?
 - b. Please describe how the opt-out fee will be calculated.

Response can be found on Bates page(s) 4-13.

5. Will the Company propose the same set of program evaluation metrics in Rhode Island as in New York and, potentially, Massachusetts?

Response can be found on Bates page(s) 14.

6. Reference Chapter 4, p. 11-13. Will the Company develop program evaluation metrics to assess whether the AMF program is achieving the benefits the Company describes in

Section 3.2?

Response can be found on Bates page(s) 15.

7. As part of program evaluation metrics, will the Company measure customer satisfaction and engagement? If yes, will the Company identify and measure satisfaction and engagement for low-income, or "income-eligible," customer participants as a distinct class?

Response can be found on Bates page(s) 16.

8. How does the Company define "income-eligible customers" for purposes of the AMF program?

Response can be found on Bates page(s) 17.

- 9. Reference Chapter 4, p. 5, describing the AMF program implementation and timeline, p. 24-25, regarding process design, and the Company's statements during the 02/28 Tech Conference regarding stakeholder engagement in its Rhode Island and New York AMF program development processes.
 - a. Has the Company developed any proposed stakeholder engagement timelines and processes to engage Rhode Island stakeholders in its New York (Niagara Mohawk) AMI program development, and New York stakeholders it its Rhode Island AMF program development? If yes, please describe those proposed timelines and processes.
 - b. Does the Company plan to coordinate the New York and Rhode Island deployment processes? If so, please describe how.

Response can be found on Bates page(s) 18-19.

10. Has the Company deployed AMF in its home territory in the United Kingdom? If yes, will the Company apply any lessons-learned or best-practices from its UK service territory in Rhode Island?

Response can be found on Bates page(s) 20.

11. Reference the Company's statement in Chapter 4, p. 3, that "The results of the BCA tests show that full deployment of AMF can achieve net positive benefit-to-cost ratios in both scenarios." Did the BCA test anticipate any potential savings to the costs addressed in the Company's base rate case?

Response can be found on Bates page(s) 21.

12. Reference the Company's statement in Chapter 4, p. 7, that "supply prices would increase further by time of day on a limited number of specific days (typically during high demands on the electrical system, where customers are notified in advance) designated as critical peak pricing events." Will the Company also consider time varying rates for storage and/or supply-side solutions?

Response can be found on Bates page(s) 22.

13. Does the Company's AMI program, as proposed, include remote disconnect capability? If yes, does it also include remote re-connect capability?

Response can be found on Bates page(s) 23.

14. Please describe in detail all of the expenditures and savings for the proposed AMI program deployment. Please list all of the FERC accounts against which the Company plans to track the program expenditures and savings.

Response can be found on Bates page(s) 24-25.

NERI 3-1

Request:

Explain the Company's statement in Chapter 4, p. 2, that "Exploring the use of open integration standards and protocols and outsourcing key system components where it makes sense to minimize the risk of premature obsolescence and ensure maximum technology agility in the future."

Response:

The PST Phase One Report recommended that the Company's AMF plan include a platform upgrade model to protect customers from obsolescence risk. The Company intends to explore at least two approaches to address this risk as part of its Detailed Planning and Procurement Phase in Fiscal Year 2019: (1) technical solution open integration standards and protocol; and (2) outsourcing of solution components.

With regard to the first approach, open integration standards and protocols are desirable to permit the integration of end-point devices and applications from multiple vendors to support evolving and new use cases. Streetlights and gas devices (*i.e.*, disconnect switches, methane detectors) are examples of areas where integration of end-point devices through open standards is valuable.

With regard to the second approach, several benefits could be realized from outsourcing components of the AMF solution including: faster implementation and enhancement adoption, fewer upgrades to legacy infrastructure, easier upgrades when needed, reduced risk of obsolescence in the future, and the opportunity to enhance security. An outsourced or "hosted" solution also provides strategic advantages by facilitating external interfaces with third party partners and can be more easily scaled for additional capacity when required to enable growth. The Company assumed hosted solutions in a number of system areas in the AMF business case. As part of the Detailed Planning and Procurement Phase in Fiscal Year 2019, the Company will perform a detailed comparison of alternatives to make final decisions on the AMF solution approach.

(This response is identical to the Company's response to NERI 20-1 in Docket No. 4770)

NERI 3-2

Request:

In relation to the frequency of reporting intervals (4 hours for electric, 8 hours for gas customers), has the Company undertaken an analysis of the added costs that would be incurred if the Rhode Island AMF stakeholder process concluded that a more frequent reporting interval is desirable in Rhode Island?

Response:

No. The Company intends to evaluate solution options and the added costs for more frequent reporting intervals as part of the Detailed Planning and Procurement Phase in Fiscal Year 2019. During the same timeframe, the Company will also seek to get stakeholder input on this topic as well as other topics related to the AMF deployment.

(This response is identical to the Company's response to NERI 20-2 in Docket No. 4770)

NERI 3-3

Request:

Is there any overlap between the Company's proposed AMF, SCADA, ADMS, operational data management, and / or the 5G initiative that has been overseen by the Division? If yes, are there any duplicative functionalities or costs?

Response:

The activities and related costs included in Schedule PST-1, Chapter 3 – Modern Grid (Bates Pages 56-63 of PST Book 1) Section 3.5 Operational Data Management, Section 3.6 Telecommunications, and Section 3.7 Cybersecurity provide information system (IS) infrastructure functionality that supports a number of Grid Modernization investments. Each of these sections includes the total cost for the functionalities. The Company uses the advanced metering functionality (AMF) portion of the costs for these areas when computing the AMF benefit-cost analysis included in the Company's AMF program described in Schedule PST-1, Chapter 4 – AMF. These same costs, however, are not included in the AMF revenue requirements to avoid duplication.

(This response is identical to the Company's response to NERI 20-3 in Docket No. 4770)

NERI 3-4

Request:

Reference Chapter 4, p. 23, Section 6.2.

- a. How much will the Company charge customers who wish to opt out of the AMF program?
- b. Please describe how the opt-out fee will be calculated.

Response:

The Company will charge customers who opt out of AMI fees similar to those it charges customers who opt out of automated meter reading (AMR) meters. The Company will perform a similar analysis as that prepared in RIPUC Docket No. 4342, in which the Public Utilities Commission approved the current electric and gas AMR Opt Out fees. Through this option, customers who do not want an AMR meter are charged a fee for the removal of the AMR meter and the installation of a non-AMR meter, along with a monthly fee for the Company having to manually read the non-AMR meter. Although the fee for manually reading a non-AMR meter for customers who have opted out of AMR meters will likely be the same for customers opting out of AMI, the Company will need to prepare an analysis to determine if the fee associated with the meter exchange is different after the AMI opt-out meter technology to be installed is finalized. The AMI opt-out meter technology will be finalized during the Detailed Planning and Procurement Phase of the project in calendar year 2018 and is expected to include stakeholder input. In any event, customers who opt-out of AMI will not be charged a fee for the initial installation of a new meter that occurs as part of AMI deployment.

The current provision and fees for customers opting out of AMR meters are provided under item 10 on Sheet 3 of Narragansett Electric's Terms and Conditions for Distribution Service for the provision of the optional service, and included as Attachment NERI 3-4.

(This response is identical to the Company's response to NERI 20-4 in Docket No. 4770)

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R.I.P.U.C. No. 2130 Sheet 1 Canceling R.I.P.U.C. No. 2124

THE NARRAGANSETT ELECTRIC COMPANY

TERMS AND CONDITIONS FOR DISTRIBUTION SERVICE

The following Terms and Conditions where not inconsistent with the rates are a part of all rates. The provisions of these Terms and Conditions apply to all persons, partnerships, corporations or others (the Customer) who obtain local distribution service from The Narragansett Electric Company (the Company) and to companies that are nonregulated power producers, as defined in Rhode Island General Laws. All policies, standards, specifications, and documents referred to herein have been filed with the Rhode Island Public Utilities Commission (Commission) and Division, and such documents and any revisions have been filed at least 30 days before becoming effective. Compliance by the Customer and nonregulated power producer is a condition precedent to the initial and continuing delivery of electricity by the Company.

Service Connection

1. The Company shall furnish on request detailed information on the method and manner of making service connections. Such detailed information may include a copy of the Company's Specifications for Electrical Installations booklet, as may be amended from time to time, a description of the service available, connections necessary between the Company's facilities and the Customer's premises, location and access of service connection facilities and metering equipment, and Customer and Company responsibilities for installation of facilities.

The Customer shall wire to the point designated by the Company, at which point the Company will connect its facilities. In addition, the Customer's facilities shall comply with any reasonable construction and equipment standards required by the Company for safe, reliable, and cost efficient service. For a service meeting Company requirements (which requirements are set forth on the Company's website at www.nationalgridus./connects), the Company may also permit this connection to be made by a licensed electrician in good standing with the authority having jurisdiction, as required by applicable law, and who is registered with the Company, provided, however, that the Company gives no warranty to the Customer, express or implied, as to the knowledge, training, reliability, honesty, fitness, or performance of any electrician registered with the Company for this purpose, and the Company shall not be liable for any damages or injuries caused by any electrician who may be used for such purpose.

Application for Service

2. Application for new service or alteration to an existing service should be made as far in advance as possible to assure time for engineering, ordering of material, and construction. Upon the Company's reasonable request, the Customer shall provide to the Company all data and plans reasonably needed to process this application.

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Line Extensions [Overhead (OH) & Underground (UG)]

3. The Company shall construct or install overhead or underground distribution facilities or other equipment determined by the Company to be appropriate under the following policies: Line Extension Policy for Residential Developments, Line Extension Policy for Individual Residential Customers, and Line Extension and Construction Advance Policy for Commercial, Industrial and Existing Residential Customers. Whenever it is necessary to provide service and a Customer requests the Company to extend or install poles, distribution lines or other service equipment to the Customer's home, premises or facility in order to supply service, the Company will furnish the necessary poles, wires, or equipment in accordance with the Company's "Line Extension and Construction Advance Policies" on file with the Commission. Except as provided in the "Policies", all such equipment, poles, and wires shall remain the property of the Company and be maintained by it in accordance with the "Policies". To the extent that any Company property needs to be located on private property, the Company will require the Customer to furnish a permanent easement.

Attachments

4. Any individual or organization who requests an attachment to distribution facilities, utility poles, or along any span between such poles, shall comply with the Company's specifications and policies governing the type of construction, metering, attachment fees, easements, permissions and electrical inspections required.

Outside Basic Local Distribution Services

5. Customers requesting the Company to arrange for Customer facility outages or additional maintenance or construction not normally part of basic local distribution service will be notified in a reasonable timely manner by the Company that the customer shall be required to pay these the Company's costs of reasonably meeting the request.

Acquisition of Necessary Permits

6. The Company shall make, or cause to be made, application for any necessary street permits, and shall not be required to supply service until a reasonable time after such permits are granted. The Customer shall obtain or cause to be obtained all permits or certificates, except street permits, necessary to give the Company or its agents' access to the Customer's equipment and to enable its conductors to be connected with the Customer's equipment.

Service to "Out-Building"

7. The Company shall not be required to install service or meter for a garage, barn or other outbuilding, so located that it may be supplied with electricity through a service and meter in the main building.

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Customer Furnished Equipment

8. The Customer shall furnish and install upon its premises such service conductors, service equipment, including circuit breaker if used, and meter mounting device as shall conform with specifications issued from time to time by the Company, and the Company will seal such service equipment and meter mounting device, and adjust, set and seal such circuit breaker, and such seals shall not be broken and such adjustments or settings shall not be changed or in any way interfered with by the Customer.

The Customer shall furnish and maintain, at no cost to the Company, the necessary space, housing, fencing, and foundations for all equipment that is installed on its premises in order to supply the Customer with local distribution service, whether such equipment is furnished by the Customer or the Company. Such space, housing, fencing, and foundations shall be in conformity with the Company's specifications and subject to its approval.

Up-Keep of Customer Equipment

9. The Customer's wiring, piping, apparatus and equipment shall, at all times, conform to the requirements of any legally constituted authorities and to those of the Company, and the Customer shall keep such wiring, piping, apparatus and equipment in proper repair.

Installation of Meters

10. Meters of either the indoor or outdoor type shall be installed by the Company at locations to be designated by the Company. The Company may at any time change any meter installed by it. The Company may also change the location of any meter or change from an indoor type to an outdoor type, provided that the cost of the change shall be borne by the Company except when such change is pursuant to the provisions of Paragraph 11. Upon the reading of the Company's meter all bills shall be computed. If more than one meter is installed, unless it is installed at the Company's option, the monthly charge for local distribution service delivered through each meter shall be computed separately under the applicable rates.

Unless otherwise determined by the Company, all residential premises shall be equipped with a meter that employs Automatic Meter Reading ("AMR") technology utilizing radio frequency transmitters to allow the Company to obtain meter readings remotely. However, residential customers may choose to "opt-out" by having their AMR meter replaced with a non-AMR meter.

Customers who choose to opt-out will be charged an initial fee of \$27.00 for the removal of the existing AMR electric meter and the installation of the non-AMR electric meter. Customers who choose to opt-out will also be charged a monthly meter reading fee of \$13.00 for the non-AMR electric meter. The meter reading fee is applicable to customers who receive gas and electric service, or receive electric-only service, from the Company. The Company, at its option, may choose to read the non-AMR meter less frequently than once per month. In that case, or if the Company is unable for any reason to read the meter on the regularly scheduled monthly read date, the Company shall make a reasonable estimate of the consumption of electricity during those

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months when the meter is not read, based on available data, and such estimated bills shall be payable as rendered. A customer will not be assessed the initial or monthly fee until after the Company has installed the non-AMR electric meter.

Any opt-out customer who subsequently wishes to have an AMR electric meter re-installed will be charged a "re-installation fee" of \$27.00. The re-installation fee will be charged for the removal of the non-AMR meter and the installation of the AMR meter. Any customer electing re-installation will no longer be assessed the special monthly meter reading fee after the AMR meter has been re-installed.

Unauthorized and Unmetered Use

11. Whenever the Company determines that an unauthorized and unmetered use of electricity is being made on the premises of a Customer and is causing a loss of revenue to the Company, the Company may, at the Customer's expense, make such changes in the location of its meters, appliance and equipment on said premises as will, in the opinion of the Company, prevent such unauthorized and unmetered use from being made.

Definition of Month

12. Whenever reference is made to "month" in connection with electricity delivered or payments to be made, it shall mean the period between two successive regular monthly meter readings or estimated meter readings, the second of which occurs in the month to which reference is made. If the Company is unable to read the meter when scheduled, the necessary billing determinants may be estimated. Bills may be rendered on such estimated basis and will be payable as so rendered.

Payment Due Date -- Interest Charge

13. All bills shall be due and payable upon receipt. Bills rendered to customers, other than individually metered residential customers, on which payment has not been received by the "Please Pay By" date as shown on the bill, shall bear interest, at the rate of 1½% per month on any unpaid balance, including any outstanding interest charges, from the date of receipt until the date of payment. The "Please Pay By" Date corresponds to the next normal bill preparation date. Bills disputed in good faith by a Customer will not be subject to the late payment charge until after the dispute is resolved.

Customer payment responsibilities with their nonregulated power producer will be governed by the particular Customer/nonregulated power producer contract. Payments made through the Company for electricity purchased from a nonregulated power supplier will be applied first to any Narragansett charges or arrearages.

Returned Check Fee

14. A \$15.00 Fee shall be charged to the Customer for each check presented to the Company that is not honored by the financial institution. This fee shall be applicable only where the check

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has been dishonored after being deposited for a second time.

Seasonal Customers

15. Seasonal Customers are those using local distribution services between June lst and September 30th only, or those using local distribution services principally between June lst and September 30th and incidentally or intermittently during the rest of the year.

Deposit and Security

16. The Company may require a cash deposit or other collateral satisfactory to it as security for prompt payment of the Customer's indebtedness to the Company. The rate of interest shall be adjusted on March lst annually. The interest rate in effect in any year shall be based on the average rate over the prior calendar year for 10-year constant maturity Treasury Bonds as reported by the Federal Reserve Board.

Payments for Line Extensions

17. The Company may require a Customer to pay for all or a portion of the cost of extending or installing poles, distribution lines, or equipment to the Customer's home, premises or facility, consistent with the terms of the Company's "Line Extension and Construction Advance Policies" on file with the Commission.

Lighting Service Charge

18. The Company may assess a Lighting Service Charge of \$130.00 for Company services rendered in response to a Customer request in support of Customer equipment where the condition, service or connection is unrelated to the performance of facilities owned by the Company. A Lighting Service Charge per each occurrence will be assessed to the Customer on their subsequent bill.

Determining Customer's Demand

19. The demand is the maximum rate of taking electricity. Under ordinary load conditions it will be based upon one or more fifteen-minute peaks as herein defined. A fifteen-minute peak is the average rate of delivery of electricity during any fifteen-minute period as determined by any suitable instrument chosen by the Company. In the case of extremely fluctuating load, however, where the demand based on the average over fifteen minutes does not fairly represent the maximum demand imposed by the Customer, the demand will be based upon the instantaneous peak or the peak for a shorter period than fifteen minutes. Such measurements will be made by any suitable instrument chosen by the Company. The demand which is billed to the Customer is determined according to the terms of the appropriate tariffs approved by the PUC from time to time.

Customer Changing Rates

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20. The Customer may change from the rate under which he is purchasing electricity to any other rate applicable to a class of service which he is receiving. Any change, however, shall not be retroactive, nor reduce, eliminate or modify any contract period, provision or guarantee made in respect to any line extension or other special condition. Nor shall such change cause such service to be billed at any rate for a period less than that specified in such rate except during the first year of electric service to any Customer. A Customer having changed from one rate to another may not again change within twelve months or within any longer contract period specified in the rate under which he is receiving electric service.

Discontinuance of Service

21. Subject to the Rules and Regulations of the Commission, the Company shall have the right to discontinue its service upon due notice and to remove its property from the premises in case the Customer fails to pay any bill due the Company for such service, or fails to perform any of its obligations to the Company. For restoration of service after such discontinuance, a reconnection charge of \$38.00 will be made.

Right of Access

22. The Company shall have the right of access to the Customer's premises at all reasonable times for the purpose of examining or removing the Company's meters, and other appliances and equipment. During emergency conditions, the Company shall have the right of access to the Customer's premises at all hours of the day to make conditions safe and/or to restore service.

Safeguarding Company Equipment

23. The Customer shall not permit access for any purpose whatsoever, except by authorized employees of the Company, to the meter or other appliances and equipment of the Company, or interfere with the same, and shall provide for their safe keeping. In case of loss or damage of the Company's property, the Customer shall pay to the Company the value of such property or the cost of making good the same.

Temporary Service

24. A temporary connection is local distribution service which does not continue for a sufficient period to yield the Company adequate revenue at its regular local distribution service rates to justify the expenditures necessary to provide such a connection. The Company may require a Customer requesting a temporary connection to pay the full amount of the estimated cost of installing and removing the requested connection, less estimated salvage value, in advance of the installation of the connection by the Company. In addition, the customer shall pay the applicable regular local distribution service and, if applicable, basic or standard offer service rates.

Limitation of Liability for Service Problems

25. The Company shall not be liable for any damage to equipment or facilities using electricity

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which damage is a result of Service Problems, or any economic losses which are a consequence of Service Problems. For purposes of this paragraph, the term "Service Problems" means any service interruption, power outage, voltage or amperage, fluctuations, discontinuance of service, reversal of its service, or irregular service caused by accident, labor difficulties, condition of fuel supply or equipment, federal or state agency order, failure to receive any electricity for which the Company has contracted, or any other causes beyond the Company's immediate control.

However, if the Company is unable for any reason to supply electricity for a continuous period of two days or more, then upon the request of the Customer, the Demand Charge, if any, shall be suspended for the duration of such inability.

The Company shall not be liable for damage to the person or property of the Customer or any other persons resulting from the use of electricity or the presence of the Company's appliances and equipment on the Customer's premises.

Limitation on Use of Electricity - Auxiliary & Temporary Local Distribution Service

26. Local distribution service supplied by the Company shall not be used to supplement or relay, or as standby or back up to any other electrical source or service except under the provisions of the Back-Up Service Rate, unless the Customer shall makes such guarantees with respect to the payment for such local distribution service as shall be just and reasonable in each case. Where such local distribution service is supplied, the Customer shall not operate its generation in parallel with the Company's system without the consent of the Company, and then only under such conditions as the Company may specify from time to time.

Company Right to Place Facilities on Customer Property

27. The Company has the right to place on a Customer's property facilities to provide and meter electric service to the Customer.

Company Right to Request a Guarantee

28. Whenever the estimated expenditures for the services or equipment necessary to deliver electricity to a Customer's premises shall be of such an amount that the income to be derived there at the applicable rates will, in the opinion of the Company, be insufficient to warrant such expenditures, the Company may require a Customer to guarantee a minimum annual payment or commitment for a term of years, or to pay the whole or a part of the cost of such equipment.

Fluctuating Load & Harmonic Distortion

29. In certain instances, extreme fluctuating loads or harmonic distortions which are created by a Customer's machinery or equipment may impair service to other Customers. If the fluctuating load or harmonic distortion causes a deterioration of the Company's service to other customers, the Company shall specify a service arrangement that avoids the deterioration and the Customer owning or operating the equipment that causes the fluctuation or distortion shall pay the cost to

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implement the new service arrangement together with applicable taxes.

Customer Tax Liability

30. The Company shall collect taxes imposed by governmental authorities on services provided or products sold by the Company. It shall be the Customer's responsibility to identify and request any exemption from the collection of the tax by filing appropriate documentation with the Company.

Customer/Supplier Relationship

31. For electricity supplied by nonregulated power producers, the Company is a local distribution service provider of electricity supplied by others. When such electricity is supplied and delivered to the Company's local distribution supply point, the Company then performs a delivery service for the electricity. Ownership of such electricity lies with either the non-regulated power producer or Customer, as per the specific agreement between the Customer and the nonregulated power producer. In no case shall the Company be liable for loss of electricity.

Billing Termination ("Soft-Off")

32. The Company and the Rhode Island Division of Public Utilities and Carriers (the "Division") have agreed to participate in a one-year pilot program (the "Pilot") with respect to the Company's "Soft-Off" termination policy pursuant to a Settlement Agreement between the Company and the Division, as approved by the Rhode Island Public Utilities Commission on May 4, 2012. During the Pilot, where a customer has requested termination of service and an estimated or actual final meter reading is recorded, and the account is not subject to a shut-off order or request, the Company may choose to utilize a "Soft-Off" termination, defined as the termination of an account by the Company for billing purposes where there is no new customer of record and the actual flow of electricity to the premises is not disconnected.

In the event of a termination of an account for which there is no unbilled consumption, a landlord may initiate an application for service in the landlord's name at that premises by either oral or written request in accordance with Section 2 of this tariff; provided however, that in the event of a termination of an account for which there is any unbilled consumption, a landlord may initiate an application for service in the landlord's name only upon providing the Company with a signed authorization. In addition, where the landlord has previously provided the Company a signed agreement, the Company may record the landlord as the customer of record for that account without further authorization.

When metered consumption at a premises where a Soft Off termination has been implemented exceeds 100 kilowatt-hours in a month, the Company will send notification to the premises indicating that service shall be terminated pursuant to the Commission and Division's rules and regulations governing the termination of service if an account is not established. When metered consumption at the location exceeds an aggregate of 250 kilowatt-hours, service to the location will be terminated; provided however that where such a termination would affect the statutory

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and/or termination rights of other electric customers at that location, service will be terminated at the Soft Off premises as soon as the Company is able to accomplish the termination so as not to conflict with the rights provided under the Commission and Division's rules and regulations governing the termination of service for the other customers.

Paperless Billing & Electronic Payments

33. Customers may elect to receive and pay their bill electronically under the Company's Optional Telephone or Web Page Payment Provision. Such customers electing to receive their bills electronically will receive a paperless billing credit of \$0.34 per account, per billing period.

Customer Notice and Right to Appeal

34. Where practicable, the Company will give the Customer reasonable notice of actions taken pursuant to these Terms & Conditions. The Customer shall have the right to appeal, pursuant to the Division's Rules of Practice and Procedure, all action taken by the Company hereunder.

Effective: February 1, 2013

<u>NERI 3-5</u>

Request:

Will the Company propose the same set of program evaluation metrics in Rhode Island as in New York and, potentially, Massachusetts?

Response:

The Company plans to engage stakeholders for input on program metrics in New York and Rhode Island as part of collaboration activities in calendar year 2018. The process is expected to lead to a largely consistent set of program metrics across the states while at the same time providing the opportunity for state-specific metrics when desired.

(This response is identical to the Company's response to NERI 20-5 in Docket No. 4770)

NERI 3-6

Request:

Reference Chapter 4, p. 11-13. Will the Company develop program evaluation metrics to assess whether the AMF program is achieving the benefits the Company describes in Section 3.2?

Response:

Yes. The Company plans to develop a set of AMF program metrics during the Detailed Planning and Procurement Phase of the program that will be included in the Company's December 1, 2018 PST filing. The Company expects to engage stakeholders for input on the metrics as part of collaboration activities in calendar year 2018.

(This response is identical to the Company's response to NERI 20-6 in Docket No. 4770)

NERI 3-7

Request:

As part of program evaluation metrics, will the Company measure customer satisfaction and engagement? If yes, will the Company identify and measure satisfaction and engagement for low-income, or "income-eligible," customer participants as a distinct class?

Response:

As described in the Company's response to NERI 3-5, the Company plans to engage stakeholders for input on program metrics as part of collaboration activities in calendar year 2018. The process will lead to the development of a set of AMF program metrics that will be included as part of the Company's proposed first annual Power Sector Transformation (PST) plan, filed by December 1, 2018.

(This response is identical to the Company's response to NERI 20-7 in Docket No. 4770)

NERI 3-8

Request:

How does the Company define "income-eligible customers" for purposes of the AMF program?

Response:

For purposes of the AMF program, the Company defines an "income-eligible" customer as one who is currently receiving service through one of the Company's low income rate tariffs – Low Income Rate (A-60) (Rate A-60) for electric customers, and Low Income Residential Non-Heating Rate 11 (Rate 11) and Low Income Residential Heating Rate 13 (Rate 13) for gas customers.

Eligibility for Rate A-60 is based on the customer of record being the head of household or the principal wage earner and must receive Supplemental Security Income from the Social Security Administration or be eligible for (i) the Federal Low Income Heating Assistance Program (LIHEAP), or (ii) one of the following from the appropriate Rhode Island agency: Medicaid, Food Stamps, General Public Assistance, of the Family Independence Program.

Eligibility for Rate 11 and Rate 13 is based upon verification of the customer's participation in the low income home energy assistance program or its successor. In RIPUC Docket No. 4770, the Company has proposed to revise the eligibility requirements for Rate 11 and Rate 13 to be the same as the eligibility requirements for Rate A-60.

(This response is identical to the Company's response to NERI 20-8 in Docket No. 4770)

NERI 3-9

Request:

Reference Chapter 4, p. 5, describing the AMF program implementation and timeline, p. 2425, regarding process design, and the Company's statements during the 02/28 Tech Conference regarding stakeholder engagement in its Rhode Island and New York AMF program development processes.

- a. Has the Company developed any proposed stakeholder engagement timelines and processes to engage Rhode Island stakeholders in its New York (Niagara Mohawk) AMI program development, and New York stakeholders it its Rhode Island AMF program development? If yes, please describe those proposed timelines and processes.
- b. Does the Company plan to coordinate the New York and Rhode Island deployment processes? If so, please describe how.

Response:

a. In New York, Section 15.4 of the Joint Proposal, which was approved by the New York State Public Service Commission in its *Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plans* (issued and effective March 15, 2018) in Cases 17-E-0238 and 17-G-0239, sets forth the stakeholder engagement timeline for Niagara Mohawk Power Corporation's (NMPC) AMI program development. A summary of the timeline is provided in the following table:

New York NMPC Stakeholder Engagement Plan Summary

Ke	y Activities		Objective	NY Timeline
1.	Initial Large	a.	Achieve a common understanding of the	By April 30, 2018
	Group meeting to		business case proposal	
	review and discuss	b.	Identify areas requiring further exploration or	
	current AMI		refinement	
	proposal.	c.	Identify areas requiring smaller Working	
			Group sessions	
2.	Refine and update	a.	Perform additional research and analysis to	May – August 1,
	AMI business plan		refine identified areas of the business case	2018
	and hold smaller	b.	Hold Working Group meetings to explore and	
	Working Group		develop common understanding of specific	
	sessions, as		AMI proposal areas.	
	needed.	c.	Engage stakeholders in the development of	
			the Customer engagement plan component of	
			the business case	

Ke	ey Activities		Objective	NY Timeline
3.	Second Large Group collaborative meeting	a. b.	Company presentation of refined and update business case addressing stakeholder identified areas Capture additional questions, comments, or proposed modifications for Company consideration	August 1, 2018
4.	Third Large Group collaborative meeting	a. b.	Seek clarification, as required, of party comments Provide new information, if any, to address party comments	August 30, 2018
5.	Prepare and file refined AMI business case	a.	Once the refined business case is filed, it would be subject to NY PSC approval.	October 1, 2018

In Rhode Island, the Company is developing a proposal that it plans to review with the Division of Public Utilities and Carriers and the Office of Energy Resources. The Rhode Island stakeholder plan proposal will consider the Docket No. 4780 procedural schedule and the desire to share feedback between the New York and Rhode Island stakeholder engagement activities.

b. Assuming both jurisdictions receive regulatory approval of deployment plans that share a similar implementation timeline, the Company would coordinate the Rhode Island deployment process with the New York deployment process. The approach will include a combination of centralized and jurisdiction-based program management that will be designed in detail following regulatory approval.

(This response is identical to the Company's response to NERI 20-9 in Docket No. 4770)

NERI 3-10

Request:

Has the Company deployed AMF in its home territory in the United Kingdom? If yes, will the Company apply any lessons-learned or best-practices from its UK service territory in Rhode Island?

Response:

National Grid does not own electric or gas distribution in the United Kingdom (UK) but does have a small unregulated business that installs smart meters. Although the business models, customer base, and operational practices diff from those in the US, the Company will look to consider the lessons learned from the UK business and apply them as appropriate.

(This response is identical to the Company's response to NERI 20-10 in Docket No. 4770)

NERI 3-11

Request:

Reference the Company's statement in Chapter 4, p. 3, that "The results of the BCA tests show that full deployment of AMF can achieve net positive benefit-to-cost ratios in both scenarios." Did the BCA test anticipate any potential savings to the costs addressed in the Company's base rate case?

Response:

Yes; however, there have been no discrete adjustments to the rate case costs in Data Years 1 and 2. Estimated AMF benefits begin to be reflected in the AMF BCA test in Fiscal Year 2021 under the assumption that meter deployment begins mid-Fiscal Year 2021. The benefits are reflected in Workpaper 4.1 – AMF Costs, REDACTED (Bates Pages 36, 39, and 42 of PST Book 3).

(This response is identical to the Company's response to NERI 20-11 in Docket No. 4770)

NERI 3-12

Request:

Reference the Company's statement in Chapter 4, p. 7, that "supply prices would increase further by time of day on a limited number of specific days (typically during high demands on the electrical system, where customers are notified in advance) designated as critical peak pricing events." Will the Company also consider time varying rates for storage and/or supply-side solutions?

Response:

In the future, the Company intends to propose cost-based time-varying rates for Standard Offer Service. Such rates would be expected to reward adoption of a variety of customer-side solutions to the extent that they reduce energy consumption at peak times. The Company does not intend to design rates that are solution-specific, but rather cost-based rates that can remain relevant and appropriate as technology solutions evolve.

(This response is identical to the Company's response to NERI 20-12 in Docket No. 4770)

NERI 3-13

Request:

Does the Company's AMI program, as proposed, include remote disconnect capability? If yes, does it also include remote re-connect capability?

Response:

Yes. The Company's proposed AMI program includes both remote disconnect and re-connect capabilities. This is further described in Section 2.1.3 of Appendix 4.1 (PST Book 2).

(This response is identical to the Company's response to NERI 20-13 in Docket No. 4770)

NERI 3-14

Request:

Please describe in detail all of the expenditures and savings for the proposed AMI program deployment. Please list all of the FERC accounts against which the Company plans to track the program expenditures and savings.

Response:

The Company has provided detailed descriptions of all of the expenditures and savings for the proposed AMI program deployment within Sections 1 and 2 of Appendix 4.1 (Bates Pages 1-30 of PST Book 2). Additional detail (*e.g.*, calculation methodologies) for all of the expenditures and savings is also included in Appendix 4.2 (Bates Pages 32-128 of PST Book 2).

The Company does not intend to track program savings by FERC account. The FERC accounts the Company will use to book program expenditures are described below. Workpaper 4.1 (Bates Pages 35-44 of PST Book 3) identifies the AMI capital costs and expense cost elements included in the Company's AMI program. The cost elements are numbered and assigned the following cost types: capital (Capex), expense (Opex), and cost of removal (COR). The combination of cost type and cost element is associated with FERC accounts as follows:

Narragansett Electric Costs:

- Capex cost type with cost elements 100-300 Will initially be booked to FERC 107 Construction Work in Progress, but will eventually end up in FERC 101 Plant in Service subaccounts 370 and 371 for meters and 397 for communication equipment.
- COR cost type with cost elements 100 FERC 108 Depreciation Reserve subaccounts 371.
- Depreciation expense FERC 403.
- Opex cost type with cost elements 100-400 FERC 901 through 910 Customer Accounts expenses and Customer Service and Informational expenses.
- Capex cost type with cost elements 500-600 Represents Information Services (IS) capital costs that will be incurred by National Grid USA Service Company, Inc. and then charged to Narragansett Electric in FERC 931 Administrative and General (A&G) Rents.
- Opex cost type with cost elements 500-600 Represents IS Opex costs that will be charged to FERC 923 A&G Outside Services Employed.

(This response is identical to the Company's response to NERI 20-14 in Docket No. 4770)

Narragansett Gas Costs:

- Capex cost type with cost elements 100-300 Will initially be booked to FERC 107 Construction Work in Progress, but will eventually end up in FERC 101 Plant in Service subaccounts 381 and 382 for meters and 397 for communication equipment.
- Depreciation expense FERC 403.
- Opex cost type with cost elements 100-400 FERC 901 through 910 Customer Accounts expenses and Customer Service and Informational expenses.
- Capex cost type with cost elements 500-600 Represents IS capital costs that will be incurred by National Grid USA Service Company, Inc. and then charged to Narragansett Gas in FERC 931 A&G Rents.
- Opex cost type with cost elements 500-600 Represents IS Opex costs that will be charged to FERC 923 A&G Outside Services Employed.

The Company is in the early planning stages of developing AMF program metrics that will assess the results of the program, including benefits achievement. As noted in the Company's response to NERI 3-6, the Company plans to develop a set of AMF program metrics during the Detailed Planning and Procurement Phase of the program that will be included in the Company's December 1, 2018 PST filing. The Company expects to engage stakeholders for input on the metrics as part of collaboration activities in calendar year 2018.