

**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 5-1 through 5-15
Date of Request: 3.16.2018
Response Due Date: Rolling
Subject/Panel: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

- 5-1. Several of the Company's proposals in this proceeding propose Company ownership of facilities, projects, and infrastructure, as opposed to third-party ownership. Please explain in detail, for each PST initiative, the Company's approach and justification for taking an ownership approach.

Response can be found on Bates page(s) 1-10.

- 5-2. Reference p. 6, lines 16-18. How does the Company reconcile its stated commitment to (a) customer choice, knowledge, and control; (b) distributed energy resources that are commonplace and accessible; and (3) efficiency as an affordable everyday goal for customers with its proposal to substantially increase fixed customer charges for residential customers, including low-income customers?

Response can be found on Bates page(s) 11.

- 5-3. Reference p. 7, lines 4 to 11, where the Company states that it has adopted four guiding principles that underlie its vision: (a) Empower all customers by ensuring choice and control over their energy needs; (b) Cultivate an efficient and resilient grid that can adapt to the evolving grid necessity of two-way power flows, and responsive customer driven demand; (c) Support the State of Rhode Island in achieving its clean energy objectives including an 80 percent reduction in greenhouse gas (GHG) emissions by 2050; (d) Maximize the effectiveness of performance incentives in driving these important outcomes for Rhode Island and its citizens.

- a. How does the Company reconcile its stated principles relating to customer empowerment, efficiency, and achievement of clean energy objectives with its proposals to increase fixed customer charges?

Response can be found on Bates page(s) 12.

- 5-4. Reference p. 11, lines 1-23. Please specifically describe and reference aspects of the rate filing in Docket 4770, and related to proposals in this proceeding, that are designed to:

- a. ensure safe, reliable, affordable, and environmentally responsible electricity service today and in the future;
- b. promote economic efficiency over the short and long term;
- c. provide efficient price signals that reflect long-run marginal cost;
- d. identify future rates and rate structures that appropriately address “externalities” that are not adequately counted in current rate structures;
- e. empower consumers to manage their costs;
- f. enable a fair opportunity for utility cost recovery of prudently incurred costs and revenue stability;
- g. ensure that all parties should provide fair compensation for value and services received and should receive fair compensation for value and benefits delivered;
- h. constitute a rate design that is transparent and understandable to all customers;
- i. ensure that any changes in rate structures are be implemented with due consideration to the principle of gradualism in order to allow ample time for customers (including DER customers) to understand new rates and to lessen immediate bill impacts;
- j. provide opportunities to reduce energy burden, and address low income and vulnerable customers’ needs;
- k. ensure consistency with policy goals (e.g., environmental, climate (Resilient Rhode Island Act), energy diversity, competition, innovation, power/data security, least cost procurement, etc.); and
- l. evaluate rate structures based on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system.

Response can be found on Bates page(s) 13-44.

5-5. Reference p. 13, line 6 through p. 14, line 17.

- a. Please provide a specific description of every PST-related cost for which the Company will seek recovery through a per kWh factor, a per customer factor, or a combination of the two.
- b. Please explain why the method of recovery was selected for each type of cost.
- c. Please provide citations to authorities or approved methods supporting the classification decision for each type of cost.
- d. Please provide, in Excel format, schedules for all such costs, how they will be collected, and the impacts on customers, but class and bill frequency.
- e. Please explain each use of terms such as “gradually,” “noticeable [cost shift],” “fair,” “undue burden,” “transparent,” and “value” as used in the cited testimony.
- f. Please provide all quantitative analysis associated with the use of these terms in the testimony.

Response can be found on Bates page(s) 45-138.

- 5-6. Reference p. 19, lines 4-7. Please detail the ways in which National Grid proposals in New York and Massachusetts are consistent with those in this proceeding. Please detail the ways in which National Grid proposals in New York and Massachusetts are not consistent with those in this proceeding.

Response can be found on Bates page(s) 139-140.

- 5-7. Reference p. 20, lines 1-4. Please confirm whether the National Grid takes the position that business risks and costs are reduced by coordinating and replicating technology deployment approaches across multiple jurisdictions.

Response can be found on Bates page(s) 141.

- 5-8. Reference p. 22, Table 2-1. Please define the term “advance Docket 4600 goals” as used in the table and accompanying testimony. Does “advancement” mean an improvement over current conditions? Does “advancement” means an improvement over a business as usual approach?

Response can be found on Bates page(s) 142.

- 5-9. Reference p. 25-26. Please specifically detail all differences between the Company’s proposed BCA and the BCA framework developed in Docket 4600.

Response can be found on Bates page(s) 143-146.

- 5-10. Reference p. 25-26. Please explain why the Company developed and relied upon a BCA framework that includes confidential information or methods that cannot be publicly shared. If confidentiality was a condition sought for by contractor(s), please explain why the Company accepted this condition.

Response can be found on Bates page(s) 147.

- 5-11. Reference p. 29, lines 1-4.
- a. Please define how the term “high penetrations of DER” are used in the Company’s PST proposal.
 - b. Please indicate numerically how much DER penetration constitutes “high” penetration such that the proposed DER-enabling investments are required.
 - c. Please indicate numerically how much DER penetration constitutes “high” penetration such that the proposed DER-enabling investments are beneficial in reducing costs of DER integration, and to what degree such costs are reduced.
 - d. Please indicate how many feeders the Company maintains in its service territory, and how many of these feeders currently meet the definition for high penetration of DER.

- e. Please indicate what the Company predicts for the timeline over which current feeders that do not have high penetrations of DER interconnected will become high DER feeders.
- f. Please provide data to support these responses.

Response can be found on Bates page(s) 148-149.

- 5-12. Reference p. 29, lines 13-14. Please explain in detail what is meant by the phrase that describes certain PST investments and costs as representing "a combination of capital and O&M expenditures that do not fit well within the requirements and/or restrictions of existing recovery mechanisms." Why do the proposed investments not fit well?

Response can be found on Bates page(s) 150-153.

- 5-13. Reference p. 30, lines 13-15. Please provide a consolidated Gantt chart or similar consolidated table of timelines for proposed PST projects, investments, and spending over time.

Response can be found on Bates page(s) 154-156.

- 5-14. Reference p. 31, line 11. Please detail all elements considered in the "least cost" analysis, including a description of the methodology used to identify and quantify costs.

Response can be found on Bates page(s) 157.

- 5-15. Reference p. 31, lines 14-18. Please describe how the "needs of the system" are reflected in specific performance metrics associated with proposed PST projects, investments, and spending over time.

Response can be found on Bates page(s) 158-159.

NERI 5-1

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Several of the Company's proposals in this proceeding propose Company ownership of facilities, projects, and infrastructure, as opposed to third-party ownership. Please explain in detail, for each PST initiative, the Company's approach and justification for taking an ownership approach.

Response:

Grid Modernization: As explained in the Company's response to NERI 1-5, the Company has and will be considering third-party services as an alternative to the deployment of Company-owned assets in a number of its Grid Modernization plans. Please see the Company's response to NERI 1-5, a copy of which is provided as Attachment NERI 5-1-1 for ease of reference.

AMF: The Company's approach to ownership varies across the AMF components, and in some case sub-components, as described below:

- End-point devices including smart electric meters and gas encoder-receiver-transmitters (ERTs);
- Field Area Network (FAN) and Wide Area Network (WAN) to move meter data to the Company and other service providers as needed;
- IT platform including the AMI head end, meter data management system, energy management portal, and supporting infrastructure other systems necessary for ongoing IT operations.

The Company proposes to own the end-point devices. The need for compatible end-points to support the AMF end-to-end solution and business case benefits, purchasing economies of scale, and the Company's regulated cost of capital are factors that support company ownership. In addition to the financial considerations, there are numerous operational and commercial considerations that would need to be addressed to support third-party meter ownership.

With respect to the FAN and WAN, the Company sees an opportunity in exploring partnerships with other parties that could share in the cost and benefit from the access to a statewide communications system and has committed to further evaluation as part of the detailed design and procurement phase of the program in Fiscal Year 2019 (Schedule PST-1, Chapter 4 – AMF, Bates Page 83 of PST Book 1). The Company also explained its effort to explore the value of a state-wide communications system in its response to Division 8-16 in Docket 4770, a copy of which is provided as Attachment NERI 5-1-2 for ease of reference. To determine whether a shared network is a feasible option, the Company must first identify other parties that could

benefit from the network. If the Company finds willing partners, it may then explore ways to structure a potential partnership. While sharing a network with one or more partners may offer cost-saving opportunities, there are other regulatory, operational, and reputational considerations that will inform the decision of whether to move forward with a partnership. Cybersecurity risks in particular would have to be addressed to ensure the confidentiality of sensitive customer information.

For the IT platform the Company's proposal includes a mix of owned and hosted (sometimes referred to as Software-as-a-Solution (SaaS)) solutions elements. The proposal assumes the head-end, meter data management system, energy management portal, and data lake are hosted systems (Appendix 4.1 - AMF Technology & BCA, REDACTED, Bates Page 9 through 17 of PST Book 2). The Company explained this approach in its response to Division 8-37 in Docket 4770, a copy of which is provided as Attachment NERI 5-1-3 for ease of reference. The Company has not made a final decision to contract an outside vendor to host these systems. A review and comparison of external versus internal hosting solutions will be performed before a final determination is made. This evaluation will be performed as part of the Detailed Planning and Procurement phase in Fiscal Year 2019 and will consider costs and other qualitative factors. The Company has explained this approach in its response to NERI 3-1, a copy of which is provided as Attachment NERI 5-1-4 for ease of reference.

Electric Transportation Initiative: As the Company states in Schedule PST-1, Chapter 5 – Electric Transportation (Bates Page 107 of PST Book 1), “The Company intends for its Electric Transportation Initiative to facilitate, and not inhibit, the development of transportation charging by property owners and third-party EV charging operators in Rhode Island.” The overarching reason for Company ownership under the Company's Electric Transportation Initiative is that the State of Rhode Island has to meet ambitious Zero Emission Vehicle (ZEV) policy goals, which require an unprecedented pace of electric vehicle (EV) market development that will be unlikely to happen without the utility's active contribution, including operation of charging stations with a regulated rate for charging. Additionally, the Company proposes an EV charging program as a demonstration, rather than a full-scale program, to ensure that the program encourages and does not hinder the development of third-party charging. For those instances where the Company has proposed to operate charging, the Company has put in place limits on the proportion of charging that the Company may operate (no more than 50 percent of Level 2 consumer charging sites, and only four DC Fast Charging sites). The Company provides further detail in Schedule PST-1, Chapter 5 – Electric Transportation (Bates Pages 107-108 of PST Book 1) why it has proposed utility ownership (operation) of EV charging (EV Supply Equipment).

Electric Heat Initiative: For the Electric Heat Initiative, the Company proposes partial ownership of a ground-source heat pump system. The Company's approach is to own the underground heat exchanger, while the adopting customer would own the remainder of the system.

Especially for large commercial buildings, ground-source heat pump systems represent the lowest emitting and most efficient heating and cooling systems available to our customers today. Despite being a mature technology, the high upfront cost of the system means they remain out of reach for many building owners, even given the faster payback for customers heating with delivered fuels. As a result, market adoption lags far behind the pace that would achieve Rhode Island's heating emissions goals.

In this context, the justification for partial utility ownership is two-fold. The first reason is to overcome the customer's upfront costs of the underground heat exchanger, which has been widely acknowledged as the main barrier to widespread adoption. The Company can leverage its balance sheet and provide a lower cost of capital to the project, thus making the system significantly more economical for the adopting customer. The second reason is to generate learnings that will help the market better understand the technology and by extension to advance business model options around hybrid ownership of ground-source heat pump systems. Data from the project will be used to directly validate benefits to the participating customer, and to more accurately project the energy system benefit for all customers based on the value of the new load shape that results from ground-source heat pump utilization for the electric utility. For both of these reasons, partial utility ownership will work to scale up the ground-source heat pump market in Rhode Island.

The Company also explains how it expands its role for third parties and bolsters a competitive third-party ecosystem for heat electrification in its response to Division 5-11.

Energy Storage Systems: The Company believes that company ownership of the Energy Storage Systems proposed in Schedule PST-1, Chapter 7 – Energy Storage of PST Book 1 is essential to the success of the demonstration. For this project, the Company will develop and test several different control strategies, and evaluate the impact on the co-located partner load, the distribution system, and the Energy Storage system itself. Taking an ownership approach allows the Company to test and demonstrate different use cases that would not be available or financially feasible under a third- party ownership model. In addition, it allows the Company and partner to dynamically modify the use cases of the Energy Storage systems, without needing to seek approval from an additional party and incurring a contract modification.

Company-Owned Solar: The Company proposes to own up to 3.75MW of Company-owned solar. As explained in Schedule PST-1, Chapter 8 – Income Eligible of PST Book 1, the Company, with permission, may own and operate up to 15MW of solar in Rhode Island by R.I. Gen. Laws § 39-26-6(g). In this proposal, the Company is anticipating to focus on an area where the third party market is not fully serving. This program also leverages the Company's ability to deliver a lower cost of capital over the life of the program to invest proceeds of the program into an energy efficiency program for the benefit of income eligible customers. Further, the Company is targeting its own property as priority locations for these systems.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's Fifth Set of Data Requests
Issued March 19, 2018

(This response is identical to the Company's response to NERI 27-1 in Docket No. 4770.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's First Set of Data Requests
Issued February 27, 2018

NERI 1-5

Request:

Has the Company conducted, or did the Company rely on any existing analyses to determine whether any components or programs of the Grid Modernization proposal could be provided by third-party providers? If yes:

- a. Please list and provide copies of those studies.
- b. Did the Company identify any Grid Modernization components or programs that could be open to market competition to enhance value? If not, why not?

Response:

The Company has and will be considering third-party provided services as an alternative to the deployment of Company-owned assets in a number of areas of its Grid Modernization plans. For example, the Company is considering third-party services in the areas of telecommunications and information services (IS), such as cloud computing and software-as-a-service for various advanced meter functionality back-office applications. There could be additional IS infrastructure components that could be sourced as well. The decision with respect to sourcing these components will be addressed in Fiscal Year 2019 as part of the detailed planning and procurement phase of the project. For additional details, please see the Company's responses to Division 2-37 and Division 2-39 in this docket, which are included here as Attachment NERI 1-5-1 and Attachment NERI 1-5-2, respectively.

- a. The Company based its initial proposals on experience with similar projects and did not conduct analyses, or rely on existing analyses directly associated with the Rhode Island Power Sector Transformation (PST) projects.
- c. No. The Grid Modernization plans proposed in the PST Plan are foundational enabling technologies that are intended to create an integrated platform to provide access to the distribution system for distributed energy resource providers. Although, in the future, the platform may enable more market-based services, the Company has not identified that any of its currently proposed investments should be provided by others through market-based services. These foundational investments should be controlled by the utility to ensure safe and reliable service to customers.

(This response is identical to the Company's response to NERI 18-5 in Docket No. 4770)

Prepared by or under the supervision of: Robert Sheridan

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to Division's Second Set of Data Requests
Issued January 8, 2018

Division 2-37

Request:

Please explain the rationale behind contracting an outside service vendor to host the MDMS rather than the Company hosting the MDMS.

Response:

National Grid assumed a hosted solution to estimate the cost of this function for the AMF component of its Power Sector Transformation Plan filing. The Company has not made a final decision to contract an outside vendor to host the MDMS. A review and comparison of external versus internal hosting solutions must first be performed before a final determination can be made. National Grid will evaluate all potential alternatives as part of the Detailed Planning and Procurement phase in Fiscal Year 2019. This process will include a review of the costs and benefits for each of the viable alternatives with the results being captured in a sanction paper that will be brought forward to the US Sanctioning Committee for approval.

In the event an outside vendor is selected to host the MDMS, the Company believes several benefits could be realized, 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. A Software as a Service (SaaS) 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.

(This response is identical to the Company's response to Division 8-37 in Docket No. 4770.)

Prepared by or under the supervision of: John Leana

The Narragansett Electric Company

d/b/a National Grid

RIPUC Docket No. 4780

Attachment NERI 1-5-2

Page 1 of 1

The Narragansett Electric Company

d/b/a National Grid

RIPUC Docket No. 4780

Responses to Division's Second Set of Data Requests

Issued January 8, 2018

Division 2-39

Request:

Please refer to page 14 of Appendix 4.1 – AMF Technology & BCA, which states: “Cloud Computing & Data Lake – Rather than hosting these data management capabilities on servers within National Grid data centers, greater efficiency, redundancies, and security regimes can be cost effectively procured by outsourcing this function.” Please provide all workpapers, workbooks, and calculations used to make this assessment.

Response:

The Company assumed a hosted solution to estimate the cost of this function for its Power Sector Transformation Plan filing (Docket No. 4780). National Grid hired Accenture to develop cost estimates for the each of the Company's Information Service (IS) grid modernization projects. Accenture assumed that the Company would pursue a hosted solution based on their experiences working with other utility clients and National Grid's IS Service Strategy and Architecture functions indicating that Cloud Computing was an integral part of the Company's strategic direction. Although National Grid believes there are potentially significant benefits in outsourcing the function, a review of each of the alternatives still needs to be performed before a final decision can be made.

As part of the sanctioning and governance process, National Grid's IS team will evaluate all potential alternatives, beginning mid-Fiscal Year 2019. This process will include a review of the costs and benefits for each of the viable alternatives, with the results being captured in a sanction paper that will be presented to the US Sanctioning Committee for approval. To the extent that additional vendor information is required, IS will issue requests for proposals and engage in competitive and strategic negotiations with vendors to determine which alternative provides the best value for customers.

For copies of the IS work books for each of the grid modernization projects including the Cloud Computing and Data Lake project, please refer to Attachment DIV 2-4-2.

(This response is identical to the Company's response to Division 8-39 in Docket No. 4770.)

Prepared by or under the supervision of: John Leana

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Eighth Set of Data Requests
Issued January 8, 2018

Division 8-16

Request:

Refer to page 2 of Chapter 4 – AMF in PST-1, where it is stated that the Company's AMF proposal will allow the Company to explore "the opportunity to partner with other parties that could share in the cost and benefit from the access to a state-wide communications system." Please list the other parties that the Company has been in contact with or expects to be in contact with regarding the sharing of the cost and benefit of the state-wide communications system.

Response:

The Company has commenced an effort to explore the value of a state-wide communications system with the external support from a consultant. Through this effort, the Company has identified possible partners, as outlined on Page 15 of Schedule PST-1, Chapter 4 - AMF (Bates Page 83 of PST Book 1). The Company is planning to initiate a more detailed analysis and engage with interested parties during the Detailed Planning and Procurement phase. This analysis will ultimately determine the total lifecycle costs of the development of a state-wide communications system and identify value drivers for the Company and other potential partners.

(This response is identical to the Company's response to Division 2-16 in Docket No. 4780.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Eighth Set of Data Requests
Issued January 8, 2018

Division 8-37

Request:

Please explain the rationale behind contracting an outside service vendor to host the MDMS rather than the Company hosting the MDMS.

Response:

National Grid assumed a hosted solution to estimate the cost of this function for the AMF component of its Power Sector Transformation Plan filing. The Company has not made a final decision to contract an outside vendor to host the MDMS. A review and comparison of external versus internal hosting solutions must first be performed before a final determination can be made. National Grid will evaluate all potential alternatives as part of the Detailed Planning and Procurement phase in Fiscal Year 2019. This process will include a review of the costs and benefits for each of the viable alternatives with the results being captured in a sanction paper that will be brought forward to the US Sanctioning Committee for approval.

In the event an outside vendor is selected to host the MDMS, the Company believes several benefits could be realized, 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. A Software as a Service (SaaS) 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.

(This response is identical to the Company's response to Division 2-37 in Docket No. 4780.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's Third Set of Data Requests
Issued February 27, 2018

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 5-2

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 6, lines 16-18. How does the Company reconcile its stated commitment to (a) customer choice, knowledge, and control; (b) distributed energy resources that are commonplace and accessible; and (3) efficiency as an affordable everyday goal for customers with its proposal to substantially increase fixed customer charges for residential customers, including low-income customers?

Response:

Narragansett Electric's base distribution rates are only one component of a customer's bill. A customer must also consider supply charges, availability of alternative suppliers, and the costs and risks of distributed generation. Having rates that reflect costs as closely as possible will lead to the most efficient decisions being made by the customer.

(This response is identical to the Company's response to NERI 27-2 in Docket No. 4770.)

NERI 5-3

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 7, lines 4 to 11, where the Company states that it has adopted four guiding principles that underlie its vision: (a) Empower all customers by ensuring choice and control over their energy needs; (b) Cultivate an efficient and resilient grid that can adapt to the evolving grid necessity of two-way power flows, and responsive customer driven demand; (c) Support the State of Rhode Island in achieving its clean energy objectives including an 80 percent reduction in greenhouse gas (GHG) emissions by 2050; (d) Maximize the effectiveness of performance incentives in driving these important outcomes for Rhode Island and its citizens.

- a. How does the Company reconcile its stated principles relating to customer empowerment, efficiency, and achievement of clean energy objectives with its proposals to increase fixed customer charges?

Response:

Narragansett Electric's base distribution rates are only one component of a customer's bill. A customer must also consider supply charges, availability of alternative suppliers, and the costs and risks of distributed generation. Having rates that reflect costs as closely as possible will lead to the most efficient decisions being made by the customer.

(This response is identical to the Company's response to NERI 27-3 in Docket No. 4770.)

NERI 5-4

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 11, lines 1-23. Please specifically describe and reference aspects of the rate filing in Docket 4770, and related to proposals in this proceeding, that are designed to:

- a. ensure safe, reliable, affordable, and environmentally responsible electricity service today and in the future;
- b. promote economic efficiency over the short and long term;
- c. provide efficient price signals that reflect long-run marginal cost;
- d. identify future rates and rate structures that appropriately address “externalities” that are not adequately counted in current rate structures;
- e. empower consumers to manage their costs;
- f. enable a fair opportunity for utility cost recovery of prudently incurred costs and revenue stability;
- g. ensure that all parties should provide fair compensation for value and services received and should receive fair compensation for value and benefits delivered;
- h. constitute a rate design that is transparent and understandable to all customers;
- i. ensure that any changes in rate structures are be implemented with due consideration to the principle of gradualism in order to allow ample time for customers (including DER customers) to understand new rates and to lessen immediate bill impacts;
- j. provide opportunities to reduce energy burden, and address low income and vulnerable customers’ needs;
- k. ensure consistency with policy goals (e.g., environmental, climate (Resilient Rhode Island Act), energy diversity, competition, innovation, power/data security, least cost procurement, etc.); and
- l. evaluate rate structures based on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system.

Response:

The listed criteria are taken from the Public Utilities Commission’s (PUC) Guidance on Goals, Principles and Values for Matters Involving The Narragansett Electric Company d/b/a National Grid in Docket No. 4600 (Guidance Document) and are intended for use in assessing the reasonableness of a proposed rate design (See, Guidance Document at 4). The PUC formally adopted and finalized the Guidance Document at its October 27, 2017 Open Meeting.

As the PUC states, the Guidance Document is intended to provide direction on how the PUC will apply the principles set forth in R.I. Gen. Laws § 39-26.6-24(b) (Id. at 1), which refers to the

section of the Renewable Energy Growth Program statute that lists the factors to be considered in rate design: (1) the benefits of distributed-energy resources; (2) the distribution services being provided to net-metered customers when the distributed generation is not producing electricity; (3) simplicity, understandability, and transparency of rates to all customers, including non-net metered and net-metered customers; (4) equitable ratemaking principles regarding the allocation of the costs of the distribution system; (5) cost causation principles; (6) the General Assembly's legislative purposes in creating the distributed-generation growth program; and (7) any other factors the PUC deems relevant and appropriate in establishing a fair rate structure (*Id.* at 1-2). Therefore, the stated criteria do not apply generally to the entirety of the Company's rate filing (as implied by the question), but rather apply to certain, new proposals made by the Company.

As the Company previously explained in its response to Division 17-8, a copy of which is provided as Attachment NERI 5-4-1 for ease of reference, the Company included the requested analysis in its initial filing in relation to the proposed class revenue allocation and rate design proposals presented in the Pre-Filed Direct Testimony of Company Witness Howard S. Gorman. Throughout his testimony, Mr. Gorman expressly addressed how these proposals advance, detract from, or are neutral to each of the rate design principles that the PUC adopted in the Guidance Document. An excerpt of Mr. Gorman's testimony is provided as Attachment NERI 5-4-2 for ease of reference.

In addition, in the Joint Pre-Filed Direct Testimony of Company Witnesses Ann E. Leary and Scott M. McCabe, the Company addressed how the redesign of the low-income A-60 rate was consistent with Section 3.4 of the Docket 4600 Stakeholder Working Group Process Report dated April 5, 2017 (Stakeholder Report). The PUC adopted the Stakeholder Report in its Report and Order in Docket No. 4600, dated July 31, 2017. These recommendations are intended to align with the rate design principles set forth in Section 3.1 of the Stakeholder Report, which the PUC adopted in the Guidance Document. (See Stakeholder Report at 12). The Company also addressed how its proposal to include demand-related costs in the A-16 fixed charge aligned with the rate design principles set forth in the Stakeholder Report in its response to NERI 7-14, a copy of which is provided as Attachment NERI 5-4-3 for ease of reference.

Similarly, the Company presented the requested analysis in its initial filing in relation to certain other applicable proposals. Specifically, in Table 3 of the Joint Pre-Filed Direct Testimony of Company Witnesses Raymond J. Rosario, Jr., Alfred Amaral III, and Ryan M. Constable, the Company presented information addressing how its proposal to increase staffing for distributed generation (DG) personnel either advances, detracts from, or is neutral to each of the goals that the PUC adopted in the Guidance Document in Docket 4600. (See Pre-Filed Testimony of Rosario, Jr., Amaral III, and Constable at 73). The PUC recognized that a given proposal may not advance all of the goals, but stated that each goal should be addressed so that the PUC can

appropriately balance the interests of all parties in setting just and reasonable rates across rate classes and programs.¹

In addition to the proposals set forth in Docket No. 4770, the Company considered each of the above listed criteria when designing its cost recovery proposal in Docket No. 4780 and the proposed Power Sector Transformation (PST) Provision, as discussed throughout the Joint Pre-Filed Direct Testimony of the PST Panel. As additional support, Attachment NERI 5-4-4 presents information addressing how the PST Provision advances, detracts from, or is neutral to each of the rate design principles that the PUC adopted in the Guidance Document. In the Joint Pre-Filed Direct Testimony of the PST Panel, the Company also addressed how each of the underlying PST investments will advance, detract from, or is neutral to the Docket 4600 goals that the PUC adopted in the Guidance Document.

(This response is identical to the Company's response to NERI 27-4 in Docket No. 4770.)

¹ The Company acknowledges that the Docket 4600 goals that the PUC adopted as part of the Guidance Document are separate and distinct from the rate design principles to which the question is referring. Nonetheless, the Company has included reference to the DG proposal as an example of the Company's analysis of certain new proposals and how they are consistent with the Guidance Document.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Seventeenth Set of Data Requests
Issued January 26, 2018

Division 17-8

Request:

Referencing the testimony of Gorman, page 41, line 8 through page 44, "the PUC adopted rate design principles referenced in Section 3.1 of the April 5, 2017 Report to the Rhode Island Public Utilities Commission on the Stakeholder Working group process in docket No. 4600" and "Specifically, a party proposing a specific rate design is required to include accompanying evidence that addresses how the proposal advances, detracts from, or is neutral as to each of the stated rate design principles", for each proposed rate design, please respond to the following:

- a. Explain and provide accompanying evidence that addresses how the rate design proposal advances, detracts from, or is neutral as to each of the stated "new" rate design principles.
- b. Explain and provide accompanying evidence that addresses how the rate design proposal as compared to the existing rate design for that rate class advances, detracts from, or is neutral as to each of the stated "new" rate design principles.
- c. Specific to each proposed rate design consolidation, explain and provide accompanying evidence that addresses how the rate design proposal as compared to the prior rate design(s) associated with the rate class(es) being consolidated into the proposed rate design advances, detracts from, or is neutral as to each of the stated "new" rate design principles.

Response:

In the pre-filed direct testimony of Company Witness Howard S. Gorman in this docket, Narragansett Electric described its rationale regarding how the rate design proposals in this general rate case advances, detracts from, or is neutral as to each of the stated "new" rate design principles. In addition, Mr. Gorman's testimony on Page 21 (Bates Page 25 of Book 12), Lines 6 through 15, indicates that the Company's proposals are consistent with the *Principles of Public Utility Rates*, commonly used as authoritative guidance on cost allocation and rate design. The cost allocation, rate design, and bill impact exhibits submitted by Narragansett Electric contain the evidence that Narragansett Electric has considered the Public Utility Commission's rate design principles listed on Pages 42-44 (Bates Pages 46-48 of Book 12) of Mr. Gorman's testimony. The Company did not conduct additional studies beyond those included in its initial November 27, 2017 filing in this docket.

1 **IV. Proposed Revenue Allocation**

2 **Q. What is the purpose of the revenue allocation process?**

3 A. The purpose of the revenue allocation process is to allocate the revenue requirement and
4 the overall increase requested in this proceeding among the rate classes.

5

6 **Q. What are the guiding principles followed in allocating the proposed revenue**
7 **requirement?**

8 A. There are two guiding principles for the revenue allocation process. The first principle is
9 to reflect the results of the allocated cost of service study as closely as possible. The
10 second principle is to mitigate extreme rate impacts on rate classes and on individual
11 customer subgroups, which is known as gradualism. These concepts are described in the
12 book, *Principles of Public Utility Rates*, Bonbright et al., 1988 edition, which is often
13 cited and relied on for guidance regarding revenue and rate design for regulated utilities.
14 The same principles also guided Narragansett Electric's revenue allocation in its most
15 recent rate cases, the 2009 Rate Case and the 2012 Rate Case.

16

17 **Q. How did you implement the guiding principles for revenue allocation listed above?**

18 A. The first step was to examine the results of the allocated cost of service study and the
19 potential revenue impacts for each rate class at the proposed system average rate of
20 return.

21

22 The dollar increase in revenue necessary for each class to produce its allocated cost of
23 service at the proposed rate of return of 7.43 percent is presented on Schedule HSG-3,

Line 24, and the percentage changes are on Line 26 (and repeated on Line 29). The changes range from a decrease of 84.4 percent to an increase of 24.7 percent, representing relative changes ranging from decreases, to 1.62 times the average increase.

I applied the concept of gradualism by limiting increases to twice the system average (which did not affect any class, Line 34) and by removing decreases for any class (which affected Street and Area Lighting Rates S-05, S-06, S-10, and S-14, and Propulsion X-01, Line 35). This produced a surplus of \$850,000 which was allocated among the rate classes on the basis of allocated revenue requirement (Line 37).

Q. Please summarize the results of the proposed revenue allocation.

A. The proposed revenue increase or decrease for each class is shown on Schedule HSG-3, Line 41, the percentage increases are on Line 42, and the relative changes (where an increase of 15.2 percent = 100) are on Line 43. The returns on rate base produced by these revenue changes are computed on Lines 45-53, the rates of return are on Line 55, the relative rates of return (where system average of 7.43 percent = 1.00) are on Line 56, progress toward unity (the portion of the gap between relative return at current rates, and unity, that is closed by the proposed revenue allocation) is on Line 57.

Q. Does the proposed revenue allocation achieve the guiding principles stated above?

A. Yes, these results achieve a reasonable balancing of the competing principles of moving the rate classes to their respective cost of service and mitigating extreme rate impacts.

1 **V. Proposed Rate Design**

2 **Q. What is the purpose of the rate design process?**

3 A. The purpose of the rate design process is to determine rates that will produce the revenue
4 for each rate class as determined in the revenue allocation process.

5

6 **Q. Is the Company proposing any changes to its existing electric service rate classes?**

7 A. Yes. The Company is proposing to eliminate Optional Large Demand Rates G-62 (Rate
8 G-62) and to transfer existing Rate G-62 customers to Large Demand Rate G-32 (Rate G-
9 32). The Company also proposes to eliminate Optional Large Demand Back-Up Service
10 Rate B-62 (Rate B-62). Presently, no customers are receiving back-up retail delivery
11 service on B-62. The proposal to consolidate these rate classes will be discussed in more
12 detail below.

13

14 **Q. What are the guiding principles for rate design?**

15 A. The guiding principles for rate design are:

- 16 • Produce the target revenue for each rate class, as determined in the revenue
17 allocation process;
- 18 • Promote efficient use of resources, ultimately reducing costs to customers;
- 19 • Produce costs for customers and revenue for the utility that are reasonably stable
20 and predictable while reflecting the nature of the costs they recover; (i.e.,
21 recovering customer-related costs in the monthly fixed charge); and
- 22 • Mitigate extreme rate impacts on customer subgroups.

1 These principles are described in *Principles of Public Utility Rates*, cited above. The
2 same principles also guided Narragansett Electric's rate design in the 2009 Rate Case and
3 the 2012 Rate Case.

4
5 **Q. Did you prepare a summary of the proposed rates?**

6 A. Yes. Schedule HSG-4I presents the proposed rates for each rate class except Street and
7 Area Lighting, which are on Schedule HSG-4J. The proposed rate design for each rate
8 class is presented in Schedules HSG-4A to HSG-4G and discussed below.

9
10 **Q. What are the billing determinants used in the design of the proposed rates?**

11 A. The billing units used in the design of the proposed rates are based on the Rate Year rate
12 class forecasted customer counts and kWh deliveries developed by Company Witness
13 Joseph F. Gredder. The information is presented on Schedule HSG-2C.

14
15 **Q. Please discuss the nature of service and the current rates for Rates A-16 and A-60.**

16 A. Rate A-16 and Rate A-60 are Narragansett Electric's residential rate classes. Rate A-60
17 is available to low-income customers who meet the criteria specified in the tariff. The
18 current distribution rate structure for Rate A-16 includes a monthly customer charge and
19 a volumetric kWh-based charge.

20
21 Currently, Rate A-60 has no monthly customer charge and only a volumetric kWh-based
22 charge. The present Rate A-60 distribution rates are designed so that a customer on Rate
23 A-60 using an average number of kWh is billed base distribution charges that are

1 approximately 50 percent of the amount that a customer on Rate A-16 with the same
2 usage is billed for base distribution charges.

3
4 **Q. Where are the rates for Rates A-16 and A-60 computed?**

5 A. These rates are computed on Schedule HSG-4A.

6
7 **Q. Is the Company proposing to change the way that the discounts for Rate A-60 are**
8 **provided and recovered?**

9 A. Yes. Instead of having separate base distribution rates for Rate A-16 and Rate A-60
10 customers, the Company is proposing to have the same stated rates for the two classes, to
11 provide a percentage discount on the total bill for Rate A-60 customers, and to recover
12 the discount through a proposed Low Income Discount Recovery Factor, as described in
13 detail in the testimony of the Pricing Panel.

14
15 **Q. How are the proposed rates for Rates A-16 and A-60 computed?**

16 A. The Company's proposed revenue allocation includes an increase of 21.6 percent in
17 distribution-only revenue for Rates A-16 and A-60. The proposed monthly charge is
18 increased to \$8.50, and the balance of the revenue target is recovered in the volumetric
19 charge, \$0.04438 per kWh.

20
21 **Q. How did you compute the proposed fixed monthly charge for Rates A-16 and A-60?**

22 A. The costs considered for recovery in the fixed monthly charge are the typical customer-
23 related costs as well as a demand-related component. The customer-related costs

1 computed in the allocated cost of service study for A-16 / A-60 are \$9.61 per customer-
2 month (Schedule HSG-1C-1, Line 23). The demand-related cost computed in the
3 allocated cost of service study for A-16 /A-60 is \$11.57 per kW-month (Schedule HSG-
4 1C-1, Line 10). In developing the maximum fixed monthly charge, both the customer-
5 related costs of \$9.61 per month plus the cost associated with 0.50 kW, or \$5.78, are
6 included, for a total of \$15.39 per month as the maximum fixed charge. The proposed
7 charge is \$8.50 per month, which is approximately 55 percent of the maximum
8 considered.

9
10 **Q. Is it appropriate to include demand-related costs in the monthly charge?**

11 A. Yes. The Company, like all electric utilities, incurs distribution system costs based on
12 the number of customers connected to the system and the peak demand the system is
13 designed to serve. None of the distribution system costs, or at most only minimal costs,
14 is affected by kWh usage. For residential customers and many small non-residential
15 customers, the customer charge does not fully recover the customer-related costs. The
16 balance of customer-related costs, *as well as all demand-related costs*, are recovered in
17 the kWh charge. Historically, this was due to the lack of customer-level demand data
18 necessary to perform analyses, the need for revenue stability (for the utility) and cost
19 stability (for customers), and historical practice.

In my view, it is appropriate to include some portion of demand-related costs in the monthly charge, in order to align the utility's revenue and costs more closely, and to help stabilize the utility's revenue and customers' costs.¹

Q. How did you determine the portion of demand costs to include in the fixed charge?

A. I computed the levels of demand incurred by residential customers by analyzing hourly data from three separate residential samples. The results are presented in the table below.

Row	Demand Level	Narragansett Residential	Massachusetts Electric Residential	Massachusetts Electric SmartGrid Residential
1	Sample size – Customers	230	197	13,659
2	Months under 0.25 kW	5.3%	12.7%	1.5%
3	Customers under 0.25 kW all year	0.0%	1.0%	0.4%
4	Months under 0.50 kW	6.7%	14.3%	2.9%
5	Customers under 0.50 kW all year	0.0%	2.0%	0.8%
6	Months under 1.00 kW	10.5%	16.9%	6.5%
7	Customers under 1.00 kW all year	2.2%	3.0%	1.7%

The results show that 2.9 percent to 14.3 percent of residential customers incur less than 0.50 kW of demand each month (row 4); alternatively, 85.7 percent to 97.1 percent of customers incur at least 0.50 kW of demand in a given month. In addition, 0.0 percent to 2.0 percent of customers did not reach 0.50 kW of demand at all during the year (row 5);

¹ There are reasons to continue to bill residential and small non-residential customers primarily on kWh, including the variability of month-to-month demand, and the complexity of demand compared to kWh.

1 alternatively, 98.0 percent to 100.0 percent of customers incur at least 0.50 kW of
2 demand at least once per year.

3
4 Based on this information, I believe it is fair and appropriate to include the cost for 0.50
5 kW in the maximum fixed monthly charge considered, because each month
6 approximately 90 percent of residential customers meet this level, and over 98 percent of
7 residential customers meet this level at least once per year.

8
9 **Q. Is 0.50 kW-month of demand-related costs the maximum to consider including in**
10 **the fixed monthly charge?**

11 A. No. In my judgement, including 0.50 kW-month of costs in the residential customer
12 charge is an appropriate first step for Narragansett Electric. The PUC could increase this
13 in future cases based on the percentage of the customers that it deems appropriate and on
14 principles of gradualism.

15
16 **Q. For Rate A-60 customers, did you consider the effect of increasing the fixed charge**
17 **from zero at present, to \$8.50 per month?**

18 A. Yes. To mitigate this effect, the Company is proposing to phase in the Rate A-60 fixed
19 charge. The proposed amounts are \$2.75 in year 1, \$5.50 in year 2, and \$8.50 (the same
20 as the Rate A-16 charge) thereafter. Company Witnesses Ann E. Leary and Scott M.
21 McCabe (Pricing Panel) discuss how the Company proposes to recover the revenue
22 shortfall from this reduced fixed charge.

1 **Q. Please discuss the nature of service and the current rate design for the Small**
2 **Commercial and Industrial Rate C-06 class.**

3 A. Rate C-06 is the small commercial and industrial general service rate class. Rate C-06 is
4 available for all purposes; however, the Company may require customers with 12-month
5 average demand exceeding 200 kW to take service on Rate G-32. Rate C-06 includes
6 customers receiving unmetered service, such as cable TV pole attachments and fire box
7 lights.

8
9 The current distribution rate structure for Rate C-06 includes a fixed monthly charge and
10 a volumetric kWh-based charge. There is an additional charge if the customer requires a
11 transformer in excess of 25 kVA. Unmetered customers pay a location charge, which
12 reflects the fixed monthly charge reduced by meter-related costs, in place of paying the
13 regular fixed monthly charge.

14
15 **Q. Where are the proposed rates for Rate C-06 computed?**

16 A. These rates are computed on Schedule HSG-4B.

17
18 **Q. What are the proposed rates for Rate C-06?**

19 A. The proposed revenue allocation includes an increase of 17.4 percent in distribution-only
20 revenue for Rate C-06. The proposed monthly charge is increased to \$13.00, the
21 proposed location charge (for unmetered customers, in lieu of the fixed monthly charge)
22 is increased to \$8.75, the kVA charge remains at \$1.85 per kVA, and the balance of the
23 revenue target is recovered in the volumetric charge, \$0.04273 per kWh.

1 The costs considered for recovery in the fixed monthly charge are the typical customer-
2 related costs as well as a demand-related component. The customer-related costs
3 computed in the allocated cost of service study for Rate C-06 are \$13.78 per customer-
4 month (Schedule HSG-1C-1, Line 23). The demand-related cost computed in the
5 allocated cost of service study for Rate C-06 is \$11.63 per kW-month (Schedule HSG-
6 1C-1, Line 10). In developing the maximum fixed monthly charge, both the customer-
7 related costs of \$13.78 per month plus the cost associated with 0.25 kW of \$2.91 are
8 included, for a total of \$16.69 per month as the maximum fixed charge. The proposed
9 charge is \$13.00 per month, which is approximately 78 percent of the maximum
10 considered.

11
12 **Q. Is it appropriate to include demand-related costs in the monthly charge?**

13 A. Yes, for the same reasons as discussed above with regard to residential customers.
14

15 **Q. How did you determine the portion of demand costs to include in the fixed charge?**

16 A. I computed the levels of demand incurred by small commercial customers by analyzing
17 hourly data from three separate small commercial customer samples. The results are
18 presented in the table below.

Row	Demand Level	Narragansett Small Commercial	Massachusetts Electric Small Commercial	Massachusetts Electric SmartGrid Small Commercial
1	Sample size – Customers	153	103	696
2	Months under 0.25 kW	15.7%	25.8%	23.7%
3	Customers under 0.25 kW all year	2.6%	11.7%	11.2%
4	Months under 0.50 kW	19.2%	28.9%	35.0%
5	Customers under 0.50 kW all year	5.9%	15.5%	20.7%
6	Months under 1.00 kW	28.5%	35.4%	46.5%
7	Customers under 1.00 kW all year	9.8%	23.3%	35.9%

The results show that 74.2 percent to 84.3 percent of customers incur at least 0.25 kW of demand in a given month (row 2), and 88.3 percent to 97.4 percent of customers incur at least 0.25 kW of demand at least once per year (row 3).

Based on this information, I believe it is fair and appropriate to include the cost for 0.25 kW in the maximum fixed monthly charge considered, because each month approximately 80 percent of small commercial customers meet this level, and 90 percent of small commercial customers meet this level at least once per year.

1 **Q. Please discuss the nature of service and the current rate design for General**
2 **Commercial and Industrial Rate G-02.**

3 A. Rate G-02 is available for all purposes to small and medium commercial and industrial
4 customers. Rate G-02 customers must have demand of 10 kW or more, and the Company
5 may require customers with 12-month average demand exceeding 200 kW to take service
6 on Rate G-32. The current distribution rate structure for Rate G-02 includes a monthly
7 customer charge, an energy-based charge, and a demand-based charge. The demand
8 charge is assessed on demand in excess of 10 kW per month. Some customers receive
9 discounts for taking service at higher voltages.

10

11 **Q. Where are the proposed rates for Rate G-02 computed?**

12 A. These rates are computed on Schedule HSG-4C.

13

14 **Q. What are the proposed rates for Rate G-02?**

15 A. The proposed revenue allocation includes an increase of 7.9 percent in distribution-only
16 revenue for Rate G-02. The proposed monthly charge is increased to \$145.00, the
17 proposed demand charge (applicable to excess of 10 kW per month) is increased to \$6.50,
18 the high voltage delivery (HVD) discount for untransformed power is \$0.42 per kW, and
19 the balance of the revenue target is recovered in the volumetric charge, \$0.00608 per
20 kWh.

21

22 The costs considered for recovery in the fixed monthly charge are the typical customer-
23 related costs as well as a demand-related component. The customer-related costs

1 computed in the allocated cost of service study for Rate G-02 are \$28.46 per customer-
2 month (Schedule HSG-1C-1, Line 23). The demand-related cost computed in the
3 allocated cost of service study for Rate G-02 is \$11.84 per kW-month (Schedule HSG-
4 1C-1, Line 10). In developing the maximum fixed monthly charge, both the customer
5 costs of \$28.46 per month plus the cost associated with 10 kW of demand of \$118.41 per
6 month are included, for a total of \$146.87 per month as the maximum fixed charge. The
7 proposed charge is unchanged at \$145.00 per month, approximately equal to the
8 maximum considered.

9
10 The HVD discount for customers supplied at not less than 2,400 volts and not needing a
11 line transformer is the revenue requirement for transformers, \$0.42 per billed kW-month
12 month (Schedule HSG-1C-4).

13
14 The final step is to compute the demand-based kW rate and the volumetric kWh-based
15 rate needed to produce the target revenue. The current rates include a ISR CapEx factor
16 of \$0.67 per kW. The proposed rates are computed so as to minimize intra-class cost
17 shifts.

18
19 **Q. Please discuss the nature of service and the current rate design for Rate G-32 and**
20 **Rate G-62.**

21 A. The Company requires any customer with a maximum 12-month demand of 200 kW or
22 greater for three consecutive months to be on Rate G-32. The current Rate G-32

1 distribution rates include a monthly customer charge, an energy-based charge, and a
2 demand-based charge for kW in excess of 200 kW.

3
4 Customers with maximum 12-month demand in excess of 5,000 kW have the option to
5 take service on Rate G-62. The current Rate G-62 distribution rates include a monthly
6 customer charge and a demand-based charge. Customers receiving service on Rate G-32
7 or Rate G-62 receive discounts for taking service at higher voltages. Both rates contain a
8 provision for Second Feeder Service.

9
10 Rates G-32 and G-62 have “companion” back-up service rates, Rates B-32 and B-62,
11 respectively, for customers who provide some or all of their electricity from their own
12 generation source but require firm back-up service from the Company. Rates for back-up
13 service are designed in conjunction with their full-service counterparts.

14
15 **Q. Is Narragansett Electric proposing to eliminate Rate G-62 and Rate B-62?**

16 A. Yes. Rates G-62 and B-62 are optional rates; customers on Rates G-62 or B-62 can elect
17 to take service under Rates G-32 or B-32 at any time. The Company computed that if
18 Rate G-32 and Rate G-62 remain in separate classes, the proposed rates for Rate G-62
19 would result in every Rate G-62 customer paying more as a Rate G-62 customer than
20 they would as a Rate G-32 customer under the proposed Rate G-32 rates. This would
21 occur because, as the allocated cost of service results show, this class is paying
22 significantly less than its cost of service, and would require a substantial rate increase,
23 resulting in rates for Rate G-62 customers that would produce higher bills at all levels of

1 use than proposed rates for Rate G-32. Therefore, if the Company were to maintain
2 separate rate classes, the Company would expect all Rate G-62 customers to migrate to
3 Rate G-32.

4
5 If the Company were to keep Rates G-32 and G-62 as separate classes, and current Rate
6 G-62 customers opted to migrate to Rate G-32, the Company would have a significant
7 loss of revenue that would flow through the operation of its RDM that would be
8 recovered from all customers. Therefore, the Company is proposing to eliminate Rate G-
9 62. The rate design for Rate G-32 reflects the migration of current Rate G-62 customers
10 to Rate G-32.

11
12 **Q. Where are the proposed rates for Rate G-32 computed?**

13 A. These rates are computed on Schedule HSG-4D.

14
15 **Q. What are the proposed rates for Rate G-32?**

16 A. The proposed revenue allocation includes no increase or decrease in distribution-only
17 revenue for Rate G-32, and an increase of 24.3 percent for Rate G-62. Narragansett
18 Electric has combined the proposed revenue allocation of Rates G-32 and G-62 for the
19 purposes of designing rates for this rate class. The proposed monthly charge is \$1,100.00
20 (currently Rate G-32 is \$825.00 and Rate G-62 is \$17,000.00), the proposed demand
21 charge (applicable to kW in excess of 200 kW per month) is increased to \$5.00 per kW-
22 month (currently Rate G-32 is \$3.70 per kW applicable to kW in excess of 200 kW per
23 month, and Rate G-62 is \$2.99 per kW applicable to all kW), the HVD discount for

1 untransformed power is \$0.42 per kW, and the balance of the revenue target is recovered
2 in the proposed volumetric charge, \$0.00631 per kWh (currently the Rate G-32
3 volumetric charge is \$0.00551 per kWh and the Rate G-62 volumetric charge is zero).

4
5 The costs considered for recovery in the fixed monthly charge are the typical customer-
6 related costs as well as a demand-related component. The customer-related costs
7 computed in the allocated cost of service study for Rate G-32 are \$127.23 and for Rate
8 G-62 are \$2,105.13 (Schedule HSG-1C-1, Line 23). The demand-related costs computed
9 in the allocated cost of service study for Rate G-32 are \$8.30 per kW-month and for Rate
10 G-62 are \$7.91 per kW-month (Schedule HSG-1C-1, Line 10). In developing the
11 maximum fixed monthly charge, both the customer costs plus the cost associated with
12 200 kW of demand are included, for a total of \$1,787.44 per month for Rate G-32 as the
13 maximum fixed charge. The proposed charge is \$1,100.00 per month, which is
14 approximately 62 per cent of the maximum considered.

15
16 The HVD for customers supplied at not less than 2,400 volts and not needing a line
17 transformer is the revenue requirement for transformers, \$0.42 per billed kW-month
18 month (Schedule HSG-1C-4). The Second Feeder Service rate is \$3.28 per kW-month,
19 equal to the revenue requirement per kW for Secondary Distribution (Schedule HSG-1C-
20 1).

21
22 The final step is to compute the demand-based kW rate and the volumetric kWh-based
23 rate needed to produce the target revenue. The current rates include an ISR CapEx factor

1 of \$0.71 per kW. The proposed rates are computed so as to minimize intra-class cost
2 shifts.

3

4 **Q. Is the Company proposing changes to the structure of Rate B-32?**

5 A. No. At this time, the Company is not proposing any changes to the structure of the Rate
6 B-32.

7

8 The calculation of the back-up service demand charge for Rate B-32 is shown in
9 Schedule HSG-4D. The proposed rate is designed using the same design criteria as used
10 in developing the current rates.

11

12 **Q. Please discuss the nature of service and the current rate design for Electric**
13 **Propulsion Rate X-01.**

14 A. Rate X-01 is the rate for traction power, or electricity supplied to railroads. The current
15 rates include a monthly customer charge and an energy-based charge. The proposed
16 revenue allocation includes no change in total distribution-only revenue for Rate X-01.

17

18 **Q. Where are the proposed rates for Rate X-01 computed?**

19 A. These rates are computed on Schedule HSG-4E.

20

21 **Q. What are the proposed distribution rates for Rate X-01?**

22 A. The proposed monthly charge for Rate X-01 is increased to \$21,000.00, and the balance
23 of the revenue target is recovered in the volumetric charge, \$0.01816 per kWh.

1

2 The customer-related costs computed in the allocated cost of service study for Rate X-01
3 are \$1,175.39 per customer-month (Schedule HSG-1C-1, Line 23). The present monthly
4 charge is above this amount, so the present monthly charge is unchanged; however this
5 rate design is consistent with the historical rate design for this class, which is intended to
6 promote stability and predictability of costs.

7

8 **Q. Please describe the existing Street and Area Lighting classes.**

9 A. The present Street and Area Lighting classes comprise:

- 10 • Rate S-05, Customer-owned Lighting.
- 11 • Rate S-06, Decorative Street and Area Lighting. This rate is available to any
12 customer, including municipality, governmental entity, or other public
13 authority
- 14 • Rate S-10, Private Lighting. This rate is closed to new customers.
- 15 • Rate S-14, General Street and Area Lighting. This rate is available to cities,
16 towns, and other public authorities, and certain other customers as stated in
17 Narragansett Electric's tariff.

18

19 **Q. What is the current rate design for the Street and Area Lighting classes?**

20 A. All Street and Area Lighting rates are unmetered. The current rates for Rates S-06, S-10,
21 and S-14 are comprised of a monthly charge based on the type and size of the luminaire

1 and support (i.e., poles and attachments). The current rate for Rate S-05 is a kWh rate
2 based on imputed usage.

3
4 **Q. Where are the proposed rates for Street and Area Lighting computed?**

5 A. These rates are computed on Schedule HSG-4F.

6
7 **Q. How did you develop the proposed rates for the Street and Area Lighting classes?**

8 A. The proposed revenue allocation includes no change to total distribution-only revenue for
9 Street and Area Lighting.

10
11 Approximately 80 percent of the revenue in Street and Area Lighting is from High
12 Pressure Sodium (HPS) fixtures, Standards (poles), and Metal Halide fixtures. For these
13 items, the proposed rates are equal to current rates (including the ISR CapEx factor,
14 which is based on imputed kWh) plus an increase of 3.00 percent.

15
16 For mercury vapor and incandescent lamps that the Company would replace with HPS
17 lamps, the proposed rate is the same as the proposed rate for the appropriate HPS lamp.

18
19 For light emitting diode (LED) lamps and Rate S-06 (Decorative), the proposed rates are
20 set equal to the levelized annual costs of owning and maintaining each item over its life.

21
22 For Rate S-05, the kWh rate is developed on Schedule HSG-1C-3.

1 **Q. Is the Company proposing to revise rates for Street and Area Lighting temporary**
2 **turn-off service?**

3 A. Yes. The temporary turn-off rates are proposed to be 53.11 percent of the full service
4 luminaire and support rates (Schedule HSG-1C-2). Narragansett Electric continues to
5 incur costs while a street light has been “red capped,” or turned off, including
6 depreciation expense, property taxes, return on investment, and related income taxes on
7 that return, billing costs, related general and administrative costs, and deferred tax
8 expense. The costs that would cease, temporarily, are operation and maintenance costs
9 and related general and administrative costs and taxes.

10

11 **Q. Please describe Station Power Delivery and Reliability Service Rate M-1.**

12 A. Rate M-1 customers are merchant generators that are interconnected directly or indirectly
13 with high voltage facilities at 115 kV or greater. Rate M-1 customers pay a fixed
14 monthly distribution charge. An increase equal to the system average increase was
15 applied to the revenue from Rate M-1 customers. The revenue from Rate M-1 is included
16 with other distribution revenue, which is used to reduce the revenue required to be
17 collected from all other customers through distribution rates. The proposed rates are
18 presented on Schedule HSG-4-G.

19

20 **HVD Discounts at 2.4 kV and 115 KV**

21 **Q. Is the Company proposing updated HVD discounts for the 2.4 kV credit and 115 kV**
22 **credit it currently provides customers?**

1 A. Yes. The HVD discount for customers supplied at not less than 2,400 volts and not
2 needing a line transformer is computed on Schedule HSG-1H. The HVD credit for
3 customers receiving service at 115kV or greater is set equal to the demand-based charge
4 for the combined Rate B/G-32 and Rate B/G-62 classes. As in the current tariffs, the
5 Second Feeder Service charge is set equal to the 115 kV credit. The rates are shown on
6 Schedule HSG-4H.

7
8 **Q. How does the Company's proposed rate design comport with the Docket 4600 rate**
9 **design Guidelines?**

10 A. It is my understanding that, in Docket No. 4600, the PUC determined that, in setting
11 future electric distribution rates, it must take into account and balance specific factors that
12 include not only traditional ratemaking principles, but also principles more specific to the
13 intent of legislation that supports distributed energy resource programs.

14
15 To assess the reasonableness of proposed rate designs, at its May 4, 2017 Open Meeting,
16 the PUC adopted rate design principles in Section 3.1 of the April 5, 2017 Report to the
17 Rhode Island Public Utilities Commission on the Stakeholder Working Group Process in
18 Docket No. 4600 (Report). The PUC determined that these principles should be
19 considered by the utility and other parties to dockets that proposed changes to their
20 current rate design.² Specifically, a party proposing a specific rate design is required to

² See Report and Order No. 22851 (issued July 31, 2017) in Docket No. 4600, at 23 (Docket No. 4600 Order).

include accompanying evidence that addresses how the proposal advances, detracts from,
or is neutral as to each of the stated rate design principles listed below.³

The Company's allocated cost of service study and rate design proposals in this filing
help to advance many of the rate design principles outlined in Section 3.1 of the Docket
No. 4600 Report.

"New" Rate Design Principles	Advances / Detracts From / Neutral To
Ensure safe, reliable, affordable, and environmentally responsible electricity service today and in the future.	<i>Advances</i> – Promotes distributed generation and aligns rates with costs.
Promote economic efficiency over the short and long term.	<i>Advances</i> – Revenue allocation moves classes very close to cost of service, and rate design (<i>i.e.</i> , fixed monthly charges) moves somewhat closer to the unit costs to serve.
Provide efficient price signals that reflect long-run marginal cost.	<i>Neutral</i> – Long run marginal cost not available.
Future rates and rate structures should appropriately address "externalities" that are not adequately counted in current rate structures.	<i>Neutral</i> – ISR and RDM address events that cannot be forecasted at the time of the rate case, but in a limited way.
Empower consumers to manage their costs.	<i>Advances</i> – Rates are easy to understand. <i>Neutral</i> – While other rate structures, such as those commonly referred to as time varying rates, would provide more opportunities for consumers to manage their electric bills, such rate structures are more appropriate for electric commodity rates, such as Standard Offer Service rates, and not for distribution services, which are substantially fixed.

³ Id. The PUC recognized that no one rate design proposal may advance each principle, but each should be addressed so that the PUC can appropriately balance the interests of all parties in setting just and reasonable rates across rate classes and programs. Docket No. 4600 Order at 23. Adoption of these principles is intended to augment the PUC's role in ensuring just and reasonable rates for all classes of customers. Id.

“New” Rate Design Principles	Advances / Detracts From / Neutral To
Enable a fair opportunity for utility cost recovery of prudently incurred costs and revenue stability.	<i>Neutral</i> – Revenue stability due to higher fixed costs, however, operation of RDM provides a fixed level of distribution revenue for the recovery of embedded capital investment and expenses, while future costs to service are subject to change. The ISR Plan mitigates the impact of additional capital investment above the amounts reflected in base distribution rates.
All parties should provide fair compensation for value and services received and should receive fair compensation for value and benefits delivered.	<i>Neutral</i> – Rates are based on embedded costs not current costs. <i>Advances</i> – Proposed rates appropriately reflect unit cost to serve and ensure all customers pay an equitable share of distribution system costs.
Be transparent and understandable to all customers.	<i>Advances</i> – Proposed rates maintain current rate structures, including only fixed monthly costs, kWh-based and kW-based, and are easy to understand. Low income rates and the proposal for the low income discount simplifies the rate structure, provides transparency to this customer group of the value of the discount they are receiving, and identifies the cost of the discount to be recovered from all other customers.
Any changes in rate structures should be implemented with due consideration to the principle of gradualism in order to allow ample time for customers (including DER customers) to understand new rates and to lessen immediate bill impacts.	<i>Advances</i> – Bill impacts within customer classes, and the effect of combining Rates G-32 and G-62, were carefully considered in the rate design. The proposal for the low income discount and phase-in of the Rate A-60 customer charge address the impacts to this customer group.
Provide opportunities to reduce energy burden, and address low income and vulnerable customers’ needs.	<i>Advances</i> – Proposed low income discount offers assistance to customers meeting need criteria.

“New” Rate Design Principles	Advances / Detracts From / Neutral To
Be consistent with policy goals (e.g., environmental, climate (Resilient Rhode Island Act), energy diversity, competition, innovation, power/data security, least cost procurement, etc.).	<i>Advances</i> – Promotes distributed generation and aligns rates with costs <i>Neutral</i> - While other rate structures, such as those commonly referred to as time varying rates, would provide more opportunities for consumers to manage their electric bills, such rate structures are more appropriate for electric commodity rates, such as Standard Offer Service rates, and not for distribution services, which are substantially generally fixed.
Rate structures should be evaluated on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system.	<i>Neutral</i> – Rates are based on embedded costs, not current costs.

1

2

Proof of Revenue for Proposed Rates

3

Q. Did you prepare a proof of revenue for the proposed rates?

4

A. Yes. Schedule HSG-4K shows that the revenue at proposed rates produces the revenue for each rate class proposed in the revenue allocation presented on Schedule HSG-3, with small differences due to rounding.

7

8

Q. Is the Company proposing rate changes related to any other existing rate mechanisms?

9

10

A. Yes. The Company is proposing to revise the Standard Offer Service Administrative Cost Factor (SOSACF), transmission charges, the Energy Efficiency Program (EEP) Charge, the Long Term Contracting Renewable Energy Recovery (LTCRER) Factor, the Renewable Energy (RE) Growth Factors, and ISR Factors.

11

12

13

1 **Q. What revisions is the Company proposing to the aforementioned rates?**

2 A. The Company is proposing to update these rates to reflect the uncollectible percentage
3 proposed in this filing. The Company will also change factors impacted by the
4 elimination of Rates G-62 and B-62 through combining the costs recovered from Rates
5 G-62/G-62 with those of Rates G-32/B-32. These include transmission charges, RE
6 Growth Factors, ISR Operations and Maintenance Factors, and ISR CapEx Factors.

7
8 **Q. What is the effective date on which the Company proposing to implement the**
9 **changes to these rates?**

10 A. The Company is proposing to revise these factors effective on the same date that base
11 distribution rates resulting from this proceeding go into effect, or January 1, 2018.

12

13 **VI. Typical Bills**

14 **Q. Has the Company included bill impacts in its filing?**

15 A. Yes. Schedule HSG-5 presents the bill impacts of the proposed rates for customers who
16 are receiving Standard Offer Service. As a result of the rates proposed in this filing, a
17 500 kWh-per month residential customer's monthly bill would increase by \$6.66, or by
18 6.3 percent, from \$105.27 to \$111.93 (Schedule HSG-5-A).

19

20 **Q. Please describe the proposed rates shown in the bill comparisons included in**
21 **Schedule HSG-5.**

22 A. The proposed rates shown under each bill impact table reflect the rates proposed in this
23 filing as shown on Schedule HSG-4, plus adjustments to the SOSACF, transmission

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to NERI's Seventh Set of Data Requests
Issued March 2, 2018

NERI 7-14

Request:

Reference p. 28, ll. 9-14. Please explain how the witness and the Company believe that the Commission's work in Docket 4600 and the Power Sector Transformation process relate to the witness' recommendation that the Commission adopt an agenda of systematically increasing the amount of demand-related costs through the fixed customer charge.

Response:

To be clear, the fixed monthly charge that is recommended would comprise both a customer component and a demand component; this is referenced as the fixed monthly charge, not simply the fixed customer charge.

The proposal to include demand-related costs in the fixed charge promotes alignment of revenues and costs more closely, which advances economic efficiency and the setting of just and reasonable rates, as discussed in the Company's response to NERI 7-12.

As discussed in the Docket 4600 Stakeholder Working Group Process Report to the Rhode Island Public Utilities Commission dated April 5, 2017, Section 3.6, at page 16: "Therefore, the Commission should investigate long-term rate design options that will provide price signals to consumers, promote a more efficient use of the electric system, and compensate the utility and others for services to customers. The members of the Working Group all agree with the application of TVR (time varying rates) over the long term.....In addition, changes to customer charges and consideration of demand charges (e.g., specific time blocks where demand would be measured) for both small and large customers warrant consideration."

The following point was also included in Section 3.6 at page 17: "When retail rates for generation and delivery appropriately reflect the underlying cost of the system, it will be possible to accurately charge and credit consumers for the grid services they use and provide in a technology-neutral manner." The Company's proposal is to move its rate design to more appropriately reflect the underlying fixed cost of the system by recovering those costs through a fixed monthly charge.

**Table 1: High level summary of alignment between Power Sector Transformation
Provision and Docket 4600 rate design principles**

Rate Design Principle	Advances?/Detracts From?/Is Neutral To?
Ensure safe, reliable, affordable, and environmentally responsible electricity service today and in the future.	<i>Advances</i> – Promotes distributed generation through advancement of distribution system operation and advanced metering; beneficial electrification; renewable energy generation through Company ownership of solar; and aligns rates with costs.
Promote economic efficiency over the short and long term.	<i>Advances</i> – Cost allocation and rate design (i.e., fixed charges for AMI-related cost recovery) results in rates that will be closer to the unit cost of serve once recovery of assets takes place through base distribution rates.
Provide efficient price signals that reflect long-run marginal cost.	<i>Neutral</i> – Long run marginal cost not available.
Identify future rates and rate structures that appropriately address “externalities” that are not adequately counted in current rate structures.	<i>Advances</i> – Rate design (i.e., fixed charges for AMI-related cost recovery) considers the expansion of distributed generation (DG) and the certainty of recovery of AMI costs through a fixed charge regardless of the reduction in kWh deliveries resulting from DG.
Empower consumers to manage their costs.	<i>Advances</i> – Through the AMI initiative, the Company would create the infrastructure (metering and communications) that would introduce to customers a tool (access to usage data) to make decisions with regard to managing their energy costs.
Enable a fair opportunity for utility cost recovery of prudently incurred costs and revenue stability.	<i>Advances</i> – Contribution towards revenue stability due to fixed charges for the recovery of AMI-related costs.
Ensure that all parties should provide fair compensation for value and services received and should receive fair compensation for value and benefits delivered.	<i>Advances</i> – Proposed recovery appropriately reflects cost to serve and ensure all customers pay an equitable share of the costs.

Rate Design Principle	Advances?/Detracts From?/Is Neutral To?
Constitute a rate design that is transparent and understandable to all customers.	<i>Advances</i> – Although there are several initiatives that require individual revenue requirement and factor calculations, when the factors are consolidated, the rate structure is transparent and easy to understand as a combination of a fixed charge and a volumetric charge.
Ensure that any changes in rate structures are be implemented with due consideration to the principle of gradualism in order to allow ample time for customers (including DER customers) to understand new rates and to lessen immediate bill impacts.	<i>Neutral</i> – PST cost recovery does not exist today, however, recovery results in impacts that are not unreasonable in light of the nature of and benefits from the initiatives.
Provide opportunities to reduce energy burden, and address low income and vulnerable customers’ needs.	<i>Advances</i> – Proposed concept regarding the income eligible rewards account is intended to provide more tools for low income customers to pay their energy bills.
Ensure consistency with policy goals (e.g., environmental, climate (Resilient Rhode Island Act), energy diversity, competition, innovation, power/data security, least cost procurement, etc.).	<i>Advances</i> – Promotes distributed generation through advancement of distribution system operation and advanced metering; beneficial electrification; renewable energy generation through Company ownership of solar; and aligns rates with costs.
Evaluate rate structures based on whether they encourage or discourage appropriate investments that enable the evolution of the future energy system.	<i>Neutral</i> – Proposed recovery factors are intended to align with current cost allocation and rate design principles.

NERI 5-5

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 13, line 6 through p. 14, line 17.

- a. Please provide a specific description of every PST-related cost for which the Company will seek recovery through a per kWh factor, a per customer factor, or a combination of the two.
- b. Please explain why the method of recovery was selected for each type of cost.
- c. Please provide citations to authorities or approved methods supporting the classification decision for each type of cost.
- d. Please provide, in Excel format, schedules for all such costs, how they will be collected, and the impacts on customers, but class and bill frequency.
- e. Please explain each use of terms such as “gradually,” “noticeable [cost shift],” “fair,” “undue burden,” “transparent,” and “value” as used in the cited testimony.
- f. Please provide all quantitative analysis associated with the use of these terms in the testimony.

Response:

- a. The description and method of recovery of the costs of each of the Power Sector Transformation (PST) initiatives is presented in the revised proposed Power Sector Transformation Provision included in Chapter 10 of the Company's January 12, 2018 filing in RIPUC Docket No. 4780. The referenced section of the pre-filed direct testimony submitted in RIPUC Docket No. 4780 (Page 13, Line 6 through Page 14, Line 17, Bates Pages 13 and 14) is describing the proposed recovery mechanism presented in the proposed PST Provision. Each PST initiative is identified separately in the proposed PST Provision, specific costs for that initiative are described, and the factor proposed to recover those costs, whether a per-kWh factor or a per-bill factor, follows the costs proposed to be recovered. A summary is provided below:

PST Initiative	PST Cost Category	Recovery Factor
Expansion of Grid Modernization	Customer-Related and Distribution/Shared	Customer-Related via a per-bill factor; Distribution/Shared via a per-kWh factor
Electric Transportation	n/a	per-kWh factor
Electric Heat	n/a	per-kWh factor
Energy Storage	n/a	per-kWh factor
Solar Demonstration	n/a	per-kWh factor
Income Eligible Rewards Program	n/a	per-kWh factor

The only PST initiative for which the Company is proposing that a portion of the costs be recovered through a per-bill factor is the expansion of grid modernization. Cost recovery for the other PST initiatives is proposed to take place via per-kWh factors. The Company's pre-filed direct testimony filed on January 12, 2018 in RIPUC Docket No. 4780 (Bates Pages 13 and 14) addresses the basis for proposing recovery of certain costs through a per-bill factor.

- b. Please see the response to part a. above.
- c. Consistent with longstanding rate design principles, certain costs are categorized into functions (aka, functionalized) as sub-transmission, primary and secondary distribution, and billing. The functional costs are then classified as demand-related, energy-related, or customer-related. This process is typically reflected as a component of an Allocated Cost of Service Study (ACOSS). On Page 7 of Company Witness Howard S. Gorman's pre-filed direct testimony (Bates Page 11 of Book 12), a description of the costs that are assigned to each function is provided. The billing function is analogous to what would be included as part of the Customer-Related PST cost category in the above table. Page 9 of Mr. Gorman's pre-filed direct testimony (Bates Page 13 of Book 12), Lines 9-14, describe the classification process. The classification of any secondary distribution and billing costs as customer-related results in costs that are analogous to what would be included as part of the Customer-Related PST cost category in the above table. All other costs associated with the Expansion of Grid Modernization initiative would be categorized as distribution or shared (such as feeder monitoring systems or control center enhancements). Finally, the Company's proposal for PST cost recovery is consistent with the manner by which Mr. Gorman describes his approach and preparation of the proposed ACOSS, which he describes in his pre-filed direct testimony on Page 12, Line 20 through Page 13, Line 4 (Bates Pages 16-17 of Book 12), which include cost causation, consistency with PUC precedent, and prior Company classification.

- d. The Company is providing the illustrative electric PST factor calculations and bill impacts in the attachments listed below. Each year's revenue requirement and the proposed allocators reflect the Company's proposal in its January 12, 2018 filing in RIPUC Docket No. 4780. To isolate the impact of the proposed PST initiatives from the impact of the Company's proposals for Narragansett Electric, the Company has used the same rates for the billing amounts based on "present rates" as those used in the November 27, 2017 version of the typical bills contained in Schedule HSG-5 of Company Witness Howard S. Gorman. However, the billing amounts based on "proposed rates" only reflects the impact of the illustrative PST factors presented in this response. The Company has not presented illustrative PST factors and bill impacts for Narragansett Gas, as the amounts proposed for Narragansett Gas through PST are less than those proposed for Narragansett Electric.

<u>Attachment</u>	<u>Content</u>
Attachment NERI 5-5-1	Illustrative PST Factors, FY 2020-2022, Based on RI-Only Grid Modernization/AMI
Attachment NERI 5-5-2	Illustrative PST Factors, FY 2020-2022, Based on Shared Grid Modernization/AMI
Attachment NERI 5-5-3	Illustrative FY 2020 Bill Impacts, RI-Only Grid Modernization/AMI
Attachment NERI 5-5-4	Illustrative FY 2021 Bill Impacts, RI-Only Grid Modernization/AMI
Attachment NERI 5-5-5	Illustrative FY 2022 Bill Impacts, RI-Only Grid Modernization/AMI
Attachment NERI 5-5-6	Illustrative FY 2020 Bill Impacts, Shared Grid Modernization/AMI
Attachment NERI 5-5-7	Illustrative FY 2021 Bill Impacts, Shared Grid Modernization/AMI
Attachment NERI 5-5-8	Illustrative FY 2022 Bill Impacts, Shared Grid Modernization/AMI

- e. The terms cited in the question are discussed below.
- The Company uses the term "gradually" to reflect that the PST Factor is a mechanism through which costs will be recovered for a limited period of time

until the recovery of PST costs is transferred, where appropriate, to base distribution rates.

- The Company uses “noticeable” to refer to the potential of a change in approach to cost recovery that would be sufficiently material to lead to changes in total bills that are observable by customers, and which will likely result in larger bill impacts for lower use customers.
- The Company uses the term “fair” in accordance with the rate design principles articulated in Docket 4600 Stakeholder Report and adopted by the PUC.
- The Company uses the term “undue burden” to reflect that, if the Company had proposed a per-kWh factor, collection of distribution system costs from non-DG customers would be at a level that is disproportionate to their actual distribution system costs incurred due to a growing customer base having DG.
- The Company uses the term “transparent” to refer to a PST factor design that is made clear to all customers.
- The Company uses the term “value” in discussing the annual review of the PST Plan to reflect the expectation that the Company’s investments provide benefits to customers, that associated costs are prudent, and that the Company’s investments support Rhode Island’s goals for power sector transformation.

- f. The Company has not conducted quantitative analysis in support of the use of these terms. The Company’s discussion in this section is consistent with generally accepted rate design best practices.

(This response is identical to the Company’s response to NERI 27-5 in Docket No. 4770.)

The Narragansett Electric Company
Calculation of PST Factors-Stand-Alone Grid Mod/AMI
Year 1 (12 months ending March 2020)

		Grid Modernization Expansion (RI Only)				Electric Transportation Total Revenue Req (e)	Electric Heat Total Revenue Req (f)	Electric Storage Total Revenue Req (g)	Solar Demonstration Total Revenue Req (h)	Combined PST Factors (i)
		Customer-Related		Distribution/Shared						
		Capital	O&M	Capital	O&M					
		Revenue Req (a)	Revenue Req (b)	Revenue Req (c)	Revenue Req (d)					
(1)	Year 1 Annual Recovery Source Appendix Source Line	\$121,193 App 10.4 line 17	\$9,265,789 line 6	\$1,521,151 App 10.2 line 28	\$7,352,383 line 13	\$920,583 App 10.6 line 21	\$383,093 App 10.7 line 6	\$115,164 App 10.8 line 10	\$79,708 App 10.9 line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$73,213	\$6,799,236							
(15)	Rate C-06	\$33,074	\$1,782,738							
(16)	Rate G-02	\$11,465	\$535,563							
(17)	Rate G-32/X-01	\$3,441	\$148,252							
(18)	Rate A-16/A-60			\$842,261	\$4,141,597					
(19)	Rate C-06			\$156,222	\$794,793					
(20)	Rate G-02			\$243,841	\$1,093,299					
(21)	Rate G-32			\$261,182	\$1,110,945					
(22)	Rate X-01			\$456	\$16,175					
(23)	Streetlighting			\$17,189	\$195,574					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,297,054	5,297,054							
(26)	Rate C-06	628,299	628,299							
(27)	Rate G-02	105,215	105,215							
(28)	Rate G-32/X-01	13,503	13,503							
(29)	Rate A-16/A-60			2,923,487,119	2,923,487,119					
(30)	Rate C-06			598,439,397	598,439,397					
(31)	Rate G-02			1,288,922,522	1,288,922,522					
(32)	Rate G-32			2,361,949,454	2,361,949,454					
(33)	Rate X-01			23,956,449	23,956,449					
(34)	Streetlighting			45,751,024	45,751,024					
(35)	Total			7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	
		Customer-Related GMEFs		Distribution/Shared GMEFs		ETFs	EHFs	ESSFs	SPFs	Total
		Capital	O&M	Capital	O&M					
(36)	<u>Illustrative Factors</u>									
(37)	Rate A-16/A-60	\$0.01	\$1.28							\$1.29
(38)	Rate C-06	\$0.05	\$2.83							\$2.88
(39)	Rate G-02	\$0.10	\$5.09							\$5.19
(40)	Rate G-32	\$0.25	\$10.97							\$11.22
(41)	Rate X-01	\$0.25	\$10.97							\$11.22
(42)	Rate A-16/A-60			\$0.00028	\$0.00141	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00188
(43)	Rate C-06			\$0.00026	\$0.00132	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00177
(44)	Rate G-02			\$0.00018	\$0.00084	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00121
(45)	Rate G-32			\$0.00011	\$0.00047	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00077
(46)	Rate X-01			\$0.00001	\$0.00067	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00087
(47)	Streetlighting			\$0.00037	\$0.00427	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00483

(3)-(6) Proposed PST Provision, Section 6.0

(8)-(12) Proposed PST Provision, Section 6.0

(14)-(17) Line (1) x Lines (3) - (6)

(19)-(23) Line (1) x Lines (8) - (12)

(25)-(35) Per Company forecast

(37)-(41) Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places

(42)-(47) Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places

Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places

The Narragansett Electric Company
Calculation of PST Factors-Stand-Alone Grid Mod/AMI
Year 2 (12 months ending March 2021)

		Grid Modernization Expansion (RI Only)				Electric Transportation Total Revenue Req (e)	Electric Heat Total Revenue Req (f)	Electric Storage Total Revenue Req (g)	Solar Demonstration Total Revenue Req (h)	Combined PST Factors (i)
		Customer-Related		Distribution/Shared						
		Capital	O&M	Capital	O&M					
		Revenue Req (a)	Revenue Req (b)	Revenue Req (c)	Revenue Req (d)					
(1)	Year 2 Annual Recovery Source Appendix Source Line	\$3,892,804 App 10.4 line 17	\$9,234,790 line 6	\$3,903,338 App 10.2 line 28	\$10,106,205 line 13	\$1,496,285 App 10.6 line 21	\$406,193 App 10.7 line 6	\$267,682 App 10.8 line 10	\$369,516 App 10.9 line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$2,351,643	\$6,776,489							
(15)	Rate C-06	\$1,062,346	\$1,776,774							
(16)	Rate G-02	\$368,259	\$533,771							
(17)	Rate G-32/X-01	\$110,556	\$147,756							
(18)	Rate A-16/A-60			\$2,161,278	\$5,692,825					
(19)	Rate C-06			\$400,873	\$1,092,481					
(20)	Rate G-02			\$625,705	\$1,502,793					
(21)	Rate G-32			\$670,203	\$1,527,048					
(22)	Rate X-01			\$1,171	\$22,234					
(23)	Streetlighting			\$44,108	\$268,824					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,318,259	5,318,259							
(26)	Rate C-06	629,726	629,726							
(27)	Rate G-02	105,426	105,426							
(28)	Rate G-32/X-01	13,516	13,516							
(29)	Rate A-16/A-60			2,899,123,414	2,899,123,414					
(30)	Rate C-06			596,790,438	596,790,438					
(31)	Rate G-02			1,284,026,902	1,284,026,902					
(32)	Rate G-32			2,341,340,361	2,341,340,361					
(33)	Rate X-01			23,913,717	23,913,717					
(34)	Streetlighting			<u>44,698,322</u>	<u>44,698,322</u>					
(35)	Total			7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	
(36)	<u>Illustrative Factors</u>	<u>Customer-Related GMEFs</u>		<u>Distribution/Shared GMEFs</u>		<u>ETFs</u>	<u>EHFs</u>	<u>ESSFs</u>	<u>SPFs</u>	<u>Total</u>
		<u>Capital</u>	<u>O&M</u>	<u>Capital</u>	<u>O&M</u>					
(37)	Rate A-16/A-60	\$0.44	\$1.27							\$1.71
(38)	Rate C-06	\$1.68	\$2.82							\$4.50
(39)	Rate G-02	\$3.49	\$5.06							\$8.55
(40)	Rate G-32	\$8.17	\$10.93							\$19.10
(41)	Rate X-01	\$8.17	\$10.93							\$19.10
(42)	Rate A-16/A-60			\$0.00074	\$0.00196	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00303
(43)	Rate C-06			\$0.00067	\$0.00183	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00283
(44)	Rate G-02			\$0.00048	\$0.00117	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00198
(45)	Rate G-32			\$0.00028	\$0.00065	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00126
(46)	Rate X-01			\$0.00004	\$0.00092	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00129
(47)	Streetlighting			\$0.00098	\$0.00601	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00732
(3)-(6)	Proposed PST Provision, Section 6.0									
(8)-(12)	Proposed PST Provision, Section 6.0									
(14)-(17)	Line (1) x Lines (3) - (6)									
(19)-(23)	Line (1) x Lines (8) - (12)									
(25)-(35)	Per Company forecast									
(37)-(41)	Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
(42)-(47)	Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
	Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places									

The Narragansett Electric Company
Calculation of PST Factors-Stand-Alone Grid Mod/AMI
Year 3 (12 months ending March 2022)

		Grid Modernization Expansion (RI Only)				Electric	Electric	Electric	Solar	Combined
		Customer-Related		Distribution/Shared		Transportation	Heat	Storage	Demonstration	PST
		Capital	O&M	Capital	O&M	Total	Total	Total	Total	Factors
		Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
(1)	Year 3 Annual Recovery Source Appendix Source Line	\$13,475,181 App 10.4 line 17	\$11,780,126 line 6	\$6,934,861 App 10.2 line 28	\$10,711,808 line 13	\$2,563,267 App 10.6 line 21	\$454,646 App 10.7 line 6	\$422,699 App 10.8 line 10	\$951,409 App 10.9 line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$8,140,357	\$8,644,256							
(15)	Rate C-06	\$3,677,377	\$2,266,496							
(16)	Rate G-02	\$1,274,752	\$680,891							
(17)	Rate G-32/X-01	\$382,695	\$188,483							
(18)	Rate A-16/A-60			\$3,839,833	\$6,033,961					
(19)	Rate C-06			\$712,210	\$1,157,946					
(20)	Rate G-02			\$1,111,658	\$1,592,846					
(21)	Rate G-32			\$1,190,716	\$1,618,554					
(22)	Rate X-01			\$2,080	\$23,566					
(23)	Streetlighting			\$78,364	\$284,935					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,339,473	5,339,473							
(26)	Rate C-06	631,458	631,458							
(27)	Rate G-02	105,678	105,678							
(28)	Rate G-32/X-01	13,524	13,524							
(29)	Rate A-16/A-60			2,866,299,901	2,866,299,901					
(30)	Rate C-06			593,037,887	593,037,887					
(31)	Rate G-02			1,274,442,089	1,274,442,089					
(32)	Rate G-32			2,310,988,735	2,310,988,735					
(33)	Rate X-01			23,788,589	23,788,589					
(34)	Streetlighting			43,603,210	43,603,210					
(35)	Total			7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	
(36)	<u>Illustrative Factors</u>	Customer-Related GMEFs		Distribution/Shared GMEFs		ETFs	EHFs	ESSFs	SPFs	Total
(37)	Rate A-16/A-60	Capital	O&M	Capital	O&M					
(38)	Rate C-06	\$1.52	\$1.61							\$3.13
(39)	Rate G-02	\$5.82	\$3.58							\$9.40
(40)	Rate G-32	\$12.06	\$6.44							\$18.50
(41)	Rate X-01	\$28.29	\$13.93							\$42.22
(42)	Rate A-16/A-60			\$0.00133	\$0.00210	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00403
(43)	Rate C-06			\$0.00120	\$0.00195	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00375
(44)	Rate G-02			\$0.00087	\$0.00124	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00271
(45)	Rate G-32			\$0.00051	\$0.00070	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00181
(46)	Rate X-01			\$0.00008	\$0.00099	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00167
(47)	Streetlighting			\$0.00179	\$0.00653	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00892
(3)-(6)	Proposed PST Provision, Section 6.0									
(8)-(12)	Proposed PST Provision, Section 6.0									
(14)-(17)	Line (1) x Lines (3) - (6)									
(19)-(23)	Line (1) x Lines (8) - (12)									
(25)-(35)	Per Company forecast									
(37)-(41)	Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
(42)-(47)	Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
	Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places									

The Narragansett Electric Company
Calculation of PST Factors - Shared Grid Mod/AMI
Year 1 (12 months ending March 2020)

		Grid Modernization Expansion (Shared)				Electric Transportation Total Revenue Req (e)	Electric Heat Total Revenue Req (f)	Electric Storage Total Revenue Req (g)	Solar Demonstration Total Revenue Req (h)	Combined PST Factors (i)
		Customer-Related		Distribution/Shared						
		Capital	O&M	Capital	O&M					
		Revenue Req (a)	Revenue Req (b)	Revenue Req (c)	Revenue Req (d)					
(1)	Year 1 Annual Recovery Source Appendix Source Line	\$108,971 App 10.5 line 17	\$5,220,293 line 6	\$600,314 App 10.3 line 28	\$2,820,970 line 13	\$920,583 App 10.6 line 21	\$383,093 App 10.7 line 6	\$115,164 App 10.8 line 10	\$79,708 App 10.9 line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$65,829	\$3,830,651							
(15)	Rate C-06	\$29,738	\$1,004,384							
(16)	Rate G-02	\$10,309	\$301,733							
(17)	Rate G-32/X-01	\$3,095	\$83,525							
(18)	Rate A-16/A-60			\$332,394	\$1,589,052					
(19)	Rate C-06			\$61,652	\$304,947					
(20)	Rate G-02			\$96,230	\$419,478					
(21)	Rate G-32			\$103,074	\$426,249					
(22)	Rate X-01			\$180	\$6,206					
(23)	Streetlighting			\$6,784	\$75,038					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,297,054	5,297,054							
(26)	Rate C-06	628,299	628,299							
(27)	Rate G-02	105,215	105,215							
(28)	Rate G-32/X-01	13,503	13,503							
(29)	Rate A-16/A-60			2,923,487,119	2,923,487,119					
(30)	Rate C-06			598,439,397	598,439,397					
(31)	Rate G-02			1,288,922,522	1,288,922,522					
(32)	Rate G-32			2,361,949,454	2,361,949,454					
(33)	Rate X-01			23,956,449	23,956,449					
(34)	Streetlighting			45,751,024	45,751,024					
(35)	Total			7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	7,242,505,965	
		Customer-Related GMEFs		Distribution/Shared GMEFs		ETFs	EHFs	ESSFs	SPFs	Total
		Capital	O&M	Capital	O&M					
(36)	<u>Illustrative Factors</u>									
(37)	Rate A-16/A-60	\$0.01	\$0.72							\$0.73
(38)	Rate C-06	\$0.04	\$1.59							\$1.63
(39)	Rate G-02	\$0.09	\$2.86							\$2.95
(40)	Rate G-32	\$0.22	\$6.18							\$6.40
(41)	Rate X-01	\$0.22	\$6.18							\$6.40
(42)	Rate A-16/A-60			\$0.00011	\$0.00054	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00084
(43)	Rate C-06			\$0.00010	\$0.00050	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00079
(44)	Rate G-02			\$0.00007	\$0.00032	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00058
(45)	Rate G-32			\$0.00004	\$0.00018	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00041
(46)	Rate X-01			\$0.00000	\$0.00025	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00044
(47)	Streetlighting			\$0.00014	\$0.00164	\$0.00012	\$0.00005	\$0.00001	\$0.00001	\$0.00197

(3)-(6) Proposed PST Provision, Section 6.0

(8)-(12) Proposed PST Provision, Section 6.0

(14)-(17) Line (1) x Lines (3) - (6)

(19)-(23) Line (1) x Lines (8) - (12)

(25)-(35) Per Company forecast

(37)-(41) Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places

(42)-(47) Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places

Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places

The Narragansett Electric Company
Calculation of PST Factors - Shared Grid Mod/AMI
Year 2 (12 months ending March 2021)

		Grid Modernization Expansion (Shared)				Electric	Electric	Electric	Solar	Combined
		Customer-Related		Distribution/Shared		Transportation	Heat	Storage	Demonstration	PST
		Capital	O&M	Capital	O&M	Total	Total	Total	Total	Factors
		Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
(1)	Year 2 Annual Recovery Source Appendix Source Line	\$3,199,256	\$7,522,544	\$1,506,700	\$4,502,518	\$1,496,285	\$406,193	\$267,682	\$369,516	
		App 10.5		App 10.3		App 10.6	App 10.7	App 10.8	App 10.9	
		line 17	line 6	line 28	line 13	line 21	line 6	line 10	line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$1,932,671	\$5,520,043							
(15)	Rate C-06	\$873,077	\$1,447,337							
(16)	Rate G-02	\$302,650	\$434,803							
(17)	Rate G-32/X-01	\$90,858	\$120,361							
(18)	Rate A-16/A-60			\$834,260	\$2,536,268					
(19)	Rate C-06			\$154,738	\$486,722					
(20)	Rate G-02			\$241,524	\$669,524					
(21)	Rate G-32			\$258,700	\$680,330					
(22)	Rate X-01			\$452	\$9,906					
(23)	Streetlighting			\$17,026	\$119,768					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,318,259	5,318,259							
(26)	Rate C-06	629,726	629,726							
(27)	Rate G-02	105,426	105,426							
(28)	Rate G-32/X-01	13,516	13,516							
(29)	Rate A-16/A-60			2,899,123,414	2,899,123,414					
(30)	Rate C-06			596,790,438	596,790,438					
(31)	Rate G-02			1,284,026,902	1,284,026,902					
(32)	Rate G-32			2,341,340,361	2,341,340,361					
(33)	Rate X-01			23,913,717	23,913,717					
(34)	Streetlighting			44,698,322	44,698,322					
(35)	Total			7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	7,189,893,154	
(36)	<u>Illustrative Factors</u>	Customer-Related GMEFs		Distribution/Shared GMEFs		ETFs	EHFs	ESSFs	SPFs	Total
		Capital	O&M	Capital	O&M					
(37)	Rate A-16/A-60	\$0.36	\$1.03							\$1.39
(38)	Rate C-06	\$1.38	\$2.29							\$3.67
(39)	Rate G-02	\$2.87	\$4.12							\$6.99
(40)	Rate G-32	\$6.72	\$8.90							\$15.62
(41)	Rate X-01	\$6.72	\$8.90							\$15.62
(42)	Rate A-16/A-60			\$0.00028	\$0.00087	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00148
(43)	Rate C-06			\$0.00025	\$0.00081	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00139
(44)	Rate G-02			\$0.00018	\$0.00052	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00103
(45)	Rate G-32			\$0.00011	\$0.00029	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00073
(46)	Rate X-01			\$0.00001	\$0.00041	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00075
(47)	Streetlighting			\$0.00038	\$0.00267	\$0.00020	\$0.00005	\$0.00003	\$0.00005	\$0.00338
(3)-(6)	Proposed PST Provision, Section 6.0									
(8)-(12)	Proposed PST Provision, Section 6.0									
(14)-(17)	Line (1) x Lines (3) - (6)									
(19)-(23)	Line (1) x Lines (8) - (12)									
(25)-(35)	Per Company forecast									
(37)-(41)	Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
(42)-(47)	Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
	Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places									

The Narragansett Electric Company
Calculation of PST Factors - Shared Grid Mod/AMI
Year 3 (12 months ending March 2022)

Grid Modernization Expansion (Shared)					Electric	Electric	Electric	Solar	Combined PST Factors (i)	
Customer-Related		Distribution/Shared		Transportation	Heat	Storage	Demonstration			
Capital	O&M	Capital	O&M	Total	Total	Total	Total			
Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req	Revenue Req			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)			
(1)	Year 3 Annual Recovery Source Appendix Source Line	\$12,080,833 App 10.5 line 17	\$10,159,829 line 6	\$2,982,380 App 10.3 line 28	\$4,867,750 line 13	\$2,563,267 App 10.6 line 21	\$454,646 App 10.7 line 6	\$422,699 App 10.8 line 10	\$951,409 App 10.9 line 10	
(2)	<u>Applicable Rate Class Allocator</u>					n/a	n/a	n/a	n/a	
(3)	Rate A-16/A-60	60.41%	73.38%							
(4)	Rate C-06	27.29%	19.24%							
(5)	Rate G-02	9.46%	5.78%							
(6)	Rate G-32/X-01	2.84%	1.60%							
(7)	Rate A-16/A-60			55.37%	56.33%					
(8)	Rate C-06			10.27%	10.81%					
(9)	Rate G-02			16.03%	14.87%					
(10)	Rate G-32			17.17%	15.11%					
(11)	Rate X-01			0.03%	0.22%					
(12)	Streetlighting			1.13%	2.66%					
(13)	<u>Allocated Revenue Requirement</u>					n/a	n/a	n/a	n/a	
(14)	Rate A-16/A-60	\$7,298,031	\$7,455,283							
(15)	Rate C-06	\$3,296,859	\$1,954,751							
(16)	Rate G-02	\$1,142,847	\$587,238							
(17)	Rate G-32/X-01	\$343,096	\$162,557							
(18)	Rate A-16/A-60			\$1,651,344	\$2,742,004					
(19)	Rate C-06			\$306,290	\$526,204					
(20)	Rate G-02			\$478,076	\$723,834					
(21)	Rate G-32			\$512,075	\$735,517					
(22)	Rate X-01			\$895	\$10,709					
(23)	Streetlighting			\$33,700	\$129,482					
(24)	<u>Forecasted Billing Units</u>									
(25)	Rate A-16/A-60	5,339,473	5,339,473							
(26)	Rate C-06	631,458	631,458							
(27)	Rate G-02	105,678	105,678							
(28)	Rate G-32/X-01	13,524	13,524							
(29)	Rate A-16/A-60			2,866,299,901	2,866,299,901					
(30)	Rate C-06			593,037,887	593,037,887					
(31)	Rate G-02			1,274,442,089	1,274,442,089					
(32)	Rate G-32			2,310,988,735	2,310,988,735					
(33)	Rate X-01			23,788,589	23,788,589					
(34)	Streetlighting			43,603,210	43,603,210					
(35)	Total			7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	7,112,160,411	
(36)	<u>Illustrative Factors</u>	Customer-Related GMEFs		Distribution/Shared GMEFs		ETFs	EHFs	ESSFs	SPFs	Total
		Capital	O&M	Capital	O&M					
(37)	Rate A-16/A-60	\$1.36	\$1.39							\$2.75
(38)	Rate C-06	\$5.22	\$3.09							\$8.31
(39)	Rate G-02	\$10.81	\$5.55							\$16.36
(40)	Rate G-32	\$25.36	\$12.01							\$37.37
(41)	Rate X-01	\$25.36	\$12.01							\$37.37
(42)	Rate A-16/A-60			\$0.00057	\$0.00095	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00212
(43)	Rate C-06			\$0.00051	\$0.00088	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00199
(44)	Rate G-02			\$0.00037	\$0.00056	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00153
(45)	Rate G-32			\$0.00022	\$0.00031	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00113
(46)	Rate X-01			\$0.00003	\$0.00045	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00108
(47)	Streetlighting			\$0.00077	\$0.00296	\$0.00036	\$0.00006	\$0.00005	\$0.00013	\$0.00433
(3)-(6)	Proposed PST Provision, Section 6.0									
(8)-(12)	Proposed PST Provision, Section 6.0									
(14)-(17)	Line (1) x Lines (3) - (6)									
(19)-(23)	Line (1) x Lines (8) - (12)									
(25)-(35)	Per Company forecast									
(37)-(41)	Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
(42)-(47)	Col (c) & (d): Applicable Lines (14) - (17) ÷ Applicable Lines (25) - (28), truncated to 2 decimal places									
	Col (e) - (h): Line (1) ÷ Line (35), truncated to 5 decimal places									

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$20.66	\$14.27	\$1.46	\$36.39	\$22.23	\$14.27	\$1.52	\$38.02	\$1.57	\$0.00	\$0.06	\$1.63	4.3%	0.0%	0.2%	4.5%	30.1%
300	\$34.72	\$28.55	\$2.64	\$65.91	\$36.58	\$28.55	\$2.71	\$67.84	\$1.86	\$0.00	\$0.07	\$1.93	2.8%	0.0%	0.1%	2.9%	12.9%
400	\$44.10	\$38.06	\$3.42	\$85.58	\$46.14	\$38.06	\$3.51	\$87.71	\$2.04	\$0.00	\$0.09	\$2.13	2.4%	0.0%	0.1%	2.5%	11.6%
500	\$53.48	\$47.58	\$4.21	\$105.27	\$55.71	\$47.58	\$4.30	\$107.59	\$2.23	\$0.00	\$0.09	\$2.32	2.1%	0.0%	0.1%	2.2%	9.6%
600	\$62.85	\$57.09	\$5.00	\$124.94	\$65.27	\$57.09	\$5.10	\$127.46	\$2.42	\$0.00	\$0.10	\$2.52	1.9%	0.0%	0.1%	2.0%	7.7%
700	\$72.23	\$66.61	\$5.79	\$144.63	\$74.84	\$66.61	\$5.89	\$147.34	\$2.61	\$0.00	\$0.10	\$2.71	1.8%	0.0%	0.1%	1.9%	19.0%
1,200	\$119.11	\$114.18	\$9.72	\$243.01	\$122.66	\$114.18	\$9.87	\$246.71	\$3.55	\$0.00	\$0.15	\$3.70	1.5%	0.0%	0.1%	1.5%	6.8%
2,000	\$194.13	\$190.30	\$16.02	\$400.45	\$199.18	\$190.30	\$16.23	\$405.71	\$5.05	\$0.00	\$0.21	\$5.26	1.3%	0.0%	0.1%	1.3%	2.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$5.00	(1)	\$6.29	(2)
RE Growth Factor		\$0.78		\$0.78	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Energy Charge	kWh x	\$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x	\$0.03664		\$0.03664	
Other Distribution Energy Charges	kWh x	\$0.00636	(3)	\$0.00824	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09515		\$0.09515	

(1) Present Rate

(2) Present Rate + \$1.29 for Year 1 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00135)

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00188

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 1

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1						Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	Discount	Total	GET	Total	\$				% of Total Bill				
											Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$13.64	\$14.27	\$1.16	\$29.07	\$15.21	\$14.27	\$0.00	\$29.48	\$1.23	\$30.71	\$1.57	\$0.00	\$0.07	\$1.64	5.4%	-	0.2%	5.6%	32.1%
300	\$25.68	\$28.55	\$2.26	\$56.49	\$27.53	\$28.55	\$0.00	\$56.08	\$2.34	\$58.42	\$1.85	\$0.00	\$0.08	\$1.93	3.3%	-	0.1%	3.4%	15.4%
400	\$33.71	\$38.06	\$2.99	\$74.76	\$35.75	\$38.06	\$0.00	\$73.81	\$3.08	\$76.89	\$2.04	\$0.00	\$0.09	\$2.13	2.7%	-	0.1%	2.8%	12.5%
500	\$41.74	\$47.58	\$3.72	\$93.04	\$43.97	\$47.58	\$0.00	\$91.55	\$3.81	\$95.36	\$2.23	\$0.00	\$0.09	\$2.32	2.4%	-	0.1%	2.5%	9.6%
600	\$49.77	\$57.09	\$4.45	\$111.31	\$52.19	\$57.09	\$0.00	\$109.28	\$4.55	\$113.83	\$2.42	\$0.00	\$0.10	\$2.52	2.2%	-	0.1%	2.3%	7.2%
700	\$57.80	\$66.61	\$5.18	\$129.59	\$60.41	\$66.61	\$0.00	\$127.02	\$5.29	\$132.31	\$2.61	\$0.00	\$0.11	\$2.72	2.0%	-	0.1%	2.1%	16.4%
1,200	\$97.95	\$114.18	\$8.84	\$220.97	\$101.50	\$114.18	\$0.00	\$215.68	\$8.99	\$224.67	\$3.55	\$0.00	\$0.15	\$3.70	1.6%	-	0.1%	1.7%	5.2%
2,000	\$162.19	\$190.30	\$14.69	\$367.18	\$167.24	\$190.30	\$0.00	\$357.54	\$14.90	\$372.44	\$5.05	\$0.00	\$0.21	\$5.26	1.4%	-	0.1%	1.4%	1.6%

	<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
	<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge	\$0.00	(1)	\$1.29	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x \$0.02317		\$0.02317	
Other Distribution Energy Charges	kWh x \$0.00636	(3)	\$0.00824	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Low Income Discount			0%	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09515		\$0.09515	

- (1) Present Rate
(2) Present Rate + \$1.29 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00135)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00188

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)								Percentage of Customers
									\$				% of Total Bill				
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$33.64	\$23.38	\$2.38	\$59.40	\$36.96	\$23.38	\$2.51	\$62.85	\$3.32	\$0.00	\$0.13	\$3.45	5.6%	0.0%	0.2%	5.8%	56.3%
500	\$55.21	\$46.75	\$4.25	\$106.21	\$58.98	\$46.75	\$4.41	\$110.14	\$3.77	\$0.00	\$0.16	\$3.93	3.5%	0.0%	0.2%	3.7%	16.9%
1,000	\$98.35	\$93.50	\$7.99	\$199.84	\$103.00	\$93.50	\$8.19	\$204.69	\$4.65	\$0.00	\$0.20	\$4.85	2.3%	0.0%	0.1%	2.4%	8.1%
1,500	\$141.49	\$140.25	\$11.74	\$293.48	\$147.03	\$140.25	\$11.97	\$299.25	\$5.54	\$0.00	\$0.23	\$5.77	1.9%	0.0%	0.1%	2.0%	5.0%
2,000	\$184.63	\$187.00	\$15.48	\$387.11	\$191.05	\$187.00	\$15.75	\$393.80	\$6.42	\$0.00	\$0.27	\$6.69	1.7%	0.0%	0.1%	1.7%	13.6%

	Present Rates Effective		Present Rates with PST	
	November 1, 2017		Year 1	
Customer Charge	\$10.00	(1)	\$12.88	(2)
RE Growth Factor	\$1.26		\$1.26	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.02838		\$0.02838	
Base Distribution Charge	kWh x \$0.03253		\$0.03253	
Other Distribution Energy Charges	kWh x \$0.00639	(3)	\$0.00816	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.88 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00119)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 1 Factor of \$0.00177

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$442.50	\$374.00	\$34.02	\$850.52	\$452.53	\$374.00	\$34.44	\$860.97	\$10.03	\$0.00	\$0.42	\$10.45	1.2%	0.0%	0.0%	1.2%
50 10,000	\$967.56	\$935.00	\$79.27	\$1,981.83	\$984.85	\$935.00	\$79.99	\$1,999.84	\$17.29	\$0.00	\$0.72	\$18.01	0.9%	0.0%	0.0%	0.9%
100 20,000	\$1,842.66	\$1,870.00	\$154.69	\$3,867.35	\$1,872.05	\$1,870.00	\$155.92	\$3,897.97	\$29.39	\$0.00	\$1.23	\$30.62	0.8%	0.0%	0.0%	0.8%
150 30,000	\$2,717.76	\$2,805.00	\$230.12	\$5,752.88	\$2,759.25	\$2,805.00	\$231.84	\$5,796.09	\$41.49	\$0.00	\$1.72	\$43.21	0.7%	0.0%	0.0%	0.8%

		<u>Present Rates Effective</u> <u>November 1, 2017</u>	<u>Present Rates with PST</u> <u>Year 1</u>
Customer Charge		\$135.00 (1)	\$140.19 (2)
RE Growth Factor		\$11.85	\$11.85
LIHEAP Charge		\$0.81	\$0.81
Transmission Demand Charge	kW x	\$4.37	\$4.37
Transmission Energy Charge	kWh x	\$0.01096	\$0.01096
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85	\$4.85
CapEx Factor	kW x	\$0.67	\$0.67
Base Distribution Energy Charge	kWh x	\$0.00468	\$0.00468
Other Distribution Energy Charges	kWh x	\$0.00344 (3)	\$0.00465 (4)
Transition Energy Charge	kWh x	\$0.00057	\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154	\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687	\$0.00687
Gross Earnings Tax		4%	4%
Standard Offer Charge	kWh x	\$0.09350	\$0.09350

(1) Present Rate

(2) Present Rate + \$5.19 for Year 1 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00121

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	6,000	\$518.62	\$561.00	\$44.98	\$1,124.60	\$531.07	\$561.00	\$45.50	\$1,137.57	\$12.45	\$0.00	\$0.52	\$12.97	1.1%	0.0%	0.0%	1.2%
50	15,000	\$1,157.86	\$1,402.50	\$106.68	\$2,667.04	\$1,181.20	\$1,402.50	\$107.65	\$2,691.35	\$23.34	\$0.00	\$0.97	\$24.31	0.9%	0.0%	0.0%	0.9%
100	30,000	\$2,223.26	\$2,805.00	\$209.51	\$5,237.77	\$2,264.75	\$2,805.00	\$211.24	\$5,280.99	\$41.49	\$0.00	\$1.73	\$43.22	0.8%	0.0%	0.0%	0.8%
150	45,000	\$3,288.66	\$4,207.50	\$312.34	\$7,808.50	\$3,348.30	\$4,207.50	\$314.83	\$7,870.63	\$59.64	\$0.00	\$2.49	\$62.13	0.8%	0.0%	0.0%	0.8%

		<u>Present Rates Effective</u>		<u>Present Rates with PST Year</u>	
		<u>November 1, 2017</u>		<u>1</u>	
Customer Charge		\$135.00	(1)	\$140.19	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00465	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate

(2) Present Rate + \$5.19 for Year 1 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00121

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 8,000	\$594.74	\$748.00	\$55.95	\$1,398.69	\$609.61	\$748.00	\$56.57	\$1,414.18	\$14.87	\$0.00	\$0.62	\$15.49	1.1%	0.0%	0.0%	1.1%
50 20,000	\$1,348.16	\$1,870.00	\$134.09	\$3,352.25	\$1,377.55	\$1,870.00	\$135.31	\$3,382.86	\$29.39	\$0.00	\$1.22	\$30.61	0.9%	0.0%	0.0%	0.9%
100 40,000	\$2,603.86	\$3,740.00	\$264.33	\$6,608.19	\$2,657.45	\$3,740.00	\$266.56	\$6,664.01	\$53.59	\$0.00	\$2.23	\$55.82	0.8%	0.0%	0.0%	0.8%
150 60,000	\$3,859.56	\$5,610.00	\$394.57	\$9,864.13	\$3,937.35	\$5,610.00	\$397.81	\$9,945.16	\$77.79	\$0.00	\$3.24	\$81.03	0.8%	0.0%	0.0%	0.8%

	<u>Present Rates Effective</u> <u>November 1, 2017</u>		<u>Present Rates with PST</u> <u>Year 1</u>	
Customer Charge	\$135.00	(1)	\$140.19	(2)
RE Growth Factor	\$11.85		\$11.85	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.37		\$4.37	
Transmission Energy Charge	kWh x \$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x \$4.85		\$4.85	
CapEx Factor	kW x \$0.67		\$0.67	
Base Distribution Energy Charge	kWh x \$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x \$0.00344	(3)	\$0.00465	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$5.19 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00121

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 10,000	\$670.86	\$935.00	\$66.91	\$1,672.77	\$688.15	\$935.00	\$67.63	\$1,690.78	\$17.29	\$0.00	\$0.72	\$18.01	1.0%	0.0%	0.0%	1.1%
50 25,000	\$1,538.46	\$2,337.50	\$161.50	\$4,037.46	\$1,573.90	\$2,337.50	\$162.98	\$4,074.38	\$35.44	\$0.00	\$1.48	\$36.92	0.9%	0.0%	0.0%	0.9%
100 50,000	\$2,984.46	\$4,675.00	\$319.14	\$7,978.60	\$3,050.15	\$4,675.00	\$321.88	\$8,047.03	\$65.69	\$0.00	\$2.74	\$68.43	0.8%	0.0%	0.0%	0.9%
150 75,000	\$4,430.46	\$7,012.50	\$476.79	\$11,919.75	\$4,526.40	\$7,012.50	\$480.79	\$12,019.69	\$95.94	\$0.00	\$4.00	\$99.94	0.8%	0.0%	0.0%	0.8%

		<u>Present Rates Effective</u> <u>November 1, 2017</u>		<u>Present Rates with PST</u> <u>Year 1</u>	
Customer Charge		\$135.00	(1)	\$140.19	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00465	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$5.19 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00121

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 12,000	\$746.98	\$1,122.00	\$77.87	\$1,946.85	\$766.69	\$1,122.00	\$78.70	\$1,967.39	\$19.71	\$0.00	\$0.83	\$20.54	1.0%	0.0%	0.0%	1.1%
50 30,000	\$1,728.76	\$2,805.00	\$188.91	\$4,722.67	\$1,770.25	\$2,805.00	\$190.64	\$4,765.89	\$41.49	\$0.00	\$1.73	\$43.22	0.9%	0.0%	0.0%	0.9%
100 60,000	\$3,365.06	\$5,610.00	\$373.96	\$9,349.02	\$3,442.85	\$5,610.00	\$377.20	\$9,430.05	\$77.79	\$0.00	\$3.24	\$81.03	0.8%	0.0%	0.0%	0.9%
150 90,000	\$5,001.36	\$8,415.00	\$559.02	\$13,975.38	\$5,115.45	\$8,415.00	\$563.77	\$14,094.22	\$114.09	\$0.00	\$4.75	\$118.84	0.8%	0.0%	0.0%	0.9%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$135.00	(1)	\$140.19	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00465	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$5.19 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00121

The Narragansett Electric Company
Calculation of Monthly Typical Bill

Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
									\$				% of Total Bill			
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 40,000	\$3,419.07	\$2,576.00	\$249.79	\$6,244.86	\$3,461.09	\$2,576.00	\$251.55	\$6,288.64	\$42.02	\$0.00	\$1.76	\$43.78	0.7%	0.0%	0.0%	0.7%
750 150,000	\$12,737.17	\$9,660.00	\$933.22	\$23,330.39	\$12,863.89	\$9,660.00	\$938.50	\$23,462.39	\$126.72	\$0.00	\$5.28	\$132.00	0.5%	0.0%	0.0%	0.6%
1,000 200,000	\$16,972.67	\$12,880.00	\$1,243.86	\$31,096.53	\$17,137.89	\$12,880.00	\$1,250.75	\$31,268.64	\$165.22	\$0.00	\$6.89	\$172.11	0.5%	0.0%	0.0%	0.6%
1,500 300,000	\$25,443.67	\$19,320.00	\$1,865.15	\$46,628.82	\$25,685.89	\$19,320.00	\$1,875.25	\$46,881.14	\$242.22	\$0.00	\$10.10	\$252.32	0.5%	0.0%	0.0%	0.5%
2,500 500,000	\$42,385.67	\$32,200.00	\$3,107.74	\$77,693.41	\$42,781.89	\$32,200.00	\$3,124.25	\$78,106.14	\$396.22	\$0.00	\$16.51	\$412.73	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$825.00	(1)	\$836.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00349	(3)	\$0.00426	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate
- (2) Present Rate + \$11.22 for Year 1 of PST
- (3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
- (4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Proposed Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	60,000	\$4,203.27	\$3,864.00	\$336.14	\$8,403.41	\$4,260.69	\$3,864.00	\$338.53	\$8,463.22	\$57.42	\$0.00	\$2.39	\$59.81	0.7%	0.0%	0.0%	0.7%
750	225,000	\$15,677.92	\$14,490.00	\$1,257.00	\$31,424.92	\$15,862.39	\$14,490.00	\$1,264.68	\$31,617.07	\$184.47	\$0.00	\$7.68	\$192.15	0.6%	0.0%	0.0%	0.6%
1,000	300,000	\$20,893.67	\$19,320.00	\$1,675.57	\$41,889.24	\$21,135.89	\$19,320.00	\$1,685.66	\$42,141.55	\$242.22	\$0.00	\$10.09	\$252.31	0.6%	0.0%	0.0%	0.6%
1,500	450,000	\$31,325.17	\$28,980.00	\$2,512.72	\$62,817.89	\$31,682.89	\$28,980.00	\$2,527.62	\$63,190.51	\$357.72	\$0.00	\$14.90	\$372.62	0.6%	0.0%	0.0%	0.6%
2,500	750,000	\$52,188.17	\$48,300.00	\$4,187.01	\$104,675.18	\$52,776.89	\$48,300.00	\$4,211.54	\$105,288.43	\$588.72	\$0.00	\$24.53	\$613.25	0.6%	0.0%	0.0%	0.6%

	Present Rates Effective November 1, 2017		Present Rates with PST Year 1	
Customer Charge	\$825.00	(1)	\$836.22	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		\$4.69	
Transmission Energy Charge	kWh x \$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		\$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	\$0.00426	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$11.22 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Proposed Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 80,000	\$4,987.47	\$5,152.00	\$422.48	\$10,561.95		\$5,060.29	\$5,152.00	\$425.51	\$10,637.80	\$72.82	\$0.00	\$3.03	\$75.85	0.7%	0.0%	0.0%	0.7%
750 300,000	\$18,618.67	\$19,320.00	\$1,580.78	\$39,519.45		\$18,860.89	\$19,320.00	\$1,590.87	\$39,771.76	\$242.22	\$0.00	\$10.09	\$252.31	0.6%	0.0%	0.0%	0.6%
1,000 400,000	\$24,814.67	\$25,760.00	\$2,107.28	\$52,681.95		\$25,133.89	\$25,760.00	\$2,120.58	\$53,014.47	\$319.22	\$0.00	\$13.30	\$332.52	0.6%	0.0%	0.0%	0.6%
1,500 600,000	\$37,206.67	\$38,640.00	\$3,160.28	\$79,006.95		\$37,679.89	\$38,640.00	\$3,180.00	\$79,499.89	\$473.22	\$0.00	\$19.72	\$492.94	0.6%	0.0%	0.0%	0.6%
2,500 1,000,000	\$61,990.67	\$64,400.00	\$5,266.28	\$131,656.95		\$62,771.89	\$64,400.00	\$5,298.83	\$132,470.72	\$781.22	\$0.00	\$32.55	\$813.77	0.6%	0.0%	0.0%	0.6%

	<u>Present Rates Effective November 1, 2017</u>		<u>Present Rates with PST Year 1</u>	
Customer Charge	\$825.00	(1)	\$836.22	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		\$4.69	
Transmission Energy Charge	kWh x \$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		\$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	\$0.00426	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$11.22 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Proposed Rates with PST Year 1				Increase (Decrease)							
									\$				% of Total Bill			
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 100,000	\$5,771.67	\$6,440.00	\$508.82	\$12,720.49	\$5,859.89	\$6,440.00	\$512.50	\$12,812.39	\$88.22	\$0.00	\$3.68	\$91.90	0.7%	0.0%	0.0%	0.7%
750 375,000	\$21,559.42	\$24,150.00	\$1,904.56	\$47,613.98	\$21,859.39	\$24,150.00	\$1,917.06	\$47,926.45	\$299.97	\$0.00	\$12.50	\$312.47	0.6%	0.0%	0.0%	0.7%
1,000 500,000	\$28,735.67	\$32,200.00	\$2,538.99	\$63,474.66	\$29,131.89	\$32,200.00	\$2,555.50	\$63,887.39	\$396.22	\$0.00	\$16.51	\$412.73	0.6%	0.0%	0.0%	0.7%
1,500 750,000	\$43,088.17	\$48,300.00	\$3,807.84	\$95,196.01	\$43,676.89	\$48,300.00	\$3,832.37	\$95,809.26	\$588.72	\$0.00	\$24.53	\$613.25	0.6%	0.0%	0.0%	0.6%
2,500 1,250,000	\$71,793.17	\$80,500.00	\$6,345.55	\$158,638.72	\$72,766.89	\$80,500.00	\$6,386.12	\$159,653.01	\$973.72	\$0.00	\$40.57	\$1,014.29	0.6%	0.0%	0.0%	0.6%

	Present Rates Effective November 1, 2017		Present Rates with PST Year 1	
Customer Charge	\$825.00	(1)	\$836.22	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		\$4.69	
Transmission Energy Charge	kWh x \$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		\$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	\$0.00426	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$11.22 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Proposed Rates with PST Year 1					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 120,000	\$6,555.87	\$7,728.00	\$595.16	\$14,879.03		\$6,659.49	\$7,728.00	\$599.48	\$14,986.97		\$103.62	\$0.00	\$4.32	\$107.94	0.7%	0.0%	0.0%	0.7%
750 450,000	\$24,500.17	\$28,980.00	\$2,228.34	\$55,708.51		\$24,857.89	\$28,980.00	\$2,243.25	\$56,081.14		\$357.72	\$0.00	\$14.91	\$372.63	0.6%	0.0%	0.0%	0.7%
1,000 600,000	\$32,656.67	\$38,640.00	\$2,970.69	\$74,267.36		\$33,129.89	\$38,640.00	\$2,990.41	\$74,760.30		\$473.22	\$0.00	\$19.72	\$492.94	0.6%	0.0%	0.0%	0.7%
1,500 900,000	\$48,969.67	\$57,960.00	\$4,455.40	\$111,385.07		\$49,673.89	\$57,960.00	\$4,484.75	\$112,118.64		\$704.22	\$0.00	\$29.35	\$733.57	0.6%	0.0%	0.0%	0.7%
2,500 1,500,000	\$81,595.67	\$96,600.00	\$7,424.82	\$185,620.49		\$82,761.89	\$96,600.00	\$7,473.41	\$186,835.30		\$1,166.22	\$0.00	\$48.59	\$1,214.81	0.6%	0.0%	0.0%	0.7%

	Present Rates Effective November 1, 2017		Present Rates with PST Year 1	
Customer Charge	\$825.00	(1)	\$836.22	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		\$4.69	
Transmission Energy Charge	kWh x \$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		\$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	\$0.00426	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$11.22 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

The Narragansett Electric Company
Streetlights Annual Bill Impacts
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

						Per kWh					
						\$0.16361					
							Per kWh				
							\$0.16844				
Line	Luminaire/ Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Current Annual Revenue	Current Lum / Std Price	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$154.59	\$77.43	\$156.73	\$2.14	1.4%	
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$222.81	\$77.43	\$226.97	\$4.15	1.9%	
3	Mercury Vapor										
4		LUM MV RWY 100W	543	\$78.06	\$4.68	\$171.58	\$78.06	\$174.20	\$2.62	1.5%	
5		LUM MV RWY 175W	881	\$78.06	\$4.68	\$226.88	\$78.06	\$231.14	\$4.26	1.9%	
6		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$334.82	\$120.39	\$341.01	\$6.19	1.8%	
7		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$493.89	\$163.46	\$503.50	\$9.62	1.9%	
8		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$916.16	\$163.46	\$938.25	\$22.08	2.4%	
9		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$511.80	\$181.37	\$521.41	\$9.62	1.9%	
10		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$934.07	\$181.37	\$956.16	\$22.08	2.4%	
11		LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$305.62	\$156.80	\$309.88	\$4.26	1.4%	
12	High Pressure Sodium Vapor Fixtures										
13		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$123.83	\$77.43	\$125.06	\$1.23	1.0%	
14		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$140.33	\$76.91	\$142.06	\$1.73	1.2%	
15		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$163.40	\$78.06	\$165.78	\$2.38	1.5%	
16		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$201.39	\$78.58	\$204.87	\$3.49	1.7%	
17		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$332.69	\$120.39	\$338.82	\$6.13	1.8%	
18		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$489.14	\$163.46	\$498.62	\$9.48	1.9%	
19		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$612.58	\$172.21	\$625.45	\$12.86	2.1%	
20		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$358.41	\$146.11	\$364.54	\$6.13	1.7%	
21		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$621.74	\$181.37	\$634.61	\$12.86	2.1%	
22		LUM HPS POST 50W	255	\$155.49	\$4.68	\$201.89	\$155.49	\$203.12	\$1.23	0.6%	
23		LUM HPS POST 100W	493	\$156.80	\$4.68	\$242.14	\$156.80	\$244.52	\$2.38	1.0%	
24		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$184.33	\$98.99	\$186.71	\$2.38	1.3%	
25											
26	Metal Halide	LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$494.13	\$181.37	\$503.22	\$9.09	1.8%	
27		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$922.62	\$181.37	\$944.37	\$21.74	2.4%	
28											
29	Light Emitting Diode	LED RWY 20W	88	\$90.61	\$4.68	\$109.69	\$90.61	\$110.11	\$0.43	0.4%	
30		LED RWY 30W	130	\$89.77	\$4.68	\$115.72	\$89.77	\$116.35	\$0.63	0.5%	
31		LED RWY 60W	255	\$99.15	\$4.68	\$145.55	\$99.15	\$146.78	\$1.23	0.8%	
32		LED RWY 140W	589	\$155.03	\$4.68	\$256.08	\$155.03	\$258.92	\$2.84	1.1%	
33		LED RWY 275W	1,153	\$198.27	\$4.68	\$391.59	\$198.27	\$397.16	\$5.57	1.4%	
34		LED POST Top 60W	255	\$147.69	\$4.68	\$194.09	\$147.69	\$195.32	\$1.23	0.6%	
35											
36	Temporary Turn-Off	LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-	
37		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-	
38		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-	
39		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-	
40		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-	
41		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-	
42		LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-	
43		LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-	
44		LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-	
45		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-	
46		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-	
47											
48	Standards	POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-	
49		POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-	
50		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-	
51		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-	
52		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-	
53		POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-	
54											
55	S-06 (Decorative) Lumaire	DEC HPS WL 100W	493	\$325.30	\$4.68	\$410.64	\$325.30	\$413.02	\$2.38	0.7%	
56											
57	S-06 Standards	DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-	
58		DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-	
59											
60											
61	S-5 Energy Rate	Includes all rate components				\$0.19015		\$0.19498	\$0.00483	2.5%	

Column Description:

- (a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3
(d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12
(e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017)
Column (b) x per kWh rate + Column (c) + Column (d)
(f) Column (c)
(h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 1 PST factor of \$0.00483
(i) Column (h) / Column (c)

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$22.23	\$14.27	\$1.52	\$38.02	\$22.82	\$14.27	\$1.55	\$38.64	\$0.59	\$0.00	\$0.03	\$0.62	1.6%	0.0%	0.1%	1.6%	30.1%
300	\$36.58	\$28.55	\$2.71	\$67.84	\$37.34	\$28.55	\$2.75	\$68.64	\$0.76	\$0.00	\$0.04	\$0.80	1.1%	0.0%	0.1%	1.2%	12.9%
400	\$46.14	\$38.06	\$3.51	\$87.71	\$47.02	\$38.06	\$3.55	\$88.63	\$0.88	\$0.00	\$0.04	\$0.92	1.0%	0.0%	0.0%	1.0%	11.6%
500	\$55.71	\$47.58	\$4.30	\$107.59	\$56.70	\$47.58	\$4.35	\$108.63	\$0.99	\$0.00	\$0.05	\$1.04	0.9%	0.0%	0.0%	1.0%	9.6%
600	\$65.27	\$57.09	\$5.10	\$127.46	\$66.38	\$57.09	\$5.14	\$128.61	\$1.11	\$0.00	\$0.04	\$1.15	0.9%	0.0%	0.0%	0.9%	7.7%
700	\$74.84	\$66.61	\$5.89	\$147.34	\$76.06	\$66.61	\$5.94	\$148.61	\$1.22	\$0.00	\$0.05	\$1.27	0.8%	0.0%	0.0%	0.9%	19.0%
1,200	\$122.66	\$114.18	\$9.87	\$246.71	\$124.46	\$114.18	\$9.94	\$248.58	\$1.80	\$0.00	\$0.07	\$1.87	0.7%	0.0%	0.0%	0.8%	6.8%
2,000	\$199.18	\$190.30	\$16.23	\$405.71	\$201.90	\$190.30	\$16.34	\$408.54	\$2.72	\$0.00	\$0.11	\$2.83	0.7%	0.0%	0.0%	0.7%	2.3%

	<u>Present Rates Effective Nov. 1, 2017 with Proposed PST</u>		<u>Present Rates with Proposed PST Year 2</u>	
	<u>Year 1</u>			
Customer Charge	\$6.29	(1)	\$6.71	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x \$0.03664		\$0.03664	
Other Distribution Energy Charges	kWh x \$0.00824	(3)	\$0.00939	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09515		\$0.09515	

(1) Present Rate + \$1.29 for Year 1 of PST

(2) Present Rate + \$1.71 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00188

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00303

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 2

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1						Year 2 Proposed Rates with PST Year 2						Increase (Decrease)								Percentage of Customers
	Discounted DeliverySOSDiscountTotalGETTotal						Discounted DeliverySOSDiscountTotalGETTotal						\$				% of Total Bill				
													Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$15.21	\$14.27	\$0.00	\$29.48	\$1.23	\$30.71	\$15.80	\$14.27	\$0.00	\$30.07	\$1.25	\$31.32	\$0.59	\$0.00	\$0.02	\$0.61	1.9%	0.0%	0.1%	2.0%	32.1%
300	\$27.53	\$28.55	\$0.00	\$56.08	\$2.34	\$58.42	\$28.30	\$28.55	\$0.00	\$56.85	\$2.37	\$59.22	\$0.77	\$0.00	\$0.03	\$0.80	1.3%	0.0%	0.1%	1.4%	15.4%
400	\$35.75	\$38.06	\$0.00	\$73.81	\$3.08	\$76.89	\$36.63	\$38.06	\$0.00	\$74.69	\$3.11	\$77.80	\$0.88	\$0.00	\$0.03	\$0.91	1.1%	0.0%	0.0%	1.2%	12.5%
500	\$43.97	\$47.58	\$0.00	\$91.55	\$3.81	\$95.36	\$44.97	\$47.58	\$0.00	\$92.55	\$3.86	\$96.41	\$1.00	\$0.00	\$0.05	\$1.05	1.0%	0.0%	0.1%	1.1%	9.6%
600	\$52.19	\$57.09	\$0.00	\$109.28	\$4.55	\$113.83	\$53.30	\$57.09	\$0.00	\$110.39	\$4.60	\$114.99	\$1.11	\$0.00	\$0.05	\$1.16	1.0%	0.0%	0.0%	1.0%	7.2%
700	\$60.41	\$66.61	\$0.00	\$127.02	\$5.29	\$132.31	\$61.63	\$66.61	\$0.00	\$128.24	\$5.34	\$133.58	\$1.22	\$0.00	\$0.05	\$1.27	0.9%	0.0%	0.0%	1.0%	16.4%
1,200	\$101.50	\$114.18	\$0.00	\$215.68	\$8.99	\$224.67	\$103.30	\$114.18	\$0.00	\$217.48	\$9.06	\$226.54	\$1.80	\$0.00	\$0.07	\$1.87	0.8%	0.0%	0.0%	0.8%	5.2%
2,000	\$167.24	\$190.30	\$0.00	\$357.54	\$14.90	\$372.44	\$169.96	\$190.30	\$0.00	\$360.26	\$15.01	\$375.27	\$2.72	\$0.00	\$0.11	\$2.83	0.7%	0.0%	0.0%	0.8%	1.6%

	<u>Present Rates Effective</u> <u>Nov. 1, 2017 with</u> <u>Proposed PST Year 1</u>		<u>Present Rates with</u> <u>Proposed PST Year 2</u>	
Customer Charge	\$1.29	(1)	\$1.71	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x \$0.02317		\$0.02317	
Other Distribution Energy Charges	kWh x \$0.00824	(3)	\$0.00939	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Low Income Discount	0%		0%	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09515		\$0.09515	

- (1) Present Rate + \$1.29 for Year 1 of PST
(2) Present Rate + \$1.71 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00188
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00303

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$36.96	\$23.38	\$2.51	\$62.85	\$38.85	\$23.38	\$2.59	\$64.82	\$1.89	\$0.00	\$0.08	\$1.97	3.0%	0.0%	0.1%	3.1%	56.3%
500	\$58.98	\$46.75	\$4.41	\$110.14	\$61.13	\$46.75	\$4.50	\$112.38	\$2.15	\$0.00	\$0.09	\$2.24	2.0%	0.0%	0.1%	2.0%	16.9%
1,000	\$103.00	\$93.50	\$8.19	\$204.69	\$105.68	\$93.50	\$8.30	\$207.48	\$2.68	\$0.00	\$0.11	\$2.79	1.3%	0.0%	0.1%	1.4%	8.1%
1,500	\$147.03	\$140.25	\$11.97	\$299.25	\$150.24	\$140.25	\$12.10	\$302.59	\$3.21	\$0.00	\$0.13	\$3.34	1.1%	0.0%	0.0%	1.1%	5.0%
2,000	\$191.05	\$187.00	\$15.75	\$393.80	\$194.79	\$187.00	\$15.91	\$397.70	\$3.74	\$0.00	\$0.16	\$3.90	0.9%	0.0%	0.0%	1.0%	13.6%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>	<u>Present Rates with Proposed PST Year 2</u>
Customer Charge		\$12.88 (1)	\$14.50 (2)
RE Growth Factor		\$1.26	\$1.26
LIHEAP Charge		\$0.81	\$0.81
Transmission Energy Charge	kWh x	\$0.02838	\$0.02838
Base Distribution Charge	kWh x	\$0.03253	\$0.03253
Other Distribution Energy Charges	kWh x	\$0.00816 (3)	\$0.00922 (4)
Transition Energy Charge	kWh x	\$0.00057	\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154	\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687	\$0.00687
Gross Earnings Tax		4%	4%
Standard Offer Charge	kWh x	\$0.09350	\$0.09350

(1) Present Rate + \$2.88 for Year 1 of PST

(2) Present Rate + \$4.50 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 1 Factor of \$0.00177

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 2 Factor of \$0.00283

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1					Present Rates with Proposed PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$452.53	\$374.00	\$34.44	\$860.97		\$458.97	\$374.00	\$34.71	\$867.68	\$6.44	\$0.00	\$0.27	\$6.71	0.7%	0.0%	0.0%	0.8%
50 10,000	\$984.85	\$935.00	\$79.99	\$1,999.84		\$995.91	\$935.00	\$80.45	\$2,011.36	\$11.06	\$0.00	\$0.46	\$11.52	0.6%	0.0%	0.0%	0.6%
100 20,000	\$1,872.05	\$1,870.00	\$155.92	\$3,897.97		\$1,890.81	\$1,870.00	\$156.70	\$3,917.51	\$18.76	\$0.00	\$0.78	\$19.54	0.5%	0.0%	0.0%	0.5%
150 30,000	\$2,759.25	\$2,805.00	\$231.84	\$5,796.09		\$2,785.71	\$2,805.00	\$232.95	\$5,823.66	\$26.46	\$0.00	\$1.11	\$27.57	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$140.19	(1)	\$143.55	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00465	(3)	\$0.00542	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$5.19 for Year 1 of PST

(2) Present Rate + \$8.55 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 1 Factor of \$0.00121

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
									\$				% of Total Bill			
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 6,000	\$531.07	\$561.00	\$45.50	\$1,137.57	\$539.05	\$561.00	\$45.84	\$1,145.89	\$7.98	\$0.00	\$0.34	\$8.32	0.7%	0.0%	0.0%	0.7%
50 15,000	\$1,181.20	\$1,402.50	\$107.65	\$2,691.35	\$1,196.11	\$1,402.50	\$108.28	\$2,706.89	\$14.91	\$0.00	\$0.63	\$15.54	0.6%	0.0%	0.0%	0.6%
100 30,000	\$2,264.75	\$2,805.00	\$211.24	\$5,280.99	\$2,291.21	\$2,805.00	\$212.34	\$5,308.55	\$26.46	\$0.00	\$1.10	\$27.56	0.5%	0.0%	0.0%	0.5%
150 45,000	\$3,348.30	\$4,207.50	\$314.83	\$7,870.63	\$3,386.31	\$4,207.50	\$316.41	\$7,910.22	\$38.01	\$0.00	\$1.58	\$39.59	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$140.19	(1)	\$143.55	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00465	(3)	\$0.00542	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$.19 for Year 1 of PST

(2) Present Rate + \$.55 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 1 Factor of \$0.00121

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	8,000	\$609.61	\$748.00	\$56.57	\$1,414.18	\$619.13	\$748.00	\$56.96	\$1,424.09	\$9.52	\$0.00	\$0.39	\$9.91	0.7%	0.0%	0.0%	0.7%
50	20,000	\$1,377.55	\$1,870.00	\$135.31	\$3,382.86	\$1,396.31	\$1,870.00	\$136.10	\$3,402.41	\$18.76	\$0.00	\$0.79	\$19.55	0.6%	0.0%	0.0%	0.6%
100	40,000	\$2,657.45	\$3,740.00	\$266.56	\$6,664.01	\$2,691.61	\$3,740.00	\$267.98	\$6,699.59	\$34.16	\$0.00	\$1.42	\$35.58	0.5%	0.0%	0.0%	0.5%
150	60,000	\$3,937.35	\$5,610.00	\$397.81	\$9,945.16	\$3,986.91	\$5,610.00	\$399.87	\$9,996.78	\$49.56	\$0.00	\$2.06	\$51.62	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$140.19	(1)	\$143.55	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00465	(3)	\$0.00542	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$5.19 for Year 1 of PST

(2) Present Rate + \$8.55 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 1 Factor of \$0.00121

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	10,000	\$688.15	\$935.00	\$67.63	\$1,690.78	\$699.21	\$935.00	\$68.09	\$1,702.30	\$11.06	\$0.00	\$0.46	\$11.52	0.7%	0.0%	0.0%	0.7%
50	25,000	\$1,573.90	\$2,337.50	\$162.98	\$4,074.38	\$1,596.51	\$2,337.50	\$163.92	\$4,097.93	\$22.61	\$0.00	\$0.94	\$23.55	0.6%	0.0%	0.0%	0.6%
100	50,000	\$3,050.15	\$4,675.00	\$321.88	\$8,047.03	\$3,092.01	\$4,675.00	\$323.63	\$8,090.64	\$41.86	\$0.00	\$1.75	\$43.61	0.5%	0.0%	0.0%	0.5%
150	75,000	\$4,526.40	\$7,012.50	\$480.79	\$12,019.69	\$4,587.51	\$7,012.50	\$483.33	\$12,083.34	\$61.11	\$0.00	\$2.54	\$63.65	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$140.19	(1)	\$143.55	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00465	(3)	\$0.00542	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$5.19 for Year 1 of PST

(2) Present Rate + \$8.55 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 1 Factor of \$0.00121

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	12,000	\$766.69	\$1,122.00	\$78.70	\$1,967.39	\$779.29	\$1,122.00	\$79.22	\$1,980.51	\$12.60	\$0.00	\$0.52	\$13.12	0.6%	0.0%	0.0%	0.7%
50	30,000	\$1,770.25	\$2,805.00	\$190.64	\$4,765.89	\$1,796.71	\$2,805.00	\$191.74	\$4,793.45	\$26.46	\$0.00	\$1.10	\$27.56	0.6%	0.0%	0.0%	0.6%
100	60,000	\$3,442.85	\$5,610.00	\$377.20	\$9,430.05	\$3,492.41	\$5,610.00	\$379.27	\$9,481.68	\$49.56	\$0.00	\$2.07	\$51.63	0.5%	0.0%	0.0%	0.5%
150	90,000	\$5,115.45	\$8,415.00	\$563.77	\$14,094.22	\$5,188.11	\$8,415.00	\$566.80	\$14,169.91	\$72.66	\$0.00	\$3.03	\$75.69	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$140.19	(1)	\$143.55	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00465	(3)	\$0.00542	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$5.19 for Year 1 of PST

(2) Present Rate + \$8.55 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 1 Factor of \$0.00121

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1					Present Rates with Proposed PST Year 2					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 40,000	\$3,461.09	\$2,576.00	\$251.55	\$6,288.64		\$3,488.57	\$2,576.00	\$252.69	\$6,317.26		\$27.48	\$0.00	\$1.14	\$28.62	0.4%	0.0%	0.0%	0.5%
750 150,000	\$12,863.89	\$9,660.00	\$938.50	\$23,462.39		\$12,945.27	\$9,660.00	\$941.89	\$23,547.16		\$81.38	\$0.00	\$3.39	\$84.77	0.3%	0.0%	0.0%	0.4%
1,000 200,000	\$17,137.89	\$12,880.00	\$1,250.75	\$31,268.64		\$17,243.77	\$12,880.00	\$1,255.16	\$31,378.93		\$105.88	\$0.00	\$4.41	\$110.29	0.3%	0.0%	0.0%	0.4%
1,500 300,000	\$25,685.89	\$19,320.00	\$1,875.25	\$46,881.14		\$25,840.77	\$19,320.00	\$1,881.70	\$47,042.47		\$154.88	\$0.00	\$6.45	\$161.33	0.3%	0.0%	0.0%	0.3%
2,500 500,000	\$42,781.89	\$32,200.00	\$3,124.25	\$78,106.14		\$43,034.77	\$32,200.00	\$3,134.78	\$78,369.55		\$252.88	\$0.00	\$10.53	\$263.41	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$836.22	(1)	\$844.10	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00426	(3)	\$0.00475	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate + \$11.22 for Year 1 of PST

(2) Present Rate + \$19.10 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00126

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery SOS GET Total				Delivery SOS GET Total			
200	60,000	\$4,260.69	\$3,864.00	\$338.53	\$8,463.22	\$4,297.97	\$3,864.00	\$340.08	\$8,502.05	\$37.28	\$0.00	\$1.55	\$38.83	0.4%	0.0%	0.0%	0.5%
750	225,000	\$15,862.39	\$14,490.00	\$1,264.68	\$31,617.07	\$15,980.52	\$14,490.00	\$1,269.61	\$31,740.13	\$118.13	\$0.00	\$4.93	\$123.06	0.4%	0.0%	0.0%	0.4%
1,000	300,000	\$21,135.89	\$19,320.00	\$1,685.66	\$42,141.55	\$21,290.77	\$19,320.00	\$1,692.12	\$42,302.89	\$154.88	\$0.00	\$6.46	\$161.34	0.4%	0.0%	0.0%	0.4%
1,500	450,000	\$31,682.89	\$28,980.00	\$2,527.62	\$63,190.51	\$31,911.27	\$28,980.00	\$2,537.14	\$63,428.41	\$228.38	\$0.00	\$9.52	\$237.90	0.4%	0.0%	0.0%	0.4%
2,500	750,000	\$52,776.89	\$48,300.00	\$4,211.54	\$105,288.43	\$53,152.27	\$48,300.00	\$4,227.18	\$105,679.45	\$375.38	\$0.00	\$15.64	\$391.02	0.4%	0.0%	0.0%	0.4%

		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1		Present Rates with Proposed PST Year 2	
Customer Charge		\$836.22	(1)	\$844.10	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00426	(3)	\$0.00475	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate + \$11.22 for Year 1 of PST

(2) Present Rate + \$19.10 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00126

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	\$5,060.29	\$5,152.00	\$425.51	\$10,637.80	\$5,107.37	\$5,152.00	\$427.47	\$10,686.84	\$47.08	\$0.00	\$1.96	\$49.04	0.4%	0.0%	0.0%	0.5%
750	300,000	\$18,860.89	\$19,320.00	\$1,590.87	\$39,771.76	\$19,015.77	\$19,320.00	\$1,597.32	\$39,933.09	\$154.88	\$0.00	\$6.45	\$161.33	0.4%	0.0%	0.0%	0.4%
1,000	400,000	\$25,133.89	\$25,760.00	\$2,120.58	\$53,014.47	\$25,337.77	\$25,760.00	\$2,129.07	\$53,226.84	\$203.88	\$0.00	\$8.49	\$212.37	0.4%	0.0%	0.0%	0.4%
1,500	600,000	\$37,679.89	\$38,640.00	\$3,180.00	\$79,499.89	\$37,981.77	\$38,640.00	\$3,192.57	\$79,814.34	\$301.88	\$0.00	\$12.57	\$314.45	0.4%	0.0%	0.0%	0.4%
2,500	1,000,000	\$62,771.89	\$64,400.00	\$5,298.83	\$132,470.72	\$63,269.77	\$64,400.00	\$5,319.57	\$132,989.34	\$497.88	\$0.00	\$20.74	\$518.62	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$836.22	(1)	\$844.10	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00426	(3)	\$0.00475	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$11.22 for Year 1 of PST
(2) Present Rate + \$19.10 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00126

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1				Present Rates with Proposed PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	100,000	\$5,859.89	\$6,440.00	\$512.50	\$12,812.39	\$5,916.77	\$6,440.00	\$514.87	\$12,871.64	\$56.88	\$0.00	\$2.37	\$59.25	0.4%	0.0%	0.0%	0.5%
750	375,000	\$21,859.39	\$24,150.00	\$1,917.06	\$47,926.45	\$22,051.02	\$24,150.00	\$1,925.04	\$48,126.06	\$191.63	\$0.00	\$7.98	\$199.61	0.4%	0.0%	0.0%	0.4%
1,000	500,000	\$29,131.89	\$32,200.00	\$2,555.50	\$63,887.39	\$29,384.77	\$32,200.00	\$2,566.03	\$64,150.80	\$252.88	\$0.00	\$10.53	\$263.41	0.4%	0.0%	0.0%	0.4%
1,500	750,000	\$43,676.89	\$48,300.00	\$3,832.37	\$95,809.26	\$44,052.27	\$48,300.00	\$3,848.01	\$96,200.28	\$375.38	\$0.00	\$15.64	\$391.02	0.4%	0.0%	0.0%	0.4%
2,500	1,250,000	\$72,766.89	\$80,500.00	\$6,386.12	\$159,653.01	\$73,387.27	\$80,500.00	\$6,411.97	\$160,299.24	\$620.38	\$0.00	\$25.85	\$646.23	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>		<u>Present Rates with Proposed PST Year 2</u>	
Customer Charge		\$836.22	(1)	\$844.10	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00426	(3)	\$0.00475	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$11.22 for Year 1 of PST
(2) Present Rate + \$19.10 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00126

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1					Present Rates with Proposed PST Year 2					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 120,000	\$6,659.49	\$7,728.00	\$599.48	\$14,986.97		\$6,726.17	\$7,728.00	\$602.26	\$15,056.43		\$66.68	\$0.00	\$2.78	\$69.46	0.4%	0.0%	0.0%	0.5%
750 450,000	\$24,857.89	\$28,980.00	\$2,243.25	\$56,081.14		\$25,086.27	\$28,980.00	\$2,252.76	\$56,319.03		\$228.38	\$0.00	\$9.51	\$237.89	0.4%	0.0%	0.0%	0.4%
1,000 600,000	\$33,129.89	\$38,640.00	\$2,990.41	\$74,760.30		\$33,431.77	\$38,640.00	\$3,002.99	\$75,074.76		\$301.88	\$0.00	\$12.58	\$314.46	0.4%	0.0%	0.0%	0.4%
1,500 900,000	\$49,673.89	\$57,960.00	\$4,484.75	\$112,118.64		\$50,122.77	\$57,960.00	\$4,503.45	\$112,586.22		\$448.88	\$0.00	\$18.70	\$467.58	0.4%	0.0%	0.0%	0.4%
2,500 1,500,000	\$82,761.89	\$96,600.00	\$7,473.41	\$186,835.30		\$83,504.77	\$96,600.00	\$7,504.37	\$187,609.14		\$742.88	\$0.00	\$30.96	\$773.84	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 1</u>	<u>Present Rates with Proposed PST Year 2</u>
Customer Charge		\$836.22 (1)	\$844.10 (2)
RE Growth Factor		\$86.86	\$86.86
LIHEAP Charge		\$0.81	\$0.81
Transmission Demand Charge	kW x	\$4.69	\$4.69
Transmission Energy Charge	kWh x	\$0.01123	\$0.01123
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70	\$3.70
CapEx Factor - > 200 kW	kW x	\$0.71	\$0.71
Base Distribution Energy Charge	kWh x	\$0.00551	\$0.00551
Other Distribution Energy Charges	kWh x	\$0.00426 (3)	\$0.00475 (4)
Transition Energy Charge	kWh x	\$0.00057	\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154	\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687	\$0.00687
Gross Earnings Tax		4%	4%
Standard Offer Charge	kWh x	\$0.06440	\$0.06440

- (1) Present Rate + \$11.22 for Year 1 of PST
(2) Present Rate + \$19.10 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00077
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00126

The Narragansett Electric Company

Streetlights Annual Bill Impacts

Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

Line	Luminaire/Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Per kWh	Current Annual Revenue	Per kWh	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact
						\$0.16844		\$0.17093			
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$156.73	\$77.43	\$157.83	\$1.10	0.7%	
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$226.97	\$77.43	\$229.11	\$2.14	0.9%	
3	Mercury Vapor										
4		LUM MV RWY 100W	543	\$78.06	\$4.68	\$174.20	\$78.06	\$175.55	\$1.35	0.8%	
5		LUM MV RWY 175W	881	\$78.06	\$4.68	\$231.14	\$78.06	\$233.33	\$2.19	0.9%	
6		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$341.01	\$120.39	\$344.20	\$3.19	0.9%	
7		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$503.50	\$163.46	\$508.46	\$4.96	1.0%	
8		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$938.25	\$163.46	\$949.63	\$11.38	1.2%	
9		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$521.41	\$181.37	\$526.37	\$4.96	1.0%	
10		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$956.16	\$181.37	\$967.54	\$11.38	1.2%	
11		LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$309.88	\$156.80	\$312.07	\$2.19	0.7%	
12	High Pressure Sodium Vapor Fixtures										
13		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$125.06	\$77.43	\$125.70	\$0.63	0.5%	
14		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$142.06	\$76.91	\$142.95	\$0.89	0.6%	
15		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$165.78	\$78.06	\$167.01	\$1.23	0.7%	
16		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$204.87	\$78.58	\$206.67	\$1.80	0.9%	
17		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$338.82	\$120.39	\$341.98	\$3.16	0.9%	
18		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$498.62	\$163.46	\$503.50	\$4.89	1.0%	
19		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$625.45	\$172.21	\$632.08	\$6.63	1.1%	
20		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$364.54	\$146.11	\$367.70	\$3.16	0.9%	
21		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$634.61	\$181.37	\$641.24	\$6.63	1.0%	
22	Metal Halide	LUM HPS POST 50W	255	\$155.49	\$4.68	\$203.12	\$155.49	\$203.76	\$0.63	0.3%	
23		LUM HPS POST 100W	493	\$156.80	\$4.68	\$244.52	\$156.80	\$245.75	\$1.23	0.5%	
24		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$186.71	\$98.99	\$187.94	\$1.23	0.7%	
25											
26	Metal Halide	LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$503.22	\$181.37	\$507.91	\$4.69	0.9%	
27		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$944.37	\$181.37	\$955.58	\$11.21	1.2%	
28	Light Emitting Diode										
29		LED RWY 20W	88	\$90.61	\$4.68	\$110.11	\$90.61	\$110.33	\$0.22	0.2%	
30		LED RWY 30W	130	\$89.77	\$4.68	\$116.35	\$89.77	\$116.67	\$0.32	0.3%	
31		LED RWY 60W	255	\$99.15	\$4.68	\$146.78	\$99.15	\$147.42	\$0.63	0.4%	
32		LED RWY 140W	589	\$155.03	\$4.68	\$258.92	\$155.03	\$260.39	\$1.47	0.6%	
33		LED RWY 275W	1,153	\$198.27	\$4.68	\$397.16	\$198.27	\$400.03	\$2.87	0.7%	
34	Temporary Turn-Off	LED POST Top 60W	255	\$147.69	\$4.68	\$195.32	\$147.69	\$195.96	\$0.63	0.3%	
35											
36		LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-	
37		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-	
38		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-	
39		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-	
40		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-	
41		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-	
42	Standards	LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-	
43		LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-	
44		LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-	
45		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-	
46		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-	
47	Standards	POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-	
48		POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-	
49		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-	
50		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-	
51		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-	
52	S-06 (Decorative) Luminaire	POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-	
53											
54											
55	S-06 Standards	DEC HPS WL 100W	493	\$325.30	\$4.68	\$413.02	\$325.30	\$414.25	\$1.23	0.4%	
56											
57	S-5 Energy Rate	DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-	
58		DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-	
59	S-5 Energy Rate										
60											
61	S-5 Energy Rate	Includes all rate components				\$0.19498		\$0.19747	\$0.00249	1.3%	
62											

Column Description:

(a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3

(d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12

(e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017) + Year 1 Pst Factor of \$0.00483

Column (b) x per kWh rate + Column (c) + Column (d)

(f) Column (c)

(h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 2 PST factor of \$0.00732

(i) Column (h) / Column (c)

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$22.82	\$14.27	\$1.55	\$38.64	\$24.39	\$14.27	\$1.61	\$40.27	\$1.57	\$0.00	\$0.06	\$1.63	4.1%	0.0%	0.2%	4.2%	30.1%
300	\$37.34	\$28.55	\$2.75	\$68.64	\$39.06	\$28.55	\$2.82	\$70.43	\$1.72	\$0.00	\$0.07	\$1.79	2.5%	0.0%	0.1%	2.6%	12.9%
400	\$47.02	\$38.06	\$3.55	\$88.63	\$48.84	\$38.06	\$3.62	\$90.52	\$1.82	\$0.00	\$0.07	\$1.89	2.1%	0.0%	0.1%	2.1%	11.6%
500	\$56.70	\$47.58	\$4.35	\$108.63	\$58.62	\$47.58	\$4.43	\$110.63	\$1.92	\$0.00	\$0.08	\$2.00	1.8%	0.0%	0.1%	1.8%	9.6%
600	\$66.38	\$57.09	\$5.14	\$128.61	\$68.40	\$57.09	\$5.23	\$130.72	\$2.02	\$0.00	\$0.09	\$2.11	1.6%	0.0%	0.1%	1.6%	7.7%
700	\$76.06	\$66.61	\$5.94	\$148.61	\$78.18	\$66.61	\$6.03	\$150.82	\$2.12	\$0.00	\$0.09	\$2.21	1.4%	0.0%	0.1%	1.5%	19.0%
1,200	\$124.46	\$114.18	\$9.94	\$248.58	\$127.08	\$114.18	\$10.05	\$251.31	\$2.62	\$0.00	\$0.11	\$2.73	1.1%	0.0%	0.0%	1.1%	6.8%
2,000	\$201.90	\$190.30	\$16.34	\$408.54	\$205.32	\$190.30	\$16.48	\$412.10	\$3.42	\$0.00	\$0.14	\$3.56	0.8%	0.0%	0.0%	0.9%	2.3%

<u>Present Rates Effective Nov. 1, 2017</u>				<u>Present Rates with Proposed PST</u>			
<u>with Proposed PST Year 2</u>				<u>Year 3</u>			
Customer Charge		\$6.71	(1)	\$8.13	(2)		
RE Growth Factor		\$0.78		\$0.78			
LIHEAP Charge		\$0.81		\$0.81			
Transmission Energy Charge	kWh x	\$0.03179		\$0.03179			
Base Distribution Energy Charge	kWh x	\$0.03664		\$0.03664			
Other Distribution Energy Charges	kWh x	\$0.00939	(3)	\$0.01039	(4)		
Transition Energy Charge	kWh x	\$0.00057		\$0.00057			
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154			
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687			
Gross Earnings Tax		4%		4%			
Standard Offer Charge	kWh x	\$0.09515		\$0.09515			

(1) Present Rate + \$1.71 for Year 2 of PST

(2) Present Rate + \$3.13 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00303

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 3 Factor of \$0.00403

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 3

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2						Present Rates with Proposed PST Year 3						Increase (Decrease)										Percentage of Customers
	Discounted						Discounted						\$				% of Total Bill						
													Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	
150	\$15.80	\$14.27	\$0.00	\$30.07	\$1.25	\$31.32	\$17.37	\$14.27	\$0.00	\$31.64	\$1.32	\$32.96	\$1.57	\$0.00	\$0.07	\$1.64	5.0%	0.0%	0.2%	5.2%	32.1%		
300	\$28.30	\$28.55	\$0.00	\$56.85	\$2.37	\$59.22	\$30.02	\$28.55	\$0.00	\$58.57	\$2.44	\$61.01	\$1.72	\$0.00	\$0.07	\$1.79	2.9%	0.0%	0.1%	3.0%	15.4%		
400	\$36.63	\$38.06	\$0.00	\$74.69	\$3.11	\$77.80	\$38.45	\$38.06	\$0.00	\$76.51	\$3.19	\$79.70	\$1.82	\$0.00	\$0.08	\$1.90	2.3%	0.0%	0.1%	2.4%	12.5%		
500	\$44.97	\$47.58	\$0.00	\$92.55	\$3.86	\$96.41	\$46.89	\$47.58	\$0.00	\$94.47	\$3.94	\$98.41	\$1.92	\$0.00	\$0.08	\$2.00	2.0%	0.0%	0.1%	2.1%	9.6%		
600	\$53.30	\$57.09	\$0.00	\$110.39	\$4.60	\$114.99	\$55.32	\$57.09	\$0.00	\$112.41	\$4.68	\$117.09	\$2.02	\$0.00	\$0.08	\$2.10	1.8%	0.0%	0.1%	1.8%	7.2%		
700	\$61.63	\$66.61	\$0.00	\$128.24	\$5.34	\$133.58	\$63.75	\$66.61	\$0.00	\$130.36	\$5.43	\$135.79	\$2.12	\$0.00	\$0.09	\$2.21	1.6%	0.0%	0.1%	1.7%	16.4%		
1,200	\$103.30	\$114.18	\$0.00	\$217.48	\$9.06	\$226.54	\$105.92	\$114.18	\$0.00	\$220.10	\$9.17	\$229.27	\$2.62	\$0.00	\$0.11	\$2.73	1.2%	0.0%	0.0%	1.2%	5.2%		
2,000	\$169.96	\$190.30	\$0.00	\$360.26	\$15.01	\$375.27	\$173.38	\$190.30	\$0.00	\$363.68	\$15.15	\$378.83	\$3.42	\$0.00	\$0.14	\$3.56	0.9%	0.0%	0.0%	0.9%	1.6%		

		<u>Present Rates Effective</u>		<u>Present Rates with</u>	
		<u>Nov. 1, 2017 with</u>		<u>Proposed PST Year 3</u>	
		<u>Proposed PST Year 2</u>		<u>Proposed PST Year 3</u>	
Customer Charge		\$1.71	(1)	\$3.13	(2)
RE Growth Factor		\$0.78		\$0.78	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Energy Charge	kWh x	\$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x	\$0.02317		\$0.02317	
Other Distribution Energy Charges	kWh x	\$0.00939	(3)	\$0.01039	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Low Income Discount		0%		0%	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09515		\$0.09515	

(1) Present Rate + \$1.71 for Year 2 of PST

(2) Present Rate + \$3.13 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00303

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 3 Factor of \$0.00403

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$38.85	\$23.38	\$2.59	\$64.82	\$43.98	\$23.38	\$2.81	\$70.17	\$5.13	\$0.00	\$0.22	\$5.35	7.9%	0.0%	0.3%	8.3%	56.3%
500	\$61.13	\$46.75	\$4.50	\$112.38	\$66.49	\$46.75	\$4.72	\$117.96	\$5.36	\$0.00	\$0.22	\$5.58	4.8%	0.0%	0.2%	5.0%	16.9%
1,000	\$105.68	\$93.50	\$8.30	\$207.48	\$111.50	\$93.50	\$8.54	\$213.54	\$5.82	\$0.00	\$0.24	\$6.06	2.8%	0.0%	0.1%	2.9%	8.1%
1,500	\$150.24	\$140.25	\$12.10	\$302.59	\$156.52	\$140.25	\$12.37	\$309.14	\$6.28	\$0.00	\$0.27	\$6.55	2.1%	0.0%	0.1%	2.2%	5.0%
2,000	\$194.79	\$187.00	\$15.91	\$397.70	\$201.53	\$187.00	\$16.19	\$404.72	\$6.74	\$0.00	\$0.28	\$7.02	1.7%	0.0%	0.1%	1.8%	13.6%

	<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge	\$14.50	(1)	\$19.40	(2)
RE Growth Factor	\$1.26		\$1.26	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.02838		\$0.02838	
Base Distribution Charge	kWh x \$0.03253		\$0.03253	
Other Distribution Energy Charges	kWh x \$0.00922	(3)	\$0.01014	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

(1) Present Rate + \$4.50 for Year 2 of PST

(2) Present Rate + \$9.40 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 2 Factor of \$0.00283

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 3 Factor of \$0.00375

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$458.97	\$374.00	\$34.71	\$867.68		\$471.84	\$374.00	\$35.24	\$881.08		\$12.87	\$0.00	\$0.53	\$13.40	1.5%	0.0%	0.1%	1.5%
50 10,000	\$995.91	\$935.00	\$80.45	\$2,011.36		\$1,013.16	\$935.00	\$81.17	\$2,029.33		\$17.25	\$0.00	\$0.72	\$17.97	0.9%	0.0%	0.0%	0.9%
100 20,000	\$1,890.81	\$1,870.00	\$156.70	\$3,917.51		\$1,915.36	\$1,870.00	\$157.72	\$3,943.08		\$24.55	\$0.00	\$1.02	\$25.57	0.6%	0.0%	0.0%	0.7%
150 30,000	\$2,785.71	\$2,805.00	\$232.95	\$5,823.66		\$2,817.56	\$2,805.00	\$234.27	\$5,856.83		\$31.85	\$0.00	\$1.32	\$33.17	0.5%	0.0%	0.0%	0.6%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$143.55	(1)	\$153.50	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00542	(3)	\$0.00615	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate + \$8.55 for Year 2 of PST
(2) Present Rate + \$18.50 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 3 Factor of \$0.00271

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 6,000	\$539.05	\$561.00	\$45.84	\$1,145.89		\$553.38	\$561.00	\$46.43	\$1,160.81		\$14.33	\$0.00	\$0.59	\$14.92	1.3%	0.0%	0.1%	1.3%
50 15,000	\$1,196.11	\$1,402.50	\$108.28	\$2,706.89		\$1,217.01	\$1,402.50	\$109.15	\$2,728.66		\$20.90	\$0.00	\$0.87	\$21.77	0.8%	0.0%	0.0%	0.8%
100 30,000	\$2,291.21	\$2,805.00	\$212.34	\$5,308.55		\$2,323.06	\$2,805.00	\$213.67	\$5,341.73		\$31.85	\$0.00	\$1.33	\$33.18	0.6%	0.0%	0.0%	0.6%
150 45,000	\$3,386.31	\$4,207.50	\$316.41	\$7,910.22		\$3,429.11	\$4,207.50	\$318.19	\$7,954.80		\$42.80	\$0.00	\$1.78	\$44.58	0.5%	0.0%	0.0%	0.6%

			<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>	<u>Present Rates with Proposed PST Year 3</u>
Customer Charge			\$143.55 (1)	\$153.50 (2)
RE Growth Factor			\$11.85	\$11.85
LIHEAP Charge			\$0.81	\$0.81
Transmission Demand Charge	kW x		\$4.37	\$4.37
Transmission Energy Charge	kWh x		\$0.01096	\$0.01096
Base Distribution Demand Charge-xcs 10 kW	kW x		\$4.85	\$4.85
CapEx Factor	kW x		\$0.67	\$0.67
Base Distribution Energy Charge	kWh x		\$0.00468	\$0.00468
Other Distribution Energy Charges	kWh x	(3)	\$0.00542	\$0.00615 (4)
Transition Energy Charge	kWh x		\$0.00057	\$0.00057
Energy Efficiency Program Charge	kWh x		\$0.01154	\$0.01154
Renewable Energy Distribution Charge	kWh x		\$0.00687	\$0.00687
Gross Earnings Tax			4%	4%
Standard Offer Charge	kWh x		\$0.09350	\$0.09350

- (1) Present Rate + \$8.55 for Year 2 of PST
(2) Present Rate + \$18.50 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 3 Factor of \$0.00271

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 8,000		\$619.13	\$748.00	\$56.96	\$1,424.09	\$634.92	\$748.00	\$57.62	\$1,440.54	\$15.79	\$0.00	\$0.66	\$16.45	1.1%	0.0%	0.0%	1.2%
50 20,000		\$1,396.31	\$1,870.00	\$136.10	\$3,402.41	\$1,420.86	\$1,870.00	\$137.12	\$3,427.98	\$24.55	\$0.00	\$1.02	\$25.57	0.7%	0.0%	0.0%	0.8%
100 40,000		\$2,691.61	\$3,740.00	\$267.98	\$6,699.59	\$2,730.76	\$3,740.00	\$269.62	\$6,740.38	\$39.15	\$0.00	\$1.64	\$40.79	0.6%	0.0%	0.0%	0.6%
150 60,000		\$3,986.91	\$5,610.00	\$399.87	\$9,996.78	\$4,040.66	\$5,610.00	\$402.11	\$10,052.77	\$53.75	\$0.00	\$2.24	\$55.99	0.5%	0.0%	0.0%	0.6%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$143.55	(1)	\$153.50	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00542	(3)	\$0.00615	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate + \$8.55 for Year 2 of PST
(2) Present Rate + \$18.50 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 3 Factor of \$0.00271

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 10,000	\$699.21	\$935.00	\$68.09	\$1,702.30	\$716.46	\$935.00	\$68.81	\$1,720.27	\$17.25	\$0.00	\$0.72	\$17.97	1.0%	0.0%	0.0%	1.1%
50 25,000	\$1,596.51	\$2,337.50	\$163.92	\$4,097.93	\$1,624.71	\$2,337.50	\$165.09	\$4,127.30	\$28.20	\$0.00	\$1.17	\$29.37	0.7%	0.0%	0.0%	0.7%
100 50,000	\$3,092.01	\$4,675.00	\$323.63	\$8,090.64	\$3,138.46	\$4,675.00	\$325.56	\$8,139.02	\$46.45	\$0.00	\$1.93	\$48.38	0.6%	0.0%	0.0%	0.6%
150 75,000	\$4,587.51	\$7,012.50	\$483.33	\$12,083.34	\$4,652.21	\$7,012.50	\$486.03	\$12,150.74	\$64.70	\$0.00	\$2.70	\$67.40	0.5%	0.0%	0.0%	0.6%

	<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge	\$143.55	(1)	\$153.50	(2)
RE Growth Factor	\$11.85		\$11.85	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.37		\$4.37	
Transmission Energy Charge	kWh x \$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x \$4.85		\$4.85	
CapEx Factor	kW x \$0.67		\$0.67	
Base Distribution Energy Charge	kWh x \$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x \$0.00542	(3)	\$0.00615	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

(1) Present Rate + \$8.55 for Year 2 of PST

(2) Present Rate + \$18.50 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 3 Factor of \$0.00271

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3				Increase (Decrease)							
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 12,000	\$779.29	\$1,122.00	\$79.22	\$1,980.51		\$798.00	\$1,122.00	\$80.00	\$2,000.00	\$18.71	\$0.00	\$0.78	\$19.49	0.9%	0.0%	0.0%	1.0%
50 30,000	\$1,796.71	\$2,805.00	\$191.74	\$4,793.45		\$1,828.56	\$2,805.00	\$193.07	\$4,826.63	\$31.85	\$0.00	\$1.33	\$33.18	0.7%	0.0%	0.0%	0.7%
100 60,000	\$3,492.41	\$5,610.00	\$379.27	\$9,481.68		\$3,546.16	\$5,610.00	\$381.51	\$9,537.67	\$53.75	\$0.00	\$2.24	\$55.99	0.6%	0.0%	0.0%	0.6%
150 90,000	\$5,188.11	\$8,415.00	\$566.80	\$14,169.91		\$5,263.76	\$8,415.00	\$569.95	\$14,248.71	\$75.65	\$0.00	\$3.15	\$78.80	0.5%	0.0%	0.0%	0.6%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$143.55	(1)	\$153.50	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00542	(3)	\$0.00615	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$8.55 for Year 2 of PST

(2) Present Rate + \$18.50 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 2 Factor of \$0.00198

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098) and PST Yr 3 Factor of \$0.00271

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 40,000	\$3,488.57	\$2,576.00	\$252.69	\$6,317.26		\$3,533.69	\$2,576.00	\$254.57	\$6,364.26	\$45.12	\$0.00	\$1.88	\$47.00	0.7%	0.0%	0.0%	0.7%
750 150,000	\$12,945.27	\$9,660.00	\$941.89	\$23,547.16		\$13,050.89	\$9,660.00	\$946.29	\$23,657.18	\$105.62	\$0.00	\$4.40	\$110.02	0.4%	0.0%	0.0%	0.5%
1,000 200,000	\$17,243.77	\$12,880.00	\$1,255.16	\$31,378.93		\$17,376.89	\$12,880.00	\$1,260.70	\$31,517.59	\$133.12	\$0.00	\$5.54	\$138.66	0.4%	0.0%	0.0%	0.4%
1,500 300,000	\$25,840.77	\$19,320.00	\$1,881.70	\$47,042.47		\$26,028.89	\$19,320.00	\$1,889.54	\$47,238.43	\$188.12	\$0.00	\$7.84	\$195.96	0.4%	0.0%	0.0%	0.4%
2,500 500,000	\$43,034.77	\$32,200.00	\$3,134.78	\$78,369.55		\$43,332.89	\$32,200.00	\$3,147.20	\$78,680.09	\$298.12	\$0.00	\$12.42	\$310.54	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$844.10	(1)	\$867.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00475	(3)	\$0.00530	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$19.10 for Year 2 of PST
(2) Present Rate + \$42.22 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 2 Factor of \$0.00126
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 3 Factor of \$0.00181

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2					Present Rates with Proposed PST Year 3					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 60,000	\$4,297.97	\$3,864.00	\$340.08	\$8,502.05		\$4,354.09	\$3,864.00	\$342.42	\$8,560.51		\$56.12	\$0.00	\$2.34	\$58.46	0.7%	0.0%	0.0%	0.7%
750 225,000	\$15,980.52	\$14,490.00	\$1,269.61	\$31,740.13		\$16,127.39	\$14,490.00	\$1,275.72	\$31,893.11		\$146.87	\$0.00	\$6.11	\$152.98	0.5%	0.0%	0.0%	0.5%
1,000 300,000	\$21,290.77	\$19,320.00	\$1,692.12	\$42,302.89		\$21,478.89	\$19,320.00	\$1,699.95	\$42,498.84		\$188.12	\$0.00	\$7.83	\$195.95	0.4%	0.0%	0.0%	0.5%
1,500 450,000	\$31,911.27	\$28,980.00	\$2,537.14	\$63,428.41		\$32,181.89	\$28,980.00	\$2,548.41	\$63,710.30		\$270.62	\$0.00	\$11.27	\$281.89	0.4%	0.0%	0.0%	0.4%
2,500 750,000	\$53,152.27	\$48,300.00	\$4,227.18	\$105,679.45		\$53,587.89	\$48,300.00	\$4,245.33	\$106,133.22		\$435.62	\$0.00	\$18.15	\$453.77	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$844.10	(1)	\$867.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00475	(3)	\$0.00530	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$19.10 for Year 2 of PST
(2) Present Rate + \$42.22 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 2 Factor of \$0.00126
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 3 Factor of \$0.00181

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	\$5,107.37	\$5,152.00	\$427.47	\$10,686.84	\$5,174.49	\$5,152.00	\$430.27	\$10,756.76	\$67.12	\$0.00	\$2.80	\$69.92	0.6%	0.0%	0.0%	0.7%
750	300,000	\$19,015.77	\$19,320.00	\$1,597.32	\$39,933.09	\$19,203.89	\$19,320.00	\$1,605.16	\$40,129.05	\$188.12	\$0.00	\$7.84	\$195.96	0.5%	0.0%	0.0%	0.5%
1,000	400,000	\$25,337.77	\$25,760.00	\$2,129.07	\$53,226.84	\$25,580.89	\$25,760.00	\$2,139.20	\$53,480.09	\$243.12	\$0.00	\$10.13	\$253.25	0.5%	0.0%	0.0%	0.5%
1,500	600,000	\$37,981.77	\$38,640.00	\$3,192.57	\$79,814.34	\$38,334.89	\$38,640.00	\$3,207.29	\$80,182.18	\$353.12	\$0.00	\$14.72	\$367.84	0.4%	0.0%	0.0%	0.5%
2,500	1,000,000	\$63,269.77	\$64,400.00	\$5,319.57	\$132,989.34	\$63,842.89	\$64,400.00	\$5,343.45	\$133,586.34	\$573.12	\$0.00	\$23.88	\$597.00	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$844.10	(1)	\$867.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00475	(3)	\$0.00530	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$19.10 for Year 2 of PST
(2) Present Rate + \$42.22 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 2 Factor of \$0.00126
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 3 Factor of \$0.00181

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	100,000	\$5,916.77	\$6,440.00	\$514.87	\$12,871.64	\$5,994.89	\$6,440.00	\$518.12	\$12,953.01	\$78.12	\$0.00	\$3.25	\$81.37	0.6%	0.0%	0.0%	0.6%
750	375,000	\$22,051.02	\$24,150.00	\$1,925.04	\$48,126.06	\$22,280.39	\$24,150.00	\$1,934.60	\$48,364.99	\$229.37	\$0.00	\$9.56	\$238.93	0.5%	0.0%	0.0%	0.5%
1,000	500,000	\$29,384.77	\$32,200.00	\$2,566.03	\$64,150.80	\$29,682.89	\$32,200.00	\$2,578.45	\$64,461.34	\$298.12	\$0.00	\$12.42	\$310.54	0.5%	0.0%	0.0%	0.5%
1,500	750,000	\$44,052.27	\$48,300.00	\$3,848.01	\$96,200.28	\$44,487.89	\$48,300.00	\$3,866.16	\$96,654.05	\$435.62	\$0.00	\$18.15	\$453.77	0.5%	0.0%	0.0%	0.5%
2,500	1,250,000	\$73,387.27	\$80,500.00	\$6,411.97	\$160,299.24	\$74,097.89	\$80,500.00	\$6,441.58	\$161,039.47	\$710.62	\$0.00	\$29.61	\$740.23	0.4%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$844.10	(1)	\$867.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00475	(3)	\$0.00530	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$19.10 for Year 2 of PST
(2) Present Rate + \$42.22 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 2 Factor of \$0.00126
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 3 Factor of \$0.00181

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - RI-Only Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2				Present Rates with Proposed PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	120,000	\$6,726.17	\$7,728.00	\$602.26	\$15,056.43	\$6,815.29	\$7,728.00	\$605.97	\$15,149.26	\$89.12	\$0.00	\$3.71	\$92.83	0.6%	0.0%	0.0%	0.6%
750	450,000	\$25,086.27	\$28,980.00	\$2,252.76	\$56,319.03	\$25,356.89	\$28,980.00	\$2,264.04	\$56,600.93	\$270.62	\$0.00	\$11.28	\$281.90	0.5%	0.0%	0.0%	0.5%
1,000	600,000	\$33,431.77	\$38,640.00	\$3,002.99	\$75,074.76	\$33,784.89	\$38,640.00	\$3,017.70	\$75,442.59	\$353.12	\$0.00	\$14.71	\$367.83	0.5%	0.0%	0.0%	0.5%
1,500	900,000	\$50,122.77	\$57,960.00	\$4,503.45	\$112,586.22	\$50,640.89	\$57,960.00	\$4,525.04	\$113,125.93	\$518.12	\$0.00	\$21.59	\$539.71	0.5%	0.0%	0.0%	0.5%
2,500	1,500,000	\$83,504.77	\$96,600.00	\$7,504.37	\$187,609.14	\$84,352.89	\$96,600.00	\$7,539.70	\$188,492.59	\$848.12	\$0.00	\$35.33	\$883.45	0.5%	0.0%	0.0%	0.5%

		<u>Present Rates Effective Nov. 1, 2017 with Proposed PST Year 2</u>		<u>Present Rates with Proposed PST Year 3</u>	
Customer Charge		\$844.10	(1)	\$867.22	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00475	(3)	\$0.00530	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$19.10 for Year 2 of PST
(2) Present Rate + \$42.22 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 2 Factor of \$0.00126
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00080, Capex Factor \$0.00000, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00048) and PST Yr 3 Factor of \$0.00181

The Narragansett Electric Company
Streetlights Annual Bill Impacts
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

Line	Luminaire/ Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Current Annual Revenue	Current Lum / Std Price	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$157.83	\$77.43	\$158.54	\$0.71	0.4%
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$229.11	\$77.43	\$230.49	\$1.38	0.6%
3	Mercury Vapor	LUM MV RWY 100W	543	\$78.06	\$4.68	\$175.55	\$78.06	\$176.42	\$0.87	0.5%
4		LUM MV RWY 175W	881	\$78.06	\$4.68	\$233.33	\$78.06	\$234.74	\$1.41	0.6%
5		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$344.20	\$120.39	\$346.25	\$2.05	0.6%
6		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$508.46	\$163.46	\$511.65	\$3.19	0.6%
7		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$949.63	\$163.46	\$956.95	\$7.32	0.8%
8		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$526.37	\$181.37	\$529.56	\$3.19	0.6%
9		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$967.54	\$181.37	\$974.86	\$7.32	0.8%
10	High Pressure Sodium Vapor Fixtures	LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$312.07	\$156.80	\$313.48	\$1.41	0.5%
11		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$125.70	\$77.43	\$126.11	\$0.41	0.3%
12		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$142.95	\$76.91	\$143.53	\$0.57	0.4%
13		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$167.01	\$78.06	\$167.80	\$0.79	0.5%
14		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$206.67	\$78.58	\$207.83	\$1.16	0.6%
15		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$341.98	\$120.39	\$344.01	\$2.03	0.6%
16		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$503.50	\$163.46	\$506.64	\$3.14	0.6%
17		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$632.08	\$172.21	\$636.34	\$4.26	0.7%
18		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$367.70	\$146.11	\$369.73	\$2.03	0.6%
19		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$641.24	\$181.37	\$645.50	\$4.26	0.7%
20	Metal Halide	LUM HPS POST 50W	255	\$155.49	\$4.68	\$203.76	\$155.49	\$204.17	\$0.41	0.2%
21		LUM HPS POST 100W	493	\$156.80	\$4.68	\$245.75	\$156.80	\$246.54	\$0.79	0.3%
22		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$187.94	\$98.99	\$188.73	\$0.79	0.4%
23		LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$507.91	\$181.37	\$510.92	\$3.01	0.6%
24		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$955.58	\$181.37	\$962.78	\$7.20	0.8%
25	Light Emitting Diode	LED RWY 20W	88	\$90.61	\$4.68	\$110.33	\$90.61	\$110.47	\$0.14	0.1%
26		LED RWY 30W	130	\$89.77	\$4.68	\$116.67	\$89.77	\$116.88	\$0.21	0.2%
27		LED RWY 60W	255	\$99.15	\$4.68	\$147.42	\$99.15	\$147.83	\$0.41	0.3%
28		LED RWY 140W	589	\$155.03	\$4.68	\$260.39	\$155.03	\$261.33	\$0.94	0.4%
29		LED RWY 275W	1,153	\$198.27	\$4.68	\$400.03	\$198.27	\$401.88	\$1.84	0.5%
30		LED POST Top 60W	255	\$147.69	\$4.68	\$195.96	\$147.69	\$196.37	\$0.41	0.2%
31	Temporary Turn-Off	LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
32		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
33		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
34		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-
35		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-
36		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-
37		LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
38		LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-
39	Standards	LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-
40		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
41		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
42		POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-
43	S-06 (Decorative) Luminaire	POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-
44		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-
45		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-
46		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-
47		POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-
48	S-06 Standards	DEC HPS WL 100W	493	\$325.30	\$4.68	\$414.25	\$325.30	\$415.04	\$0.79	0.2%
49		DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-
50	S-5 Energy Rate	DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-
51		Includes all rate components				\$0.19747		\$0.19907	\$0.00160	0.8%

Column Description:

- (a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3
- (d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12
- (e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017) + Year 2 Pst Factor of \$0.00732
- Column (b) x per kWh rate + Column (c) + Column (d)
- (f) Column (c)
- (h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 3 PST factor of \$0.00892
- (i) Column (h) / Column (c)

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)								Percentage of Customers
									\$				% of Total Bill				
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$20.66	\$14.27	\$1.46	\$36.39	\$21.51	\$14.27	\$1.49	\$37.27	\$0.85	\$0.00	\$0.03	\$0.88	2.3%	0.0%	0.1%	2.4%	30.1%
300	\$34.72	\$28.55	\$2.64	\$65.91	\$35.70	\$28.55	\$2.68	\$66.93	\$0.98	\$0.00	\$0.04	\$1.02	1.5%	0.0%	0.1%	1.5%	12.9%
400	\$44.10	\$38.06	\$3.42	\$85.58	\$45.16	\$38.06	\$3.47	\$86.69	\$1.06	\$0.00	\$0.05	\$1.11	1.2%	0.0%	0.1%	1.3%	11.6%
500	\$53.48	\$47.58	\$4.21	\$105.27	\$54.63	\$47.58	\$4.26	\$106.47	\$1.15	\$0.00	\$0.05	\$1.20	1.1%	0.0%	0.0%	1.1%	9.6%
600	\$62.85	\$57.09	\$5.00	\$124.94	\$64.09	\$57.09	\$5.05	\$126.23	\$1.24	\$0.00	\$0.05	\$1.29	1.0%	0.0%	0.0%	1.0%	7.7%
700	\$72.23	\$66.61	\$5.79	\$144.63	\$73.55	\$66.61	\$5.84	\$146.00	\$1.32	\$0.00	\$0.05	\$1.37	0.9%	0.0%	0.0%	0.9%	19.0%
1,200	\$119.11	\$114.18	\$9.72	\$243.01	\$120.85	\$114.18	\$9.79	\$244.82	\$1.74	\$0.00	\$0.07	\$1.81	0.7%	0.0%	0.0%	0.7%	6.8%
2,000	\$194.13	\$190.30	\$16.02	\$400.45	\$196.54	\$190.30	\$16.12	\$402.96	\$2.41	\$0.00	\$0.10	\$2.51	0.6%	0.0%	0.0%	0.6%	2.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>
		<u>November 1, 2017</u>		<u>Year 1</u>
Customer Charge		\$5.00 (1)		\$5.73 (2)
RE Growth Factor		\$0.78		\$0.78
LIHEAP Charge		\$0.81		\$0.81
Transmission Energy Charge	kWh x	\$0.03179		\$0.03179
Base Distribution Energy Charge	kWh x	\$0.03664		\$0.03664
Other Distribution Energy Charges	kWh x	\$0.00636 (3)		\$0.00720 (4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687
Gross Earnings Tax		4%		4%
Standard Offer Charge	kWh x	\$0.09515		\$0.09515

(1) Present Rate

(2) Present Rate + \$0.73 for Year 1 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00135)

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00084

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 1

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1						Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	Discounted		GET	Total	\$				% of Total Bill				
							Discount	Total			Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$13.64	\$14.27	\$1.16	\$29.07	\$14.49	\$14.27	\$0.00	\$28.76	\$1.20	\$29.96	\$0.85	\$0.00	\$0.04	\$0.89	2.9%	-	0.1%	3.1%	32.1%
300	\$25.68	\$28.55	\$2.26	\$56.49	\$26.66	\$28.55	\$0.00	\$55.21	\$2.30	\$57.51	\$0.98	\$0.00	\$0.04	\$1.02	1.7%	-	0.1%	1.8%	15.4%
400	\$33.71	\$38.06	\$2.99	\$74.76	\$34.78	\$38.06	\$0.00	\$72.84	\$3.04	\$75.88	\$1.07	\$0.00	\$0.05	\$1.12	1.4%	-	0.1%	1.5%	12.5%
500	\$41.74	\$47.58	\$3.72	\$93.04	\$42.89	\$47.58	\$0.00	\$90.47	\$3.77	\$94.24	\$1.15	\$0.00	\$0.05	\$1.20	1.2%	-	0.1%	1.3%	9.6%
600	\$49.77	\$57.09	\$4.45	\$111.31	\$51.00	\$57.09	\$0.00	\$108.09	\$4.50	\$112.59	\$1.23	\$0.00	\$0.05	\$1.28	1.1%	-	0.0%	1.1%	7.2%
700	\$57.80	\$66.61	\$5.18	\$129.59	\$59.12	\$66.61	\$0.00	\$125.73	\$5.24	\$130.97	\$1.32	\$0.00	\$0.06	\$1.38	1.0%	-	0.0%	1.1%	16.4%
1,200	\$97.95	\$114.18	\$8.84	\$220.97	\$99.69	\$114.18	\$0.00	\$213.87	\$8.91	\$222.78	\$1.74	\$0.00	\$0.07	\$1.81	0.8%	-	0.0%	0.8%	5.2%
2,000	\$162.19	\$190.30	\$14.69	\$367.18	\$164.60	\$190.30	\$0.00	\$354.90	\$14.79	\$369.69	\$2.41	\$0.00	\$0.10	\$2.51	0.7%	-	0.0%	0.7%	1.6%

	<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
	<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge	\$0.00	(1)	\$0.73	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x \$0.02317		\$0.02317	
Other Distribution Energy Charges	kWh x \$0.00636	(3)	\$0.00720	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Low Income Discount			0%	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09515		\$0.09515	

- (1) Present Rate
(2) Present Rate + \$0.73 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00135)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00084

**The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers**

Monthly kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)								Percentage of Customers
	DeliverySOSGETTotal				DeliverySOSGETTotal				\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$33.64	\$23.38	\$2.38	\$59.40	\$35.47	\$23.38	\$2.45	\$61.30	\$1.83	\$0.00	\$0.07	\$1.90	3.1%	0.0%	0.1%	3.2%	56.3%
500	\$55.21	\$46.75	\$4.25	\$106.21	\$57.24	\$46.75	\$4.33	\$108.32	\$2.03	\$0.00	\$0.08	\$2.11	1.9%	0.0%	0.1%	2.0%	16.9%
1,000	\$98.35	\$93.50	\$7.99	\$199.84	\$100.77	\$93.50	\$8.09	\$202.36	\$2.42	\$0.00	\$0.10	\$2.52	1.2%	0.0%	0.1%	1.3%	8.1%
1,500	\$141.49	\$140.25	\$11.74	\$293.48	\$144.31	\$140.25	\$11.86	\$296.42	\$2.82	\$0.00	\$0.12	\$2.94	1.0%	0.0%	0.0%	1.0%	5.0%
2,000	\$184.63	\$187.00	\$15.48	\$387.11	\$187.84	\$187.00	\$15.62	\$390.46	\$3.21	\$0.00	\$0.14	\$3.35	0.8%	0.0%	0.0%	0.9%	13.6%

	<u>Present Rates Effective</u> <u>November 1, 2017</u>		<u>Present Rates with PST</u> <u>Year 1</u>	
Customer Charge	\$10.00	(1)	\$11.63	(2)
RE Growth Factor	\$1.26		\$1.26	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.02838		\$0.02838	
Base Distribution Charge	kWh x \$0.03253		\$0.03253	
Other Distribution Energy Charges	kWh x \$0.00639	(3)	\$0.00718	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

(1) Present Rate

(2) Present Rate + \$1.63 for Year 1 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00119)

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 1 Factor of \$0.00079

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Present Rates with PST Year 1					Increase (Decrease)							
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		\$				% of Total Bill			
											Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$442.50	\$374.00	\$34.02	\$850.52		\$447.77	\$374.00	\$34.24	\$856.01		\$5.27	\$0.00	\$0.22	\$5.49	0.6%	0.0%	0.0%	0.6%
50 10,000	\$967.56	\$935.00	\$79.27	\$1,981.83		\$976.31	\$935.00	\$79.64	\$1,990.95		\$8.75	\$0.00	\$0.37	\$9.12	0.4%	0.0%	0.0%	0.5%
100 20,000	\$1,842.66	\$1,870.00	\$154.69	\$3,867.35		\$1,857.21	\$1,870.00	\$155.30	\$3,882.51		\$14.55	\$0.00	\$0.61	\$15.16	0.4%	0.0%	0.0%	0.4%
150 30,000	\$2,717.76	\$2,805.00	\$230.12	\$5,752.88		\$2,738.11	\$2,805.00	\$230.96	\$5,774.07		\$20.35	\$0.00	\$0.84	\$21.19	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$135.00	(1)	\$137.95	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00402	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.95 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Present Rates with PST Year 1					Increase (Decrease)							
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		\$				% of Total Bill			
											Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 6,000	\$518.62	\$561.00	\$44.98	\$1,124.60		\$525.05	\$561.00	\$45.25	\$1,131.30		\$6.43	\$0.00	\$0.27	\$6.70	0.6%	0.0%	0.0%	0.6%
50 15,000	\$1,157.86	\$1,402.50	\$106.68	\$2,667.04		\$1,169.51	\$1,402.50	\$107.17	\$2,679.18		\$11.65	\$0.00	\$0.49	\$12.14	0.4%	0.0%	0.0%	0.5%
100 30,000	\$2,223.26	\$2,805.00	\$209.51	\$5,237.77		\$2,243.61	\$2,805.00	\$210.36	\$5,258.97		\$20.35	\$0.00	\$0.85	\$21.20	0.4%	0.0%	0.0%	0.4%
150 45,000	\$3,288.66	\$4,207.50	\$312.34	\$7,808.50		\$3,317.71	\$4,207.50	\$313.55	\$7,838.76		\$29.05	\$0.00	\$1.21	\$30.26	0.4%	0.0%	0.0%	0.4%

	<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
	<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge	\$135.00	(1)	\$137.95	(2)
RE Growth Factor	\$11.85		\$11.85	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.37		\$4.37	
Transmission Energy Charge	kWh x \$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x \$4.85		\$4.85	
CapEx Factor	kW x \$0.67		\$0.67	
Base Distribution Energy Charge	kWh x \$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x \$0.00344	(3)	\$0.00402	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.95 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW	kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	8,000	\$594.74	\$748.00	\$55.95	\$1,398.69	\$602.33	\$748.00	\$56.26	\$1,406.59	\$7.59	\$0.00	\$0.31	\$7.90	0.5%	0.0%	0.0%	0.6%
50	20,000	\$1,348.16	\$1,870.00	\$134.09	\$3,352.25	\$1,362.71	\$1,870.00	\$134.70	\$3,367.41	\$14.55	\$0.00	\$0.61	\$15.16	0.4%	0.0%	0.0%	0.5%
100	40,000	\$2,603.86	\$3,740.00	\$264.33	\$6,608.19	\$2,630.01	\$3,740.00	\$265.42	\$6,635.43	\$26.15	\$0.00	\$1.09	\$27.24	0.4%	0.0%	0.0%	0.4%
150	60,000	\$3,859.56	\$5,610.00	\$394.57	\$9,864.13	\$3,897.31	\$5,610.00	\$396.14	\$9,903.45	\$37.75	\$0.00	\$1.57	\$39.32	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective</u>		<u>Present Rates with PST Year</u>	
		<u>November 1, 2017</u>		<u>1</u>	
Customer Charge		\$135.00	(1)	\$137.95	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00402	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.95 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	10,000	\$670.86	\$935.00	\$66.91	\$1,672.77	\$679.61	\$935.00	\$67.28	\$1,681.89	\$8.75	\$0.00	\$0.37	\$9.12	0.5%	0.0%	0.0%	0.5%
50	25,000	\$1,538.46	\$2,337.50	\$161.50	\$4,037.46	\$1,555.91	\$2,337.50	\$162.23	\$4,055.64	\$17.45	\$0.00	\$0.73	\$18.18	0.4%	0.0%	0.0%	0.5%
100	50,000	\$2,984.46	\$4,675.00	\$319.14	\$7,978.60	\$3,016.41	\$4,675.00	\$320.48	\$8,011.89	\$31.95	\$0.00	\$1.34	\$33.29	0.4%	0.0%	0.0%	0.4%
150	75,000	\$4,430.46	\$7,012.50	\$476.79	\$11,919.75	\$4,476.91	\$7,012.50	\$478.73	\$11,968.14	\$46.45	\$0.00	\$1.94	\$48.39	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$135.00	(1)	\$137.95	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00402	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.95 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	12,000	\$746.98	\$1,122.00	\$77.87	\$1,946.85	\$756.89	\$1,122.00	\$78.29	\$1,957.18	\$9.91	\$0.00	\$0.42	\$10.33	0.5%	0.0%	0.0%	0.5%
50	30,000	\$1,728.76	\$2,805.00	\$188.91	\$4,722.67	\$1,749.11	\$2,805.00	\$189.75	\$4,743.86	\$20.35	\$0.00	\$0.84	\$21.19	0.4%	0.0%	0.0%	0.4%
100	60,000	\$3,365.06	\$5,610.00	\$373.96	\$9,349.02	\$3,402.81	\$5,610.00	\$375.53	\$9,388.34	\$37.75	\$0.00	\$1.57	\$39.32	0.4%	0.0%	0.0%	0.4%
150	90,000	\$5,001.36	\$8,415.00	\$559.02	\$13,975.38	\$5,056.51	\$8,415.00	\$561.31	\$14,032.82	\$55.15	\$0.00	\$2.29	\$57.44	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective</u> <u>November 1, 2017</u>		<u>Present Rates with PST</u> <u>Year 1</u>	
Customer Charge		\$135.00	(1)	\$137.95	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00344	(3)	\$0.00402	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate
(2) Present Rate + \$2.95 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001) and Capex Recon Factor (\$0.00098)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	40,000	\$3,419.07	\$2,576.00	\$249.79	\$6,244.86	\$3,441.87	\$2,576.00	\$250.74	\$6,268.61	\$22.80	\$0.00	\$0.95	\$23.75	0.4%	0.0%	0.0%	0.4%
750	150,000	\$12,737.17	\$9,660.00	\$933.22	\$23,330.39	\$12,805.07	\$9,660.00	\$936.04	\$23,401.11	\$67.90	\$0.00	\$2.82	\$70.72	0.3%	0.0%	0.0%	0.3%
1,000	200,000	\$16,972.67	\$12,880.00	\$1,243.86	\$31,096.53	\$17,061.07	\$12,880.00	\$1,247.54	\$31,188.61	\$88.40	\$0.00	\$3.68	\$92.08	0.3%	0.0%	0.0%	0.3%
1,500	300,000	\$25,443.67	\$19,320.00	\$1,865.15	\$46,628.82	\$25,573.07	\$19,320.00	\$1,870.54	\$46,763.61	\$129.40	\$0.00	\$5.39	\$134.79	0.3%	0.0%	0.0%	0.3%
2,500	500,000	\$42,385.67	\$32,200.00	\$3,107.74	\$77,693.41	\$42,597.07	\$32,200.00	\$3,116.54	\$77,913.61	\$211.40	\$0.00	\$8.80	\$220.20	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u> November 1, 2017		<u>Present Rates with PST</u> Year 1	
Customer Charge		\$825.00	(1)	\$831.40	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00349	(3)	\$0.00390	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$6.40 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 60,000	\$4,203.27	\$3,864.00	\$336.14	\$8,403.41	\$4,234.27	\$3,864.00	\$337.43	\$8,435.70	\$31.00	\$0.00	\$1.29	\$32.29	0.4%	0.0%	0.0%	0.4%
750 225,000	\$15,677.92	\$14,490.00	\$1,257.00	\$31,424.92	\$15,776.57	\$14,490.00	\$1,261.11	\$31,527.68	\$98.65	\$0.00	\$4.11	\$102.76	0.3%	0.0%	0.0%	0.3%
1,000 300,000	\$20,893.67	\$19,320.00	\$1,675.57	\$41,889.24	\$21,023.07	\$19,320.00	\$1,680.96	\$42,024.03	\$129.40	\$0.00	\$5.39	\$134.79	0.3%	0.0%	0.0%	0.3%
1,500 450,000	\$31,325.17	\$28,980.00	\$2,512.72	\$62,817.89	\$31,516.07	\$28,980.00	\$2,520.67	\$63,016.74	\$190.90	\$0.00	\$7.95	\$198.85	0.3%	0.0%	0.0%	0.3%
2,500 750,000	\$52,188.17	\$48,300.00	\$4,187.01	\$104,675.18	\$52,502.07	\$48,300.00	\$4,200.09	\$105,002.16	\$313.90	\$0.00	\$13.08	\$326.98	0.3%	0.0%	0.0%	0.3%

	<u>Present Rates Effective</u> <u>November 1, 2017</u>		<u>Present Rates with PST</u> <u>Year 1</u>	
Customer Charge	\$825.00	(1)	\$831.40	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		\$4.69	
Transmission Energy Charge	kWh x \$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		\$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	\$0.00390	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$6.40 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective November 1, 2017				Present Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	\$4,987.47	\$5,152.00	\$422.48	\$10,561.95	\$5,026.67	\$5,152.00	\$424.11	\$10,602.78	\$39.20	\$0.00	\$1.63	\$40.83	0.4%	0.0%	0.0%	0.4%
750	300,000	\$18,618.67	\$19,320.00	\$1,580.78	\$39,519.45	\$18,748.07	\$19,320.00	\$1,586.17	\$39,654.24	\$129.40	\$0.00	\$5.39	\$134.79	0.3%	0.0%	0.0%	0.3%
1,000	400,000	\$24,814.67	\$25,760.00	\$2,107.28	\$52,681.95	\$24,985.07	\$25,760.00	\$2,114.38	\$52,859.45	\$170.40	\$0.00	\$7.10	\$177.50	0.3%	0.0%	0.0%	0.3%
1,500	600,000	\$37,206.67	\$38,640.00	\$3,160.28	\$79,006.95	\$37,459.07	\$38,640.00	\$3,170.79	\$79,269.86	\$252.40	\$0.00	\$10.51	\$262.91	0.3%	0.0%	0.0%	0.3%
2,500	1,000,000	\$61,990.67	\$64,400.00	\$5,266.28	\$131,656.95	\$62,407.07	\$64,400.00	\$5,283.63	\$132,090.70	\$416.40	\$0.00	\$17.35	\$433.75	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge		\$825.00	(1)	\$831.40	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00349	(3)	\$0.00390	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$6.40 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Present Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 100,000	\$5,771.67	\$6,440.00	\$508.82	\$12,720.49		\$5,819.07	\$6,440.00	\$510.79	\$12,769.86	\$47.40	\$0.00	\$1.97	\$49.37	0.4%	0.0%	0.0%	0.4%
750 375,000	\$21,559.42	\$24,150.00	\$1,904.56	\$47,613.98		\$21,719.57	\$24,150.00	\$1,911.23	\$47,780.80	\$160.15	\$0.00	\$6.67	\$166.82	0.3%	0.0%	0.0%	0.4%
1,000 500,000	\$28,735.67	\$32,200.00	\$2,538.99	\$63,474.66		\$28,947.07	\$32,200.00	\$2,547.79	\$63,694.86	\$211.40	\$0.00	\$8.80	\$220.20	0.3%	0.0%	0.0%	0.3%
1,500 750,000	\$43,088.17	\$48,300.00	\$3,807.84	\$95,196.01		\$43,402.07	\$48,300.00	\$3,820.92	\$95,522.99	\$313.90	\$0.00	\$13.08	\$326.98	0.3%	0.0%	0.0%	0.3%
2,500 1,250,000	\$71,793.17	\$80,500.00	\$6,345.55	\$158,638.72		\$72,312.07	\$80,500.00	\$6,367.17	\$159,179.24	\$518.90	\$0.00	\$21.62	\$540.52	0.3%	0.0%	0.0%	0.3%

	<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
	<u>November 1, 2017</u>		<u>Year 1</u>	
Customer Charge	\$825.00	(1)	\$831.40	(2)
RE Growth Factor	\$86.86		\$86.86	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.69		kW x \$4.69	
Transmission Energy Charge	kWh x \$0.01123		kWh x \$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x \$3.70		kW x \$3.70	
CapEx Factor - > 200 kW	kW x \$0.71		kW x \$0.71	
Base Distribution Energy Charge	kWh x \$0.00551		kWh x \$0.00551	
Other Distribution Energy Charges	kWh x \$0.00349	(3)	kWh x \$0.00390	(4)
Transition Energy Charge	kWh x \$0.00057		kWh x \$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		kWh x \$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		kWh x \$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.06440		kWh x \$0.06440	

- (1) Present Rate
(2) Present Rate + \$6.40 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2020 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective November 1, 2017					Present Rates with PST Year 1				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 120,000	\$6,555.87	\$7,728.00	\$595.16	\$14,879.03		\$6,611.47	\$7,728.00	\$597.48	\$14,936.95	\$55.60	\$0.00	\$2.32	\$57.92	0.4%	0.0%	0.0%	0.4%
750 450,000	\$24,500.17	\$28,980.00	\$2,228.34	\$55,708.51		\$24,691.07	\$28,980.00	\$2,236.29	\$55,907.36	\$190.90	\$0.00	\$7.95	\$198.85	0.3%	0.0%	0.0%	0.4%
1,000 600,000	\$32,656.67	\$38,640.00	\$2,970.69	\$74,267.36		\$32,909.07	\$38,640.00	\$2,981.21	\$74,530.28	\$252.40	\$0.00	\$10.52	\$262.92	0.3%	0.0%	0.0%	0.4%
1,500 900,000	\$48,969.67	\$57,960.00	\$4,455.40	\$111,385.07		\$49,345.07	\$57,960.00	\$4,471.04	\$111,776.11	\$375.40	\$0.00	\$15.64	\$391.04	0.3%	0.0%	0.0%	0.4%
2,500 1,500,000	\$81,595.67	\$96,600.00	\$7,424.82	\$185,620.49		\$82,217.07	\$96,600.00	\$7,450.71	\$186,267.78	\$621.40	\$0.00	\$25.89	\$647.29	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u> November 1, 2017		<u>Present Rates with PST</u> Year 1	
Customer Charge		\$825.00	(1)	\$831.40	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00349	(3)	\$0.00390	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate
(2) Present Rate + \$6.40 for Year 1 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), and Capex Recon Factor (\$0.00050)
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

The Narragansett Electric Company
Streetlights Annual Bill Impacts
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

Line	Luminaire/ Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Current Annual Revenue	Current Lum / Std Price	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$154.59	\$77.43	\$155.46	\$0.87	0.6%
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$222.81	\$77.43	\$224.51	\$1.69	0.8%
3	Mercury Vapor	LUM MV RWY 100W	543	\$78.06	\$4.68	\$171.58	\$78.06	\$172.65	\$1.07	0.6%
4		LUM MV RWY 175W	881	\$78.06	\$4.68	\$226.88	\$78.06	\$228.62	\$1.74	0.8%
5		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$334.82	\$120.39	\$337.34	\$2.53	0.8%
6		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$493.89	\$163.46	\$497.81	\$3.92	0.8%
7		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$916.16	\$163.46	\$925.17	\$9.01	1.0%
8		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$511.80	\$181.37	\$515.72	\$3.92	0.8%
9		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$934.07	\$181.37	\$943.08	\$9.01	1.0%
10	High Pressure Sodium Vapor Fixtures	LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$305.62	\$156.80	\$307.36	\$1.74	0.6%
11		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$123.83	\$77.43	\$124.33	\$0.50	0.4%
12		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$140.33	\$76.91	\$141.03	\$0.71	0.5%
13		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$163.40	\$78.06	\$164.37	\$0.97	0.6%
14		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$201.39	\$78.58	\$202.81	\$1.42	0.7%
15		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$332.69	\$120.39	\$335.19	\$2.50	0.8%
16		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$489.14	\$163.46	\$493.01	\$3.87	0.8%
17		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$612.58	\$172.21	\$617.83	\$5.25	0.9%
18		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$358.41	\$146.11	\$360.91	\$2.50	0.7%
19		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$621.74	\$181.37	\$626.99	\$5.25	0.8%
20	Metal Halide	LUM HPS POST 50W	255	\$155.49	\$4.68	\$201.89	\$155.49	\$202.39	\$0.50	0.2%
21		LUM HPS POST 100W	493	\$156.80	\$4.68	\$242.14	\$156.80	\$243.11	\$0.97	0.4%
22		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$184.33	\$98.99	\$185.30	\$0.97	0.5%
23	Light Emitting Diode	LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$494.13	\$181.37	\$497.84	\$3.71	0.8%
24		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$922.62	\$181.37	\$931.49	\$8.87	1.0%
25		LED RWY 20W	88	\$90.61	\$4.68	\$109.69	\$90.61	\$109.86	\$0.17	0.2%
26		LED RWY 30W	130	\$89.77	\$4.68	\$115.72	\$89.77	\$115.98	\$0.26	0.2%
27		LED RWY 60W	255	\$99.15	\$4.68	\$145.55	\$99.15	\$146.05	\$0.50	0.3%
28	Temporary Turn-Off	LED RWY 140W	589	\$155.03	\$4.68	\$256.08	\$155.03	\$257.24	\$1.16	0.5%
29		LED RWY 275W	1,153	\$198.27	\$4.68	\$391.59	\$198.27	\$393.86	\$2.27	0.6%
30		LED POST Top 60W	255	\$147.69	\$4.68	\$194.09	\$147.69	\$194.59	\$0.50	0.3%
31		LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
32		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
33		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
34		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-
35		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-
36		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-
37		LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
38	Standards	LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-
39		LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-
40		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
41		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
42	S-06 (Decorative) Luminaire	POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-
43		POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-
44		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-
45		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-
46		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-
47	S-06 Standards	POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-
48		DEC HPS WL 100W	493	\$325.30	\$4.68	\$410.64	\$325.30	\$411.61	\$0.97	0.3%
49	S-5 Energy Rate	DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-
50		DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-
51	S-5 Energy Rate	Includes all rate components				\$0.19015		\$0.19212	\$0.00197	1.0%
52										

Column Description:

- (a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3
- (d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12
- (e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017)
- Column (b) x per kWh rate + Column (c) + Column (d)
- (f) Column (c)
- (h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 1 PST factor of \$0.00197
- (i) Column (h) / Column (c)

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$21.51	\$14.27	\$1.49	\$37.27	\$22.27	\$14.27	\$1.52	\$38.06	\$0.76	\$0.00	\$0.03	\$0.79	2.0%	0.0%	0.1%	2.1%	30.1%
300	\$35.70	\$28.55	\$2.68	\$66.93	\$36.56	\$28.55	\$2.71	\$67.82	\$0.86	\$0.00	\$0.03	\$0.89	1.3%	0.0%	0.0%	1.3%	12.9%
400	\$45.16	\$38.06	\$3.47	\$86.69	\$46.08	\$38.06	\$3.51	\$87.65	\$0.92	\$0.00	\$0.04	\$0.96	1.1%	0.0%	0.0%	1.1%	11.6%
500	\$54.63	\$47.58	\$4.26	\$106.47	\$55.61	\$47.58	\$4.30	\$107.49	\$0.98	\$0.00	\$0.04	\$1.02	0.9%	0.0%	0.0%	1.0%	9.6%
600	\$64.09	\$57.09	\$5.05	\$126.23	\$65.13	\$57.09	\$5.09	\$127.31	\$1.04	\$0.00	\$0.04	\$1.08	0.8%	0.0%	0.0%	0.9%	7.7%
700	\$73.55	\$66.61	\$5.84	\$146.00	\$74.66	\$66.61	\$5.89	\$147.16	\$1.11	\$0.00	\$0.05	\$1.16	0.8%	0.0%	0.0%	0.8%	19.0%
1,200	\$120.85	\$114.18	\$9.79	\$244.82	\$122.28	\$114.18	\$9.85	\$246.31	\$1.43	\$0.00	\$0.06	\$1.49	0.6%	0.0%	0.0%	0.6%	6.8%
2,000	\$196.54	\$190.30	\$16.12	\$402.96	\$198.48	\$190.30	\$16.20	\$404.98	\$1.94	\$0.00	\$0.08	\$2.02	0.5%	0.0%	0.0%	0.5%	2.3%

	<u>Present Rates Effective Nov. 1, 2017 with PST Year 1</u>		<u>Present Rates with PST Year 2</u>	
Customer Charge	\$5.73	(1)	\$6.39	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge kWh x	\$0.03179		\$0.03179	
Base Distribution Energy Charge kWh x	\$0.03664		\$0.03664	
Other Distribution Energy Charges kWh x	\$0.00720	(3)	\$0.00784	(4)
Transition Energy Charge kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge kWh x	\$0.09515		\$0.09515	

(1) Present Rate + \$0.73 for Year 1 of PST

(2) Present Rate + \$1.39 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00084

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00148

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 2

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1						Present Rates with PST Year 2						Increase (Decrease)								Percentage of Customers
	Discounted Delivery SOS Discount Total GET Total						Discounted Delivery SOS Discount Total GET Total						\$				% of Total Bill				
													Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
	Delivery	SOS	Discount	Total	GET	Total	Delivery	SOS	Discount	Total	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$14.49	\$14.27	\$0.00	\$28.76	\$1.20	\$29.96	\$15.25	\$14.27	\$0.00	\$29.52	\$1.23	\$30.75	\$0.76	\$0.00	\$0.03	\$0.79	2.5%	0.0%	0.1%	2.6%	32.1%
300	\$26.66	\$28.55	\$0.00	\$55.21	\$2.30	\$57.51	\$27.51	\$28.55	\$0.00	\$56.06	\$2.34	\$58.40	\$0.85	\$0.00	\$0.04	\$0.89	1.5%	0.0%	0.1%	1.5%	15.4%
400	\$34.78	\$38.06	\$0.00	\$72.84	\$3.04	\$75.88	\$35.69	\$38.06	\$0.00	\$73.75	\$3.07	\$76.82	\$0.91	\$0.00	\$0.03	\$0.94	1.2%	0.0%	0.0%	1.2%	12.5%
500	\$42.89	\$47.58	\$0.00	\$90.47	\$3.77	\$94.24	\$43.87	\$47.58	\$0.00	\$91.45	\$3.81	\$95.26	\$0.98	\$0.00	\$0.04	\$1.02	1.0%	0.0%	0.0%	1.1%	9.6%
600	\$51.00	\$57.09	\$0.00	\$108.09	\$4.50	\$112.59	\$52.05	\$57.09	\$0.00	\$109.14	\$4.55	\$113.69	\$1.05	\$0.00	\$0.05	\$1.10	0.9%	0.0%	0.0%	1.0%	7.2%
700	\$59.12	\$66.61	\$0.00	\$125.73	\$5.24	\$130.97	\$60.23	\$66.61	\$0.00	\$126.84	\$5.29	\$132.13	\$1.11	\$0.00	\$0.05	\$1.16	0.8%	0.0%	0.0%	0.9%	16.4%
1,200	\$99.69	\$114.18	\$0.00	\$213.87	\$8.91	\$222.78	\$101.12	\$114.18	\$0.00	\$215.30	\$8.97	\$224.27	\$1.43	\$0.00	\$0.06	\$1.49	0.6%	0.0%	0.0%	0.7%	5.2%
2,000	\$164.60	\$190.30	\$0.00	\$354.90	\$14.79	\$369.69	\$166.54	\$190.30	\$0.00	\$356.84	\$14.87	\$371.71	\$1.94	\$0.00	\$0.08	\$2.02	0.5%	0.0%	0.0%	0.5%	1.6%

	<u>Present Rates Effective Nov. 1, 2017 with PST Year 1</u>		<u>Present Rates with PST Year 2</u>	
Customer Charge	\$0.73	(1)	\$1.39	(2)
RE Growth Factor	\$0.78		\$0.78	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.03179		\$0.03179	
Base Distribution Energy Charge	kWh x \$0.02317		\$0.02317	
Other Distribution Energy Charges	kWh x \$0.00720	(3)	\$0.00784	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Low Income Discount	0%		0%	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09515		\$0.09515	

(1) Present Rate + \$0.73 for Year 1 of PST

(2) Present Rate + \$1.39 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 1 Factor of \$0.00084

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00148

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)								Percentage of Customers
									\$				% of Total Bill				
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$35.47	\$23.38	\$2.45	\$61.30	\$37.66	\$23.38	\$2.54	\$63.58	\$2.19	\$0.00	\$0.09	\$2.28	3.6%	0.0%	0.1%	3.7%	56.3%
500	\$57.24	\$46.75	\$4.33	\$108.32	\$59.58	\$46.75	\$4.43	\$110.76	\$2.34	\$0.00	\$0.10	\$2.44	2.2%	0.0%	0.1%	2.3%	16.9%
1,000	\$100.77	\$93.50	\$8.09	\$202.36	\$103.41	\$93.50	\$8.20	\$205.11	\$2.64	\$0.00	\$0.11	\$2.75	1.3%	0.0%	0.1%	1.4%	8.1%
1,500	\$144.31	\$140.25	\$11.86	\$296.42	\$147.25	\$140.25	\$11.98	\$299.48	\$2.94	\$0.00	\$0.12	\$3.06	1.0%	0.0%	0.0%	1.0%	5.0%
2,000	\$187.84	\$187.00	\$15.62	\$390.46	\$191.08	\$187.00	\$15.75	\$393.83	\$3.24	\$0.00	\$0.13	\$3.37	0.8%	0.0%	0.0%	0.9%	13.6%

		<u>Present Rates Effective Nov. 1, 2017 with PST Year 1</u>		<u>Present Rates with PST Year 2</u>	
Customer Charge		\$11.63	(1)	\$13.67	(2)
RE Growth Factor		\$1.26		\$1.26	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Energy Charge	kWh x	\$0.02838		\$0.02838	
Base Distribution Charge	kWh x	\$0.03253		\$0.03253	
Other Distribution Energy Charges	kWh x	\$0.00718	(3)	\$0.00778	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$1.63 for Year 1 of PST

(2) Present Rate + \$3.67 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 1 Factor of \$0.00079

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 2 Factor of \$0.00139

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1					Present Rates with PST Year 2					Increase (Decrease)							
											\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$447.77	\$374.00	\$34.24	\$856.01		\$453.61	\$374.00	\$34.48	\$862.09		\$5.84	\$0.00	\$0.24	\$6.08	0.7%	0.0%	0.0%	0.7%
50 10,000	\$976.31	\$935.00	\$79.64	\$1,990.95		\$984.85	\$935.00	\$79.99	\$1,999.84		\$8.54	\$0.00	\$0.35	\$8.89	0.4%	0.0%	0.0%	0.4%
100 20,000	\$1,857.21	\$1,870.00	\$155.30	\$3,882.51		\$1,870.25	\$1,870.00	\$155.84	\$3,896.09		\$13.04	\$0.00	\$0.54	\$13.58	0.3%	0.0%	0.0%	0.3%
150 30,000	\$2,738.11	\$2,805.00	\$230.96	\$5,774.07		\$2,755.65	\$2,805.00	\$231.69	\$5,792.34		\$17.54	\$0.00	\$0.73	\$18.27	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov.</u>		<u>Present Rates with PST</u>	
Customer Charge		\$137.95	(1)	\$141.99	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00402	(3)	\$0.00447	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$2.95 for Year 1 of PST

(2) Present Rate + \$6.99 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery SOS GET Total				Delivery SOS GET Total			
20	6,000	\$525.05	\$561.00	\$45.25	\$1,131.30	\$531.79	\$561.00	\$45.53	\$1,138.32	\$6.74	\$0.00	\$0.28	\$7.02	0.6%	0.0%	0.0%	0.6%
50	15,000	\$1,169.51	\$1,402.50	\$107.17	\$2,679.18	\$1,180.30	\$1,402.50	\$107.62	\$2,690.42	\$10.79	\$0.00	\$0.45	\$11.24	0.4%	0.0%	0.0%	0.4%
100	30,000	\$2,243.61	\$2,805.00	\$210.36	\$5,258.97	\$2,261.15	\$2,805.00	\$211.09	\$5,277.24	\$17.54	\$0.00	\$0.73	\$18.27	0.3%	0.0%	0.0%	0.3%
150	45,000	\$3,317.71	\$4,207.50	\$313.55	\$7,838.76	\$3,342.00	\$4,207.50	\$314.56	\$7,864.06	\$24.29	\$0.00	\$1.01	\$25.30	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov. 1, 2017 with PST Year 1</u>	<u>Present Rates with PST Year 2</u>
Customer Charge		\$137.95 (1)	\$141.99 (2)
RE Growth Factor		\$11.85	\$11.85
LIHEAP Charge		\$0.81	\$0.81
Transmission Demand Charge	kW x	\$4.37	\$4.37
Transmission Energy Charge	kWh x	\$0.01096	\$0.01096
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85	\$4.85
CapEx Factor	kW x	\$0.67	\$0.67
Base Distribution Energy Charge	kWh x	\$0.00468	\$0.00468
Other Distribution Energy Charges	kWh x	\$0.00402 (3)	\$0.00447 (4)
Transition Energy Charge	kWh x	\$0.00057	\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154	\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687	\$0.00687
Gross Earnings Tax		4%	4%
Standard Offer Charge	kWh x	\$0.09350	\$0.09350

(1) Present Rate + \$2.95 for Year 1 of PST

(2) Present Rate + \$6.99 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery SOS GET Total				Delivery SOS GET Total			
20	8,000	\$602.33	\$748.00	\$56.26	\$1,406.59	\$609.97	\$748.00	\$56.58	\$1,414.55	\$7.64	\$0.00	\$0.32	\$7.96	0.5%	0.0%	0.0%	0.6%
50	20,000	\$1,362.71	\$1,870.00	\$134.70	\$3,367.41	\$1,375.75	\$1,870.00	\$135.24	\$3,380.99	\$13.04	\$0.00	\$0.54	\$13.58	0.4%	0.0%	0.0%	0.4%
100	40,000	\$2,630.01	\$3,740.00	\$265.42	\$6,635.43	\$2,652.05	\$3,740.00	\$266.34	\$6,658.39	\$22.04	\$0.00	\$0.92	\$22.96	0.3%	0.0%	0.0%	0.3%
150	60,000	\$3,897.31	\$5,610.00	\$396.14	\$9,903.45	\$3,928.35	\$5,610.00	\$397.43	\$9,935.78	\$31.04	\$0.00	\$1.29	\$32.33	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov.</u>		<u>Present Rates with PST</u>	
		<u>1, 2017 with PST Year 1</u>		<u>Year 2</u>	
Customer Charge		\$137.95	(1)	\$141.99	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00402	(3)	\$0.00447	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rate + \$2.95 for Year 1 of PST
(2) Present Rate + \$6.99 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1					Present Rates with PST Year 2					Increase (Decrease)							
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		\$				% of Total Bill			
											Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 10,000	\$679.61	\$935.00	\$67.28	\$1,681.89		\$688.15	\$935.00	\$67.63	\$1,690.78		\$8.54	\$0.00	\$0.35	\$8.89	0.5%	0.0%	0.0%	0.5%
50 25,000	\$1,555.91	\$2,337.50	\$162.23	\$4,055.64		\$1,571.20	\$2,337.50	\$162.86	\$4,071.56		\$15.29	\$0.00	\$0.63	\$15.92	0.4%	0.0%	0.0%	0.4%
100 50,000	\$3,016.41	\$4,675.00	\$320.48	\$8,011.89		\$3,042.95	\$4,675.00	\$321.58	\$8,039.53		\$26.54	\$0.00	\$1.10	\$27.64	0.3%	0.0%	0.0%	0.3%
150 75,000	\$4,476.91	\$7,012.50	\$478.73	\$11,968.14		\$4,514.70	\$7,012.50	\$480.30	\$12,007.50		\$37.79	\$0.00	\$1.57	\$39.36	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov.</u>		<u>Present Rates with PST</u>	
		<u>1, 2017 with PST Year 1</u>		<u>Year 2</u>	
Customer Charge		\$137.95	(1)	\$141.99	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00402	(3)	\$0.00447	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$2.95 for Year 1 of PST

(2) Present Rate + \$6.99 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery SOS GET Total				Delivery SOS GET Total			
20	12,000	\$756.89	\$1,122.00	\$78.29	\$1,957.18	\$766.33	\$1,122.00	\$78.68	\$1,967.01	\$9.44	\$0.00	\$0.39	\$9.83	0.5%	0.0%	0.0%	0.5%
50	30,000	\$1,749.11	\$2,805.00	\$189.75	\$4,743.86	\$1,766.65	\$2,805.00	\$190.49	\$4,762.14	\$17.54	\$0.00	\$0.74	\$18.28	0.4%	0.0%	0.0%	0.4%
100	60,000	\$3,402.81	\$5,610.00	\$375.53	\$9,388.34	\$3,433.85	\$5,610.00	\$376.83	\$9,420.68	\$31.04	\$0.00	\$1.30	\$32.34	0.3%	0.0%	0.0%	0.3%
150	90,000	\$5,056.51	\$8,415.00	\$561.31	\$14,032.82	\$5,101.05	\$8,415.00	\$563.17	\$14,079.22	\$44.54	\$0.00	\$1.86	\$46.40	0.3%	0.0%	0.0%	0.3%

		Present Rates Effective Nov. 1, 2017 with PST Year 1		Present Rates with PST Year 2	
Customer Charge		\$137.95	(1)	\$141.99	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00402	(3)	\$0.00447	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

(1) Present Rate + \$2.95 for Year 1 of PST

(2) Present Rate + \$6.99 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 1 Factor of \$0.00058

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW	kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	40,000	\$3,441.87	\$2,576.00	\$250.74	\$6,268.61	\$3,463.89	\$2,576.00	\$251.66	\$6,291.55	\$22.02	\$0.00	\$0.92	\$22.94	0.4%	0.0%	0.0%	0.4%
750	150,000	\$12,805.07	\$9,660.00	\$936.04	\$23,401.11	\$12,862.29	\$9,660.00	\$938.43	\$23,460.72	\$57.22	\$0.00	\$2.39	\$59.61	0.2%	0.0%	0.0%	0.3%
1,000	200,000	\$17,061.07	\$12,880.00	\$1,247.54	\$31,188.61	\$17,134.29	\$12,880.00	\$1,250.60	\$31,264.89	\$73.22	\$0.00	\$3.06	\$76.28	0.2%	0.0%	0.0%	0.2%
1,500	300,000	\$25,573.07	\$19,320.00	\$1,870.54	\$46,763.61	\$25,678.29	\$19,320.00	\$1,874.93	\$46,873.22	\$105.22	\$0.00	\$4.39	\$109.61	0.2%	0.0%	0.0%	0.2%
2,500	500,000	\$42,597.07	\$32,200.00	\$3,116.54	\$77,913.61	\$42,766.29	\$32,200.00	\$3,123.60	\$78,089.89	\$169.22	\$0.00	\$7.06	\$176.28	0.2%	0.0%	0.0%	0.2%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>Nov. 1, 2017 with PST Year</u>		<u>Year 2</u>	
		<u>1</u>			
Customer Charge		\$831.40	(1)	\$840.62	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00390	(3)	\$0.00422	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$6.40 for Year 1 of PST
(2) Present Rate + \$15.62 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	60,000	\$4,234.27	\$3,864.00	\$337.43	\$8,435.70	\$4,262.69	\$3,864.00	\$338.61	\$8,465.30	\$28.42	\$0.00	\$1.18	\$29.60	0.3%	0.0%	0.0%	0.4%
750	225,000	\$15,776.57	\$14,490.00	\$1,261.11	\$31,527.68	\$15,857.79	\$14,490.00	\$1,264.49	\$31,612.28	\$81.22	\$0.00	\$3.38	\$84.60	0.3%	0.0%	0.0%	0.3%
1,000	300,000	\$21,023.07	\$19,320.00	\$1,680.96	\$42,024.03	\$21,128.29	\$19,320.00	\$1,685.35	\$42,133.64	\$105.22	\$0.00	\$4.39	\$109.61	0.3%	0.0%	0.0%	0.3%
1,500	450,000	\$31,516.07	\$28,980.00	\$2,520.67	\$63,016.74	\$31,669.29	\$28,980.00	\$2,527.05	\$63,176.34	\$153.22	\$0.00	\$6.38	\$159.60	0.2%	0.0%	0.0%	0.3%
2,500	750,000	\$52,502.07	\$48,300.00	\$4,200.09	\$105,002.16	\$52,751.29	\$48,300.00	\$4,210.47	\$105,261.76	\$249.22	\$0.00	\$10.38	\$259.60	0.2%	0.0%	0.0%	0.2%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>Nov. 1, 2017 with PST Year</u>		<u>Year 2</u>	
		<u>1</u>		<u>Year 2</u>	
Customer Charge		\$831.40	(1)	\$840.62	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00390	(3)	\$0.00422	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate + \$6.40 for Year 1 of PST
(2) Present Rate + \$15.62 for Year 2 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW	kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	\$5,026.67	\$5,152.00	\$424.11	\$10,602.78	\$5,061.49	\$5,152.00	\$425.56	\$10,639.05	\$34.82	\$0.00	\$1.45	\$36.27	0.3%	0.0%	0.0%	0.3%
750	300,000	\$18,748.07	\$19,320.00	\$1,586.17	\$39,654.24	\$18,853.29	\$19,320.00	\$1,590.55	\$39,763.84	\$105.22	\$0.00	\$4.38	\$109.60	0.3%	0.0%	0.0%	0.3%
1,000	400,000	\$24,985.07	\$25,760.00	\$2,114.38	\$52,859.45	\$25,122.29	\$25,760.00	\$2,120.10	\$53,002.39	\$137.22	\$0.00	\$5.72	\$142.94	0.3%	0.0%	0.0%	0.3%
1,500	600,000	\$37,459.07	\$38,640.00	\$3,170.79	\$79,269.86	\$37,660.29	\$38,640.00	\$3,179.18	\$79,479.47	\$201.22	\$0.00	\$8.39	\$209.61	0.3%	0.0%	0.0%	0.3%
2,500	1,000,000	\$62,407.07	\$64,400.00	\$5,283.63	\$132,090.70	\$62,736.29	\$64,400.00	\$5,297.35	\$132,433.64	\$329.22	\$0.00	\$13.72	\$342.94	0.2%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST Year</u>	
		<u>Nov. 1, 2017 with PST</u>		<u>2</u>	
		<u>Year 1</u>			
Customer Charge		\$831.40	(1)	\$840.62	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00390	(3)	\$0.00422	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate + \$6.40 for Year 1 of PST

(2) Present Rate + \$15.62 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1				Present Rates with PST Year 2				Increase (Decrease)							
									\$				% of Total Bill			
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 100,000	\$5,819.07	\$6,440.00	\$510.79	\$12,769.86	\$5,860.29	\$6,440.00	\$512.51	\$12,812.80	\$41.22	\$0.00	\$1.72	\$42.94	0.3%	0.0%	0.0%	0.3%
750 375,000	\$21,719.57	\$24,150.00	\$1,911.23	\$47,780.80	\$21,848.79	\$24,150.00	\$1,916.62	\$47,915.41	\$129.22	\$0.00	\$5.39	\$134.61	0.3%	0.0%	0.0%	0.3%
1,000 500,000	\$28,947.07	\$32,200.00	\$2,547.79	\$63,694.86	\$29,116.29	\$32,200.00	\$2,554.85	\$63,871.14	\$169.22	\$0.00	\$7.06	\$176.28	0.3%	0.0%	0.0%	0.3%
1,500 750,000	\$43,402.07	\$48,300.00	\$3,820.92	\$95,522.99	\$43,651.29	\$48,300.00	\$3,831.30	\$95,782.59	\$249.22	\$0.00	\$10.38	\$259.60	0.3%	0.0%	0.0%	0.3%
2,500 1,250,000	\$72,312.07	\$80,500.00	\$6,367.17	\$159,179.24	\$72,721.29	\$80,500.00	\$6,384.22	\$159,605.51	\$409.22	\$0.00	\$17.05	\$426.27	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>Nov. 1, 2017 with PST</u>		<u>Year 2</u>	
		<u>Year 1</u>			
Customer Charge		\$831.40	(1)	\$840.62	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00390	(3)	\$0.00422	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate + \$6.40 for Year 1 of PST

(2) Present Rate + \$15.62 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2021 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 1					Present Rates with PST Year 2				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 120,000	\$6,611.47	\$7,728.00	\$597.48	\$14,936.95		\$6,659.09	\$7,728.00	\$599.46	\$14,986.55	\$47.62	\$0.00	\$1.98	\$49.60	0.3%	0.0%	0.0%	0.3%
750 450,000	\$24,691.07	\$28,980.00	\$2,236.29	\$55,907.36		\$24,844.29	\$28,980.00	\$2,242.68	\$56,066.97	\$153.22	\$0.00	\$6.39	\$159.61	0.3%	0.0%	0.0%	0.3%
1,000 600,000	\$32,909.07	\$38,640.00	\$2,981.21	\$74,530.28		\$33,110.29	\$38,640.00	\$2,989.60	\$74,739.89	\$201.22	\$0.00	\$8.39	\$209.61	0.3%	0.0%	0.0%	0.3%
1,500 900,000	\$49,345.07	\$57,960.00	\$4,471.04	\$111,776.11		\$49,642.29	\$57,960.00	\$4,483.43	\$112,085.72	\$297.22	\$0.00	\$12.39	\$309.61	0.3%	0.0%	0.0%	0.3%
2,500 1,500,000	\$82,217.07	\$96,600.00	\$7,450.71	\$186,267.78		\$82,706.29	\$96,600.00	\$7,471.10	\$186,777.39	\$489.22	\$0.00	\$20.39	\$509.61	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective</u>		<u>Present Rates with PST</u>	
		<u>Nov. 1, 2017 with PST</u>		<u>Year 2</u>	
		<u>Year 1</u>		<u>Year 2</u>	
Customer Charge		\$831.40	(1)	\$840.62	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00390	(3)	\$0.00422	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate + \$6.40 for Year 1 of PST

(2) Present Rate + \$15.62 for Year 2 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 1 Factor of \$0.00041

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

The Narragansett Electric Company
Streetlights Annual Bill Impacts
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

Line	Luminaire/ Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Current Annual Revenue	Current Lum / Std Price	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$155.46	\$77.43	\$156.09	\$0.62	0.4%
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$224.51	\$77.43	\$225.72	\$1.21	0.5%
3	Mercury Vapor	LUM MV RWY 100W	543	\$78.06	\$4.68	\$172.65	\$78.06	\$173.42	\$0.77	0.4%
4		LUM MV RWY 175W	881	\$78.06	\$4.68	\$228.62	\$78.06	\$229.86	\$1.24	0.5%
5		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$337.34	\$120.39	\$339.15	\$1.81	0.5%
6		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$497.81	\$163.46	\$500.62	\$2.81	0.6%
7		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$925.17	\$163.46	\$931.62	\$6.45	0.7%
8		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$515.72	\$181.37	\$518.53	\$2.81	0.5%
9		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$943.08	\$181.37	\$949.53	\$6.45	0.7%
10	High Pressure Sodium Vapor Fixtures	LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$307.36	\$156.80	\$308.60	\$1.24	0.4%
11		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$124.33	\$77.43	\$124.69	\$0.36	0.3%
12		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$141.03	\$76.91	\$141.54	\$0.51	0.4%
13		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$164.37	\$78.06	\$165.07	\$0.70	0.4%
14		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$202.81	\$78.58	\$203.83	\$1.02	0.5%
15		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$335.19	\$120.39	\$336.98	\$1.79	0.5%
16		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$493.01	\$163.46	\$495.77	\$2.77	0.6%
17		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$617.83	\$172.21	\$621.58	\$3.75	0.6%
18		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$360.91	\$146.11	\$362.70	\$1.79	0.5%
19		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$626.99	\$181.37	\$630.74	\$3.75	0.6%
20		LUM HPS POST 50W	255	\$155.49	\$4.68	\$202.39	\$155.49	\$202.75	\$0.36	0.2%
21	Metal Halide	LUM HPS POST 100W	493	\$156.80	\$4.68	\$243.11	\$156.80	\$243.81	\$0.70	0.3%
22		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$185.30	\$98.99	\$186.00	\$0.70	0.4%
23	Light Emitting Diode	LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$497.84	\$181.37	\$500.49	\$2.66	0.5%
24		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$931.49	\$181.37	\$937.84	\$6.35	0.7%
25		LED RWY 20W	88	\$90.61	\$4.68	\$109.86	\$90.61	\$109.99	\$0.12	0.1%
26		LED RWY 30W	130	\$89.77	\$4.68	\$115.98	\$89.77	\$116.16	\$0.18	0.2%
27		LED RWY 60W	255	\$99.15	\$4.68	\$146.05	\$99.15	\$146.41	\$0.36	0.2%
28		LED RWY 140W	589	\$155.03	\$4.68	\$257.24	\$155.03	\$258.07	\$0.83	0.3%
29	Temporary Turn-Off	LED RWY 275W	1,153	\$198.27	\$4.68	\$393.86	\$198.27	\$395.49	\$1.63	0.4%
30		LED POST Top 60W	255	\$147.69	\$4.68	\$194.59	\$147.69	\$194.95	\$0.36	0.2%
31		LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
32		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
33		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
34		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-
35		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-
36		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-
37		LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
38		LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-
39	Standards	LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-
40		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
41		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
42		POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-
43	S-06 (Decorative) Luminaire	POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-
44		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-
45		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-
46		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-
47		POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-
48	S-06 Standards	DEC HPS WL 100W	493	\$325.30	\$4.68	\$411.61	\$325.30	\$412.31	\$0.70	0.2%
49		DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-
50	S-5 Energy Rate	DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-
51		Includes all rate components				\$0.19212		\$0.19353	\$0.00141	0.7%

Column Description:

- (a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3
- (d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12
- (e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017) Year 1 PST factor of \$0.00197
- Column (b) x per kWh rate + Column (c) + Column (d)
- (f) Column (c)
- (h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 2 PST factor of \$0.00338
- (i) Column (h) / Column (c)

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-16 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$22.27	\$14.27	\$1.52	\$38.06	\$23.72	\$14.27	\$1.58	\$39.57	\$1.45	\$0.00	\$0.06	\$1.51	3.8%	0.0%	0.2%	4.0%	30.1%
300	\$36.56	\$28.55	\$2.71	\$67.82	\$38.11	\$28.55	\$2.78	\$69.44	\$1.55	\$0.00	\$0.07	\$1.62	2.3%	0.0%	0.1%	2.4%	12.9%
400	\$46.08	\$38.06	\$3.51	\$87.65	\$47.70	\$38.06	\$3.57	\$89.33	\$1.62	\$0.00	\$0.06	\$1.68	1.8%	0.0%	0.1%	1.9%	11.6%
500	\$55.61	\$47.58	\$4.30	\$107.49	\$57.29	\$47.58	\$4.37	\$109.24	\$1.68	\$0.00	\$0.07	\$1.75	1.6%	0.0%	0.1%	1.6%	9.6%
600	\$65.13	\$57.09	\$5.09	\$127.31	\$66.87	\$57.09	\$5.17	\$129.13	\$1.74	\$0.00	\$0.08	\$1.82	1.4%	0.0%	0.1%	1.4%	7.7%
700	\$74.66	\$66.61	\$5.89	\$147.16	\$76.46	\$66.61	\$5.96	\$149.03	\$1.80	\$0.00	\$0.07	\$1.87	1.2%	0.0%	0.0%	1.3%	19.0%
1,200	\$122.28	\$114.18	\$9.85	\$246.31	\$124.41	\$114.18	\$9.94	\$248.53	\$2.13	\$0.00	\$0.09	\$2.22	0.9%	0.0%	0.0%	0.9%	6.8%
2,000	\$198.48	\$190.30	\$16.20	\$404.98	\$201.12	\$190.30	\$16.31	\$407.73	\$2.64	\$0.00	\$0.11	\$2.75	0.7%	0.0%	0.0%	0.7%	2.3%

Present Rates Effective Nov.				Present Rates with PST			
1. 2017 with PST Year 2				Year 3			
Customer Charge		\$6.39	(1)		\$7.75	(2)	
RE Growth Factor		\$0.78			\$0.78		
LIHEAP Charge		\$0.81			\$0.81		
Transmission Energy Charge	kWh x	\$0.03179			\$0.03179		
Base Distribution Energy Charge	kWh x	\$0.03664			\$0.03664		
Other Distribution Energy Charges	kWh x	\$0.00784	(3)		\$0.00848	(4)	
Transition Energy Charge	kWh x	\$0.00057			\$0.00057		
Energy Efficiency Program Charge	kWh x	\$0.01154			\$0.01154		
Renewable Energy Distribution Charge	kWh x	\$0.00687			\$0.00687		
Gross Earnings Tax		4%			4%		
Standard Offer Charge	kWh x	\$0.09515			\$0.09515		

(1) Present Rate + \$1.39 for Year 2 of PST

(2) Present Rate + \$2.75 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00148

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 3 Factor of \$0.00212

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to A-60 Rate Customers, Year 3

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2						Present Rates with PST Year 3						Increase (Decrease)								Percentage of Customers
	Discounted						Discounted						\$				% of Total Bill				
													Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
150	\$15.25	\$14.27	\$0.00	\$29.52	\$1.23	\$30.75	\$16.70	\$14.27	\$0.00	\$30.97	\$1.29	\$32.26	\$1.45	\$0.00	\$0.06	\$1.51	4.7%	0.0%	0.2%	4.9%	32.1%
300	\$27.51	\$28.55	\$0.00	\$56.06	\$2.34	\$58.40	\$29.07	\$28.55	\$0.00	\$57.62	\$2.40	\$60.02	\$1.56	\$0.00	\$0.06	\$1.62	2.7%	0.0%	0.1%	2.8%	15.4%
400	\$35.69	\$38.06	\$0.00	\$73.75	\$3.07	\$76.82	\$37.31	\$38.06	\$0.00	\$75.37	\$3.14	\$78.51	\$1.62	\$0.00	\$0.07	\$1.69	2.1%	0.0%	0.1%	2.2%	12.5%
500	\$43.87	\$47.58	\$0.00	\$91.45	\$3.81	\$95.26	\$45.55	\$47.58	\$0.00	\$93.13	\$3.88	\$97.01	\$1.68	\$0.00	\$0.07	\$1.75	1.8%	0.0%	0.1%	1.8%	9.6%
600	\$52.05	\$57.09	\$0.00	\$109.14	\$4.55	\$113.69	\$53.79	\$57.09	\$0.00	\$110.88	\$4.62	\$115.50	\$1.74	\$0.00	\$0.07	\$1.81	1.5%	0.0%	0.1%	1.6%	7.2%
700	\$60.23	\$66.61	\$0.00	\$126.84	\$5.29	\$132.13	\$62.03	\$66.61	\$0.00	\$128.64	\$5.36	\$134.00	\$1.80	\$0.00	\$0.07	\$1.87	1.4%	0.0%	0.1%	1.4%	16.4%
1,200	\$101.12	\$114.18	\$0.00	\$215.30	\$8.97	\$224.27	\$103.24	\$114.18	\$0.00	\$217.42	\$9.06	\$226.48	\$2.12	\$0.00	\$0.09	\$2.21	0.9%	0.0%	0.0%	1.0%	5.2%
2,000	\$166.54	\$190.30	\$0.00	\$356.84	\$14.87	\$371.71	\$169.18	\$190.30	\$0.00	\$359.48	\$14.98	\$374.46	\$2.64	\$0.00	\$0.11	\$2.75	0.7%	0.0%	0.0%	0.7%	1.6%

		<u>Present Rates Effective</u>			<u>Present Rates with PST</u>
		<u>Nov. 1, 2017 with PST</u>			<u>Year 3</u>
		<u>Year 2</u>			
Customer Charge		\$1.39	(1)		\$2.75 (2)
RE Growth Factor		\$0.78			\$0.78
LIHEAP Charge		\$0.81			\$0.81
Transmission Energy Charge	kWh x	\$0.03179			\$0.03179
Base Distribution Energy Charge	kWh x	\$0.02317			\$0.02317
Other Distribution Energy Charges	kWh x	\$0.00784	(3)		\$0.00848 (4)
Transition Energy Charge	kWh x	\$0.00057			\$0.00057
Energy Efficiency Program Charge	kWh x	\$0.01154			\$0.01154
Renewable Energy Distribution Charge	kWh x	\$0.00687			\$0.00687
Low Income Discount		0%			0%
Gross Earnings Tax		4%			4%
Standard Offer Charge	kWh x	\$0.09515			\$0.09515

- (1) Present Rate + \$1.39 for Year 2 of PST
(2) Present Rate + \$2.75 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 2 Factor of \$0.00148
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00163, Capex Factor \$0.00288, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00135), and PST Yr 3 Factor of \$0.00212

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to C-06 Rate Customers

Monthly kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)								Percentage of Customers
	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill				
									Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	
250	\$37.66	\$23.38	\$2.54	\$63.58	\$42.45	\$23.38	\$2.74	\$68.57	\$4.79	\$0.00	\$0.20	\$4.99	7.5%	0.0%	0.3%	7.8%	56.3%
500	\$59.58	\$46.75	\$4.43	\$110.76	\$64.52	\$46.75	\$4.64	\$115.91	\$4.94	\$0.00	\$0.21	\$5.15	4.5%	0.0%	0.2%	4.6%	16.9%
1,000	\$103.42	\$93.50	\$8.21	\$205.13	\$108.66	\$93.50	\$8.42	\$210.58	\$5.24	\$0.00	\$0.21	\$5.45	2.6%	0.0%	0.1%	2.7%	8.1%
1,500	\$147.26	\$140.25	\$11.98	\$299.49	\$152.80	\$140.25	\$12.21	\$305.26	\$5.54	\$0.00	\$0.23	\$5.77	1.8%	0.0%	0.1%	1.9%	5.0%
2,000	\$191.10	\$187.00	\$15.75	\$393.85	\$196.94	\$187.00	\$16.00	\$399.94	\$5.84	\$0.00	\$0.25	\$6.09	1.5%	0.0%	0.1%	1.5%	13.6%

	<u>Present Rates Effective Nov. 1, 2017 with PST Year 2</u>		<u>Present Rates with PST Year 3</u>	
Customer Charge	\$13.67	(1)	\$18.31	(2)
RE Growth Factor	\$1.26		\$1.26	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Energy Charge	kWh x \$0.02838		\$0.02839	
Base Distribution Charge	kWh x \$0.03253		\$0.03253	
Other Distribution Energy Charges	kWh x \$0.00778	(3)	\$0.00838	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00688		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

- (1) Present Rate + \$3.67 for Year 2 of PST
(2) Present Rate + \$8.31 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 2 Factor of \$0.00139
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00169, Capex Factor \$0.00269, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00119), and PST Yr 3 Factor of \$0.00199

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2					Present Rates with PST Year 3					Increase (Decrease)							
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total		\$				% of Total Bill			
											Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 4,000	\$453.61	\$374.00	\$34.48	\$862.09		\$464.98	\$374.00	\$34.96	\$873.94		\$11.37	\$0.00	\$0.48	\$11.85	1.3%	0.0%	0.1%	1.4%
50 10,000	\$984.85	\$935.00	\$79.99	\$1,999.84		\$999.22	\$935.00	\$80.59	\$2,014.81		\$14.37	\$0.00	\$0.60	\$14.97	0.7%	0.0%	0.0%	0.7%
100 20,000	\$1,870.25	\$1,870.00	\$155.84	\$3,896.09		\$1,889.62	\$1,870.00	\$156.65	\$3,916.27		\$19.37	\$0.00	\$0.81	\$20.18	0.5%	0.0%	0.0%	0.5%
150 30,000	\$2,755.65	\$2,805.00	\$231.69	\$5,792.34		\$2,780.02	\$2,805.00	\$232.71	\$5,817.73		\$24.37	\$0.00	\$1.02	\$25.39	0.4%	0.0%	0.0%	0.4%

	<u>Present Rates Effective Nov. 1, 2017 with PST Year 2</u>		<u>Present Rates with PST Year 3</u>	
Customer Charge	\$141.99	(1)	\$151.36	(2)
RE Growth Factor	\$11.85		\$11.85	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.37		\$4.37	
Transmission Energy Charge	kWh x \$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x \$4.85		\$4.85	
CapEx Factor	kW x \$0.67		\$0.67	
Base Distribution Energy Charge	kWh x \$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x \$0.00447	(3)	\$0.00497	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

(1) Present Rates + \$6.99 for Year 2 of PST

(2) Present Rates + \$16.36 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 3 Factor of \$0.00153

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2					Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20 6,000	\$531.79	\$561.00	\$45.53	\$1,138.32		\$544.16	\$561.00	\$46.05	\$1,151.21	\$12.37	\$0.00	\$0.52	\$12.89	1.1%	0.0%	0.0%	1.1%
50 15,000	\$1,180.30	\$1,402.50	\$107.62	\$2,690.42		\$1,197.17	\$1,402.50	\$108.32	\$2,707.99	\$16.87	\$0.00	\$0.70	\$17.57	0.6%	0.0%	0.0%	0.7%
100 30,000	\$2,261.15	\$2,805.00	\$211.09	\$5,277.24		\$2,285.52	\$2,805.00	\$212.11	\$5,302.63	\$24.37	\$0.00	\$1.02	\$25.39	0.5%	0.0%	0.0%	0.5%
150 45,000	\$3,342.00	\$4,207.50	\$314.56	\$7,864.06		\$3,373.87	\$4,207.50	\$315.89	\$7,897.26	\$31.87	\$0.00	\$1.33	\$33.20	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov.</u>			<u>Present Rates with PST Year 3</u>	
		<u>1, 2017 with PST Year 2</u>				
Customer Charge		\$141.99	(1)		\$151.36	(2)
RE Growth Factor		\$11.85			\$11.85	
LIHEAP Charge		\$0.81			\$0.81	
Transmission Demand Charge	kW x	\$4.37			\$4.37	
Transmission Energy Charge	kWh x	\$0.01096			\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85			\$4.85	
CapEx Factor	kW x	\$0.67			\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468			\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00447	(3)		\$0.00497	(4)
Transition Energy Charge	kWh x	\$0.00057			\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154			\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687			\$0.00687	
Gross Earnings Tax		4%			4%	
Standard Offer Charge	kWh x	\$0.09350			\$0.09350	

- (1) Present Rates + \$6.99 for Year 2 of PST
(2) Present Rates + \$16.36 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 3 Factor of \$0.00153

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	8,000	\$609.97	\$748.00	\$56.58	\$1,414.55	\$623.34	\$748.00	\$57.14	\$1,428.48	\$13.37	\$0.00	\$0.56	\$13.93	0.9%	0.0%	0.0%	1.0%
50	20,000	\$1,375.75	\$1,870.00	\$135.24	\$3,380.99	\$1,395.12	\$1,870.00	\$136.05	\$3,401.17	\$19.37	\$0.00	\$0.81	\$20.18	0.6%	0.0%	0.0%	0.6%
100	40,000	\$2,652.05	\$3,740.00	\$266.34	\$6,658.39	\$2,681.42	\$3,740.00	\$267.56	\$6,688.98	\$29.37	\$0.00	\$1.22	\$30.59	0.4%	0.0%	0.0%	0.5%
150	60,000	\$3,928.35	\$5,610.00	\$397.43	\$9,935.78	\$3,967.72	\$5,610.00	\$399.07	\$9,976.79	\$39.37	\$0.00	\$1.64	\$41.01	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov.</u>		<u>Present Rates with PST Year 3</u>	
		<u>1, 2017 with PST Year 2</u>			
Customer Charge		\$141.99	(1)	\$151.36	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00447	(3)	\$0.00497	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rates + \$6.99 for Year 2 of PST
(2) Present Rates + \$16.36 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 3 Factor of \$0.00153

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
		Delivery SOS GET Total				Delivery SOS GET Total				\$				% of Total Bill			
										Delivery SOS GET Total				Delivery SOS GET Total			
20	10,000	\$688.15	\$935.00	\$67.63	\$1,690.78	\$702.52	\$935.00	\$68.23	\$1,705.75	\$14.37	\$0.00	\$0.60	\$14.97	0.8%	0.0%	0.0%	0.9%
50	25,000	\$1,571.20	\$2,337.50	\$162.86	\$4,071.56	\$1,593.07	\$2,337.50	\$163.77	\$4,094.34	\$21.87	\$0.00	\$0.91	\$22.78	0.5%	0.0%	0.0%	0.6%
100	50,000	\$3,042.95	\$4,675.00	\$321.58	\$8,039.53	\$3,077.32	\$4,675.00	\$323.01	\$8,075.33	\$34.37	\$0.00	\$1.43	\$35.80	0.4%	0.0%	0.0%	0.4%
150	75,000	\$4,514.70	\$7,012.50	\$480.30	\$12,007.50	\$4,561.57	\$7,012.50	\$482.25	\$12,056.32	\$46.87	\$0.00	\$1.95	\$48.82	0.4%	0.0%	0.0%	0.4%

	<u>Present Rates Effective Nov. 1, 2017 with PST Year 2</u>		<u>Present Rates with PST Year 3</u>	
Customer Charge	\$141.99	(1)	\$151.36	(2)
RE Growth Factor	\$11.85		\$11.85	
LIHEAP Charge	\$0.81		\$0.81	
Transmission Demand Charge	kW x \$4.37		\$4.37	
Transmission Energy Charge	kWh x \$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x \$4.85		\$4.85	
CapEx Factor	kW x \$0.67		\$0.67	
Base Distribution Energy Charge	kWh x \$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x \$0.00447	(3)	\$0.00497	(4)
Transition Energy Charge	kWh x \$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x \$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x \$0.00687		\$0.00687	
Gross Earnings Tax	4%		4%	
Standard Offer Charge	kWh x \$0.09350		\$0.09350	

(1) Present Rates + \$6.99 for Year 2 of PST

(2) Present Rates + \$16.36 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 3 Factor of \$0.00153

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-02 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
20	12,000	\$766.33	\$1,122.00	\$78.68	\$1,967.01	\$781.70	\$1,122.00	\$79.32	\$1,983.02	\$15.37	\$0.00	\$0.64	\$16.01	0.8%	0.0%	0.0%	0.8%
50	30,000	\$1,766.65	\$2,805.00	\$190.49	\$4,762.14	\$1,791.02	\$2,805.00	\$191.50	\$4,787.52	\$24.37	\$0.00	\$1.01	\$25.38	0.5%	0.0%	0.0%	0.5%
100	60,000	\$3,433.85	\$5,610.00	\$376.83	\$9,420.68	\$3,473.22	\$5,610.00	\$378.47	\$9,461.69	\$39.37	\$0.00	\$1.64	\$41.01	0.4%	0.0%	0.0%	0.4%
150	90,000	\$5,101.05	\$8,415.00	\$563.17	\$14,079.22	\$5,155.42	\$8,415.00	\$565.43	\$14,135.85	\$54.37	\$0.00	\$2.26	\$56.63	0.4%	0.0%	0.0%	0.4%

		<u>Present Rates Effective Nov. 1, 2017 with PST Year 2</u>		<u>Present Rates with PST Year 3</u>	
Customer Charge		\$141.99	(1)	\$151.36	(2)
RE Growth Factor		\$11.85		\$11.85	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.37		\$4.37	
Transmission Energy Charge	kWh x	\$0.01096		\$0.01096	
Base Distribution Demand Charge-xcs 10 kW	kW x	\$4.85		\$4.85	
CapEx Factor	kW x	\$0.67		\$0.67	
Base Distribution Energy Charge	kWh x	\$0.00468		\$0.00468	
Other Distribution Energy Charges	kWh x	\$0.00447	(3)	\$0.00497	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.09350		\$0.09350	

- (1) Present Rates + \$6.99 for Year 2 of PST
(2) Present Rates + \$16.36 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 2 Factor of \$0.00103
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00122, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00098), and PST Yr 3 Factor of \$0.00153

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 200 Hours of Use

Hours Use: 200

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	40,000	\$3,463.89	\$2,576.00	\$251.66	\$6,291.55	\$3,501.64	\$2,576.00	\$253.24	\$6,330.88	\$37.75	\$0.00	\$1.58	\$39.33	0.6%	0.0%	0.0%	0.6%
750	150,000	\$12,862.29	\$9,660.00	\$938.43	\$23,460.72	\$12,944.04	\$9,660.00	\$941.84	\$23,545.88	\$81.75	\$0.00	\$3.41	\$85.16	0.3%	0.0%	0.0%	0.4%
1,000	200,000	\$17,134.29	\$12,880.00	\$1,250.60	\$31,264.89	\$17,236.04	\$12,880.00	\$1,254.84	\$31,370.88	\$101.75	\$0.00	\$4.24	\$105.99	0.3%	0.0%	0.0%	0.3%
1,500	300,000	\$25,678.29	\$19,320.00	\$1,874.93	\$46,873.22	\$25,820.04	\$19,320.00	\$1,880.84	\$47,020.88	\$141.75	\$0.00	\$5.91	\$147.66	0.3%	0.0%	0.0%	0.3%
2,500	500,000	\$42,766.29	\$32,200.00	\$3,123.60	\$78,089.89	\$42,988.04	\$32,200.00	\$3,132.84	\$78,320.88	\$221.75	\$0.00	\$9.24	\$230.99	0.3%	0.0%	0.0%	0.3%

		Present Rates Effective Nov. 1, 2017 with PST Year 2		Present Rates with PST Year 3	
Customer Charge		\$840.62	(1)	\$862.37	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00422	(3)	\$0.00462	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate +\$15.62 for Year 2 of PST

(2) Present Rate + \$37.37 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 3 Factor of \$0.00113

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 300 Hours of Use

Hours Use: 300

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2					Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 60,000	\$4,262.69	\$3,864.00	\$338.61	\$8,465.30		\$4,308.44	\$3,864.00	\$340.52	\$8,512.96	\$45.75	\$0.00	\$1.91	\$47.66	0.5%	0.0%	0.0%	0.6%
750 225,000	\$15,857.79	\$14,490.00	\$1,264.49	\$31,612.28		\$15,969.54	\$14,490.00	\$1,269.15	\$31,728.69	\$111.75	\$0.00	\$4.66	\$116.41	0.4%	0.0%	0.0%	0.4%
1,000 300,000	\$21,128.29	\$19,320.00	\$1,685.35	\$42,133.64		\$21,270.04	\$19,320.00	\$1,691.25	\$42,281.29	\$141.75	\$0.00	\$5.90	\$147.65	0.3%	0.0%	0.0%	0.4%
1,500 450,000	\$31,669.29	\$28,980.00	\$2,527.05	\$63,176.34		\$31,871.04	\$28,980.00	\$2,535.46	\$63,386.50	\$201.75	\$0.00	\$8.41	\$210.16	0.3%	0.0%	0.0%	0.3%
2,500 750,000	\$52,751.29	\$48,300.00	\$4,210.47	\$105,261.76		\$53,073.04	\$48,300.00	\$4,223.88	\$105,596.92	\$321.75	\$0.00	\$13.41	\$335.16	0.3%	0.0%	0.0%	0.3%

			<u>Present Rates Effective Nov. 1,</u>		<u>Present Rates with PST Year 3</u>	
			<u>2017 with PST Year 2</u>			
Customer Charge			\$840.62	(1)	\$862.37	(2)
RE Growth Factor			\$86.86		\$86.86	
LIHEAP Charge			\$0.81		\$0.81	
Transmission Demand Charge	kW x		\$4.69		\$4.69	
Transmission Energy Charge	kWh x		\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x		\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x		\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x		\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x		\$0.00422	(3)	\$0.00462	(4)
Transition Energy Charge	kWh x		\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x		\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x		\$0.00687		\$0.00687	
Gross Earnings Tax			4%		4%	
Standard Offer Charge	kWh x		\$0.06440		\$0.06440	

- (1) Present Rate +\$15.62 for Year 2 of PST
(2) Present Rate + \$37.37 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 3 Factor of \$0.00113

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 400 Hours of Use

Hours Use: 400

Monthly Power kW kWh		Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	80,000	\$5,061.49	\$5,152.00	\$425.56	\$10,639.05	\$5,115.24	\$5,152.00	\$427.80	\$10,695.04	\$53.75	\$0.00	\$2.24	\$55.99	0.5%	0.0%	0.0%	0.5%
750	300,000	\$18,853.29	\$19,320.00	\$1,590.55	\$39,763.84	\$18,995.04	\$19,320.00	\$1,596.46	\$39,911.50	\$141.75	\$0.00	\$5.91	\$147.66	0.4%	0.0%	0.0%	0.4%
1,000	400,000	\$25,122.29	\$25,760.00	\$2,120.10	\$53,002.39	\$25,304.04	\$25,760.00	\$2,127.67	\$53,191.71	\$181.75	\$0.00	\$7.57	\$189.32	0.3%	0.0%	0.0%	0.4%
1,500	600,000	\$37,660.29	\$38,640.00	\$3,179.18	\$79,479.47	\$37,922.04	\$38,640.00	\$3,190.09	\$79,752.13	\$261.75	\$0.00	\$10.91	\$272.66	0.3%	0.0%	0.0%	0.3%
2,500	1,000,000	\$62,736.29	\$64,400.00	\$5,297.35	\$132,433.64	\$63,158.04	\$64,400.00	\$5,314.92	\$132,872.96	\$421.75	\$0.00	\$17.57	\$439.32	0.3%	0.0%	0.0%	0.3%

		Present Rates Effective Nov. 1, 2017 with PST Year 2		Present Rates with PST Year 3	
Customer Charge		\$840.62	(1)	\$862.37	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00422	(3)	\$0.00462	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

- (1) Present Rate +\$15.62 for Year 2 of PST
(2) Present Rate + \$37.37 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 3 Factor of \$0.00113

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 500 Hours of Use

Hours Use: 500

Monthly Power kW kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2					Present Rates with PST Year 3				Increase (Decrease)							
										\$				% of Total Bill			
	Delivery	SOS	GET	Total		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200 100,000	\$5,860.29	\$6,440.00	\$512.51	\$12,812.80		\$5,922.04	\$6,440.00	\$515.09	\$12,877.13	\$61.75	\$0.00	\$2.58	\$64.33	0.5%	0.0%	0.0%	0.5%
750 375,000	\$21,848.79	\$24,150.00	\$1,916.62	\$47,915.41		\$22,020.54	\$24,150.00	\$1,923.77	\$48,094.31	\$171.75	\$0.00	\$7.15	\$178.90	0.4%	0.0%	0.0%	0.4%
1,000 500,000	\$29,116.29	\$32,200.00	\$2,554.85	\$63,871.14		\$29,338.04	\$32,200.00	\$2,564.09	\$64,102.13	\$221.75	\$0.00	\$9.24	\$230.99	0.3%	0.0%	0.0%	0.4%
1,500 750,000	\$43,651.29	\$48,300.00	\$3,831.30	\$95,782.59		\$43,973.04	\$48,300.00	\$3,844.71	\$96,117.75	\$321.75	\$0.00	\$13.41	\$335.16	0.3%	0.0%	0.0%	0.3%
2,500 1,250,000	\$72,721.29	\$80,500.00	\$6,384.22	\$159,605.51		\$73,243.04	\$80,500.00	\$6,405.96	\$160,149.00	\$521.75	\$0.00	\$21.74	\$543.49	0.3%	0.0%	0.0%	0.3%

		<u>Present Rates Effective Nov. 1,</u>				<u>Present Rates with PST Year 3</u>	
		<u>2017 with PST Year 2</u>					
Customer Charge		\$840.62	(1)	\$862.37	(2)		
RE Growth Factor		\$86.86		\$86.86			
LIHEAP Charge		\$0.81		\$0.81			
Transmission Demand Charge	kW x	\$4.69		\$4.69			
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123			
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70			
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71			
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551			
Other Distribution Energy Charges	kWh x	\$0.00422	(3)	\$0.00462	(4)		
Transition Energy Charge	kWh x	\$0.00057		\$0.00057			
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154			
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687			
Gross Earnings Tax		4%		4%			
Standard Offer Charge	kWh x	\$0.06440		\$0.06440			

- (1) Present Rate +\$15.62 for Year 2 of PST
(2) Present Rate + \$37.37 for Year 3 of PST
(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073
(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 3 Factor of \$0.00113

The Narragansett Electric Company
Calculation of Monthly Typical Bill
Total Bill Impact of Illustrative FY 2022 PST Factors - Shared Grid Modernization/AMI
Rates Applicable to G-32 / Former G-62 Rate Customers, 600 Hours of Use

Hours Use: 600

Monthly Power kW	kWh	Present Rates Effective Nov. 1, 2017 with PST Year 2				Present Rates with PST Year 3				Increase (Decrease)							
		Delivery	SOS	GET	Total	Delivery	SOS	GET	Total	\$				% of Total Bill			
										Delivery	SOS	GET	Total	Delivery	SOS	GET	Total
200	120,000	\$6,659.09	\$7,728.00	\$599.46	\$14,986.55	\$6,728.84	\$7,728.00	\$602.37	\$15,059.21	\$69.75	\$0.00	\$2.91	\$72.66	0.5%	0.0%	0.0%	0.5%
750	450,000	\$24,844.29	\$28,980.00	\$2,242.68	\$56,066.97	\$25,046.04	\$28,980.00	\$2,251.09	\$56,277.13	\$201.75	\$0.00	\$8.41	\$210.16	0.4%	0.0%	0.0%	0.4%
1,000	600,000	\$33,110.29	\$38,640.00	\$2,989.60	\$74,739.89	\$33,372.04	\$38,640.00	\$3,000.50	\$75,012.54	\$261.75	\$0.00	\$10.90	\$272.65	0.4%	0.0%	0.0%	0.4%
1,500	900,000	\$49,642.29	\$57,960.00	\$4,483.43	\$112,085.72	\$50,024.04	\$57,960.00	\$4,499.34	\$112,483.38	\$381.75	\$0.00	\$15.91	\$397.66	0.3%	0.0%	0.0%	0.4%
2,500	1,500,000	\$82,706.29	\$96,600.00	\$7,471.10	\$186,777.39	\$83,328.04	\$96,600.00	\$7,497.00	\$187,425.04	\$621.75	\$0.00	\$25.90	\$647.65	0.3%	0.0%	0.0%	0.3%

		Present Rates Effective Nov. 1, 2017 with PST Year 2		Present Rates with PST Year 3	
Customer Charge		\$840.62	(1)	\$862.37	(2)
RE Growth Factor		\$86.86		\$86.86	
LIHEAP Charge		\$0.81		\$0.81	
Transmission Demand Charge	kW x	\$4.69		\$4.69	
Transmission Energy Charge	kWh x	\$0.01123		\$0.01123	
Base Distribution Demand Charge - > 200 kW	kW x	\$3.70		\$3.70	
CapEx Factor - > 200 kW	kW x	\$0.71		\$0.71	
Base Distribution Energy Charge	kWh x	\$0.00551		\$0.00551	
Other Distribution Energy Charges	kWh x	\$0.00422	(3)	\$0.00462	(4)
Transition Energy Charge	kWh x	\$0.00057		\$0.00057	
Energy Efficiency Program Charge	kWh x	\$0.01154		\$0.01154	
Renewable Energy Distribution Charge	kWh x	\$0.00687		\$0.00687	
Gross Earnings Tax		4%		4%	
Standard Offer Charge	kWh x	\$0.06440		\$0.06440	

(1) Present Rate +\$15.62 for Year 2 of PST

(2) Present Rate + \$37.37 for Year 3 of PST

(3) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 2 Factor of \$0.00073

(4) Includes current RDM Factor of \$0.00118, Pension Factor of (\$0.00085), Storm Fund Replenishment Factor \$0.00288, O&M Factor \$0.00079, O&M Recon Factor (\$0.00001), Capex Recon Factor (\$0.00050), and PST Yr 3 Factor of \$0.00113

The Narragansett Electric Company
Streetlights Annual Bill Impacts
Total Bill Impact of Illustrative FY 2020 PST Factors - RI-Only Grid Modernization/AMI

Line	Luminaire/ Standard Type	Lumens Description	Annual kWh	Current Lum / Std Price	RE Growth Charge	Current Annual Revenue	Current Lum / Std Price	Proposed Annual Revenue	Annual Bill Impact	Annual % Impact
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
1	Incandescent	LUM INC RWY 105W	443	\$77.43	\$4.68	\$156.09	\$77.43	\$156.51	\$0.42	0.3%
2		LUM INC RWY 205W (S-14 Only)	860	\$77.43	\$4.68	\$225.72	\$77.43	\$226.54	\$0.82	0.4%
3	Mercury Vapor	LUM MV RWY 100W	543	\$78.06	\$4.68	\$173.42	\$78.06	\$173.93	\$0.52	0.3%
4		LUM MV RWY 175W	881	\$78.06	\$4.68	\$229.86	\$78.06	\$230.70	\$0.84	0.4%
5		LUM MV RWY 250W (S-14 Only)	1,282	\$120.39	\$4.68	\$339.15	\$120.39	\$340.37	\$1.22	0.4%
6		LUM MV RWY 400W	1,991	\$163.46	\$4.68	\$500.62	\$163.46	\$502.51	\$1.89	0.4%
7		LUM MV RWY 1000W	4,572	\$163.46	\$4.68	\$931.62	\$163.46	\$935.96	\$4.34	0.5%
8		LUM MV FLD 400W	1,991	\$181.37	\$4.68	\$518.53	\$181.37	\$520.42	\$1.89	0.4%
9		LUM MV FLD 1000W	4,572	\$181.37	\$4.68	\$949.53	\$181.37	\$953.87	\$4.34	0.5%
10	High Pressure Sodium Vapor Fixtures	LUM MV POST 175W (S-14 Only)	881	\$156.80	\$4.68	\$308.60	\$156.80	\$309.44	\$0.84	0.3%
11		LUM HPS RWY 50W	255	\$77.43	\$4.68	\$124.69	\$77.43	\$124.93	\$0.24	0.2%
12		LUM HPS RWY 70W	359	\$76.91	\$4.68	\$141.54	\$76.91	\$141.88	\$0.34	0.2%
13		LUM HPS RWY 100W	493	\$78.06	\$4.68	\$165.07	\$78.06	\$165.53	\$0.47	0.3%
14		LUM HPS RWY 150W	722	\$78.58	\$4.68	\$203.83	\$78.58	\$204.51	\$0.69	0.3%
15		LUM HPS RWY 250W	1,269	\$120.39	\$4.68	\$336.98	\$120.39	\$338.19	\$1.21	0.4%
16		LUM HPS RWY 400W	1,962	\$163.46	\$4.68	\$495.77	\$163.46	\$497.64	\$1.86	0.4%
17		WALL HPS 250W 24 HR	2,663	\$172.21	\$4.68	\$621.58	\$172.21	\$624.11	\$2.53	0.4%
18		LUM HPS FLD 250W	1,269	\$146.11	\$4.68	\$362.70	\$146.11	\$363.91	\$1.21	0.3%
19		LUM HPS FLD 400W	2,663	\$181.37	\$4.68	\$630.74	\$181.37	\$633.27	\$2.53	0.4%
20	Metal Halide	LUM HPS POST 50W	255	\$155.49	\$4.68	\$202.75	\$155.49	\$202.99	\$0.24	0.1%
21		LUM HPS POST 100W	493	\$156.80	\$4.68	\$243.81	\$156.80	\$244.27	\$0.47	0.2%
22		LUM HPS REC 100W-C1	493	\$98.99	\$4.68	\$186.00	\$98.99	\$186.46	\$0.47	0.3%
23		LUM MH FLD 400W	1,883	\$181.37	\$4.68	\$500.49	\$181.37	\$502.28	\$1.79	0.4%
24		LUM MH FLD 1000W	4,502	\$181.37	\$4.68	\$937.84	\$181.37	\$942.12	\$4.28	0.5%
25	Light Emitting Diode	LED RWY 20W	88	\$90.61	\$4.68	\$109.99	\$90.61	\$110.07	\$0.08	0.1%
26		LED RWY 30W	130	\$89.77	\$4.68	\$116.16	\$89.77	\$116.28	\$0.12	0.1%
27		LED RWY 60W	255	\$99.15	\$4.68	\$146.41	\$99.15	\$146.65	\$0.24	0.2%
28		LED RWY 140W	589	\$155.03	\$4.68	\$258.07	\$155.03	\$258.63	\$0.56	0.2%
29		LED RWY 275W	1,153	\$198.27	\$4.68	\$395.49	\$198.27	\$396.58	\$1.10	0.3%
30	Temporary Turn-Off	LED POST Top 60W	255	\$147.69	\$4.68	\$194.95	\$147.69	\$195.19	\$0.24	0.1%
31		LUM INC RWY 105W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
32		LUM MV RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
33		LUM HPS RWY 50W TT	N/A	\$46.46	\$4.68	\$51.14	\$46.46	\$51.14	\$0.00	-
34		LUM HPS RWY 70W TT	N/A	\$46.15	\$4.68	\$50.83	\$46.15	\$50.83	\$0.00	-
35		LUM HPS RWY 100W TT	N/A	\$46.84	\$4.68	\$51.52	\$46.84	\$51.52	\$0.00	-
36		LUM HPS RWY 250W TT	N/A	\$72.23	\$4.68	\$76.91	\$72.23	\$76.91	\$0.00	-
37		LUM HPS RWY 400W TT	N/A	\$98.08	\$4.68	\$102.76	\$98.08	\$102.76	\$0.00	-
38	Standards	LUM HPS POST 100W TT	N/A	\$94.08	\$4.68	\$98.76	\$94.08	\$98.76	\$0.00	-
39		LUM HPS FLD 250W TT	N/A	\$87.67	\$4.68	\$92.35	\$87.67	\$92.35	\$0.00	-
40		LUM HPS FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
41		LUM MH FLD 400W TT	N/A	\$108.82	\$4.68	\$113.50	\$108.82	\$113.50	\$0.00	-
42	S-06 (Decorative) Luminaire	POLE-WOOD		\$133.71			\$133.71	\$133.71	\$0.00	-
43		POLE FIBER PT EMB <25' w/out foundation		\$260.22			\$260.22	\$260.22	\$0.00	-
44		POLE FIBER RWY <25 w/ foundation		\$424.14			\$424.14	\$424.14	\$0.00	-
45		POLE FIBER RWY => 25 w/ foundation		\$473.53			\$473.53	\$473.53	\$0.00	-
46		POLE METAL=>25FT (with foundation)		\$484.72			\$484.72	\$484.72	\$0.00	-
47	S-06 Standards	POLE METAL EMBEDDED (S-14 Only)		\$405.16			\$405.16	\$405.16	\$0.00	-
48		DEC HPS WL 100W	493	\$325.30	\$4.68	\$412.31	\$325.30	\$412.77	\$0.47	0.1%
49	S-06 Standards	DEC VILL PT/FDN		\$566.70	\$4.68	\$571.38	\$566.70	\$571.38	\$0.00	-
50		DEC WASH PT/FDN		\$575.78	\$4.68	\$580.46	\$575.78	\$580.46	\$0.00	-
51	S-5 Energy Rate									
52		Includes all rate components				\$0.19353		\$0.19448	\$0.00095	0.5%

Column Description:

- (a) - (b) per current tariff R.I.P.U.C. 2095 (Nov. 2017), Sheet 3
- (d) & (g) per current tariff R.I.P.U.C. 2095 (Nov. 2017) \$0.39 per luminaire x 12
- (e) per current tariff R.I.P.U.C. 2095 (Nov. 2017), and R.I.P.U.C. 2096 (Nov. 2017) Year 2 PST factor of \$0.00338
- Column (b) x per kWh rate + Column (c) + Column (d)
- (f) Column (c)
- (h) per kWh rate is per current tariffs R.I.P.U.C. 2095 and 2096 (Nov. 2017) + Year 3 PST factor of \$0.00433
- (i) Column (h) / Column (c)

NERI 5-6

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 19, lines 4-7. Please detail the ways in which National Grid proposals in New York and Massachusetts are consistent with those in this proceeding. Please detail the ways in which National Grid proposals in New York and Massachusetts are not consistent with those in this proceeding.

Response:

The Company presented in its Power Sector Transformation (PST) Plan filing both a Rhode Island Only deployment scenario and a Multi-Jurisdiction deployment scenario. For PST Plan grid modernization projects that are consistent with those in National Grid's New York and/or Massachusetts jurisdictions, the costs have been presented as a Multi-Jurisdiction deployment scenario in Workpaper 3.2.

Table 1 below lists all Grid Modernization projects proposed in National Grid's Niagara Mohawk Power Corporation (NMPC) Rate Case in New York (NY), Massachusetts (MA) Grid Modernization Plan (Grid Mod), and Rhode Island (RI) Power Sector Transformation (denoted with "X" in Table 1). These proposals are detailed in Case 17-E-0238 in New York and Docket D.P.U 15-120 in Massachusetts. The table shows where there are consistencies between each proposal, where there are potential cost synergies from a multi-jurisdiction deployment, and which jurisdictions were included in the PST Plan Multi-Jurisdiction Deployment Scenario.

Table 1: Grid Modernization Project Synergies

Grid Modernization Project	NMPC Rate Case	MA Grid Mod	RI PST	Multi- Jurisdiction Synergy	PST Multi- Jurisdiction Scenario¹
System Data Portal	X		X	N	N/A
Feeder Monitor Sensors	X	X	X	N	N/A
DSCADA& ADMS	X	X	X	Y	MA+RI
RTU Separation	X		X	N	N/A
GIS Data Enhancement (IS)	X	X	X	Y	NY+MA+RI
GIS Data Enhancement (BR)	X	X	X	N	N/A
Enterprise Service Bus	X	X	X	Y	NY+RI
Data Lake	X	X	X	Y	NY+RI
PI Historian	X	X	X	Y	NY+RI
Advanced Analytics	X	X	X	Y	NY+RI
Telecommunications	X	X	X	Y	NY+RI
Cybersecurity	X	X	X	Y	NY+RI
Advanced Meter Functionality	X	X	X	Y	NY+RI
Volt-Var Optimization	X	X		N	N/A
Distribution Automation		X		N	N/A
Mobile Workforce		X		N	N/A

Table 1 highlights areas of consistency between the proposed PST Plan Grid Modernization projects and National Grid's proposals in New York and Massachusetts. In many cases, significant cost synergies can be realized if these investments are coordinated across the operating companies. There are other projects in Table 1 in which similar work has been proposed in the Company's affiliates' grid modernization proposals, but the scope of the projects are confined to the individual jurisdictions, so cost synergies cannot be realized. Finally, Table 1 clearly shows there are three projects where National Grid proposals in New York and Massachusetts are not consistent with those in the PST Plan: Volt-Var Optimization, which is being progressed as part of the Rhode Island Infrastructure, Safety, and Reliability (ISR) proceeding; Distribution Automation, which is not included in the PST Plan because of Rhode Island's existing top performance with respect to system reliability metrics; and Mobile Workforce, which is a pilot project proposed in Massachusetts that could be proposed in Rhode Island at a later date if the results are promising.

(This response is identical to the Company's response to NERI 27-6 in Docket No. 4770.)

¹ N/A = Not applicable

NERI 5-7

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 20, lines 1-4. Please confirm whether the National Grid takes the position that business risks and costs are reduced by coordinating and replicating technology deployment approaches across multiple jurisdictions.

Response:

Yes. There are cost synergies where there is shared infrastructure and fixed costs. There are also synergies through standardization that range from procurement, integration, and efficiencies with respect to business continuity and resiliency and the ability to leverage resources across National Grid.

(This response is identical to the Company's response to NERI 27-7 in Docket No. 4770.)

NERI 5-8

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 22, Table 2-1. Please define the term “advance Docket 4600 goals” as used in the table and accompanying testimony. Does “advancement” mean an improvement over current conditions? Does “advancement” means an improvement over a business as usual approach?

Response:

The Company, along with state agencies, distributed energy resource (DER) developers, and other interested stakeholders, is an active stakeholder and supporter of the Public Utilities Commission's Docket 4600 goals. The term “advancement” in this context means supporting the achievement of the Public Utilities Commission's goals and implementing policies that are consistent with Rhode Island's goals for a transformed power system, which are: (1) controlling the long-term costs of the electric system through a new regulatory framework that promotes a broad range of resources that will “right-size” the distribution system instead of building for peak usage; (2) providing customers with more energy choices and information to manage their costs and usage; and (3) building a flexible distribution system to integrate more clean energy generation to help Rhode Island meet its greenhouse gas emission reduction and clean energy goals.

(This response is identical to the Company's response to NERI 27-8 in Docket No. 4770.)

NERI 5-9

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 25-26. Please specifically detail all differences between the Company's proposed BCA and the BCA framework developed in Docket 4600.

Response:

Please see the Company's response to NERI 2-3(b), a copy of which is provided as Attachment NERI 5-9 for ease of reference, for a discussion of the benefit-cost analysis (BCA) methodology the Company used in the Power Sector Transformation filing as compared to the Benefit-Cost Framework presented in Docket 4600. The Company is not aware of any explicit or intentional differences between the principles set forth in the Docket 4600 Guidance Document and those applied to its BCA methodology.

(This response is identical to the Company's response to NERI 27-9 in Docket No. 4770.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's Second Set of Data Requests
Issued February 27, 2018

NERI 2-3

Request:

Please reference Chapter 2, p. 36 to 37.

- a. Did the Company solicit stakeholder engagement in developing the Rhode Island specific benefit cost assessment (BCA) methodology, including, but not limited to, stakeholders who participated in Docket 4600?
- b. Why did the Company develop a new BCA methodology, rather than using the stakeholder developed Docket 4600 BCA Framework?

Response:

- a. Yes. When developing the Rhode Island-specific benefits cost assessment (BCA), the Company solicited stakeholder engagement from the Division of Public Utilities and Carriers (Division) and the Division's consultant, Tim Woolf, Vice President of Synapse Energy Economics, Inc., to develop the BCA methodology applied in the Company's Power Sector Transformation (PST) Plan. The stakeholder input from Docket 4600 led to the development of the Rhode Island Docket 4600 Benefit-Cost Framework (the Framework), which the Company then used to develop the Rhode Island-specific test.
- b. The Company developed a Rhode Island-specific BCA methodology to evaluate many of the investments proposed in the PST Plan. This BCA methodology is based on the guidance provided in the Framework. Although the Docket 4600 Guidance Document¹ calls for the application of a quantitative cost-effectiveness test, it does not explicitly specify which type of cost-effectiveness test(s) should be used or the economic perspective(s) from which investments should be evaluated. The Docket 4600 Guidance Document states that "there is still significant work [sic] left to be done so that the Framework can be applied in a fully quantitative manner."² Furthermore, the Stakeholder Report³, sections of which the Public Utilities Commission (PUC) adopted in its Report and Order in Docket 4600, noted "the Framework is meant to be refined or modified over time as the PUC and parties to dockets gain experience in applying it."⁴ The PUC also held that, although the Framework should be relied upon, "it should not be the exclusive

¹ Public Utilities Commission's Guidance on Goals, Principles and Values for Matters Involving The Narragansett Electric Company d/b/a National Grid (October 27, 2017) (the Docket 4600 Guidance Document).

² *Id.* at 6.

³ Raab Associates, Ltd. with Paul Centolella & Associates and Tabors Caramanis Rudkevich (TCR), Docket 4600: Stakeholder Working Group Process, Report to the Rhode Island Public Utilities Commission (April 5, 2017) (the Stakeholder Report).

⁴ Report and Order, Docket No. 4600, at 9 (July 31, 2017).

Prepared by or under the supervision of: Kayte O'Neill

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's Second Set of Data Requests
Issued February 27, 2018

measure of whether a specific proposal should be approved. Rather, the Framework should serve as a starting point in making a business case for a proposal.”⁵

The Company determined through analysis of the Docket 4600 Guidance Document, stakeholder input, and stated Rhode Island policy goals that the primary quantitative cost-effectiveness test to be included in the Company's business case for its PST investments is the societal cost test (SCT). Further, analysis of the Docket 4600 Guidance Document also suggests that inclusion of a quantitative test to present the monetary benefits and costs from a customer perspective is also appropriate. To present the monetary benefits and costs from a customer perspective, the Company relied on a rate impact measure. As provided in the Docket 4600 Guidance Document, benefits and costs included in Appendix 2.1 of the Docket 4600 Guidance Document that were not applicable to these cost tests or that are not quantifiable given currently available data and methods were included qualitatively in the overall business case.⁶

In addition, the Company relied on sources and methodologies that have been previously vetted with stakeholders in Rhode Island and other states to develop the input assumptions used in the BCA models:

- Wherever applicable and appropriate, the BCA methodologies and assumptions relied upon for each of the investments proposed in the Company's PST Plan are aligned with those used by the Company when modeling the cost effectiveness of its energy efficiency programs in Rhode Island. These assumptions and methodologies have been developed over several years with significant input from Rhode Island stakeholders.
- Second, avoided energy, capacity, RECs, and environmental compliance and externality cost values, as well as wholesale market price impact assumptions and general methodology for their application, were taken from the Avoided Energy Supply Costs (AESC) in New England: 2015 Report.⁷ The AESC study is sponsored and overseen by a group of New England electric and gas utilities, other efficiency program administrators, non-utility parties, and consultants, and is used by the Company and other utilities throughout New England to evaluate energy efficiency programs.

⁵ *Id.*, at 23.

⁶ Docket 4600 Guidance Document at 6.

⁷ The AESC 2015 Report was sponsored by a group of electric utilities, gas utilities, and other efficiency program administrators including National Grid (collectively, “program administrators”). The sponsors, along with non-utility parties and their consultants, formed an AESC 2015 Study Group to oversee design and execution of the report.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's Second Set of Data Requests
Issued February 27, 2018

- Where applicable and appropriate, the Company also relied on assumptions and methodologies developed for similar projects previously proposed for its Massachusetts and New York operating companies and subjected to stakeholder engagement in those jurisdictions.

(This response is identical to the Company's response to NERI 19-3 in Docket No. 4770)

Prepared by or under the supervision of: Kayte O'Neill

NERI 5-10

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 25-26. Please explain why the Company developed and relied upon a BCA framework that includes confidential information or methods that cannot be publicly shared. If confidentiality was a condition sought for by contractor(s), please explain why the Company accepted this condition.

Response:

Neither the framework of the Benefit Cost Analysis (BCA), nor the vast majority of its inputs, are confidential. The BCA files for the Electric Transportation Initiative, Electric Heat Initiative, Energy Storage Investments, and Company-owned Solar Facilities and Income Eligible Rewards Program have been submitted on the public record as Attachment DIV 1-1-3.

Certain discrete inputs into the BCA model for the Advanced Meter Functionality proposal include confidential commercially sensitive information that either: (a) reflects vendor pricing submitted in connection with competitive bidding; (b) is information from which vendor bid pricing can readily be derived; or (c) contains Company cost information that, if publicly known, would impact the Company's ability to obtain competitive vendor bid pricing in future procurement processes. Accordingly, the Company maintains the confidentiality of this information (regardless of whether there is a specific request from a vendor to keep any particular data confidential) because to make it publicly available would harm the Company's competitive position.

(This response is identical to the Company's response to NERI 27-10 in Docket No. 4770.)

NERI 5-11

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 29, lines 1-4.

- a. Please define how the term “high penetrations of DER” are used in the Company’s PST proposal.
- b. Please indicate numerically how much DER penetration constitutes “high” penetration such that the proposed DER-enabling investments are required.
- c. Please indicate numerically how much DER penetration constitutes “high” penetration such that the proposed DER-enabling investments are beneficial in reducing costs of DER integration, and to what degree such costs are reduced.
- d. Please indicate how many feeders the Company maintains in its service territory, and how many of these feeders currently meet the definition for high penetration of DER.
- e. Please indicate what the Company predicts for the timeline over which current feeders that do not have high penetrations of DER interconnected will become high DER feeders.
- f. Please provide data to support these responses.

Response:

- a. “High penetrations of DER” represents when the level of distributed energy resources (DERs) materially impacts the manner in which the transmission and distribution (T&D) delivery system operates. Examples of these impacts can be reflected in direction of power flow, voltage regulation, and protective device coordination.
- b. “High penetration” is not a numerical threshold, rather it represents when the level of DERs materially impacts the manner in which the T&D delivery system operates. The degree of DER penetration that leads to these impacts can and will vary by location and circuit to circuit.
- c. “High penetration” is not a numerical threshold; rather, it represents when the level of DERs materially impacts the manner in which the T&D delivery system operates. The degree of DER penetration that leads to these impacts can and will vary by location and circuit to circuit. Therefore, the Company has not determined a numerical value of “high” penetration and has not quantified the cost reduction for the DER integration associated with its proposal.
- d. The Company maintains 381 distribution feeders. The Company has initiated a Hosting Capacity Analysis effort to identify areas where increased distributed generation

penetration may materially impact the manner in which the T&D delivery system operates. This analysis is not complete.

- e. The Company has not attempted to predict the size and location of the customer proposed DERs and therefore when any particular feeder will be materially impacted. DER applications in queue are studied for their specific impacts, and these impacts are addressed prior to operation.
- f. As described above, "high penetration" is not a numerical threshold and feeder level potential impacts cannot be summarized until the Hosting Capacity Analysis is progressed.

(This response is identical to the Company's response to NERI 27-11 in Docket No. 4770.)

NERI 5-12

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 29, lines 13-14. Please explain in detail what is meant by the phrase that describes certain PST investments and costs as representing "a combination of capital and O&M expenditures that do not fit well within the requirements and/or restrictions of existing recovery mechanisms." Why do the proposed investments not fit well?

Response:

The Company's existing recovery mechanisms do not permit recovery of a combination of significant capital and operating and maintenance (O&M) expenses for these types of projects. For example, as the Company explained in its responses to Division 19-2 and Division 19-4 in Docket 4770, copies of which are provided as Attachment NERI 5-12-1 and Attachment NERI 5-12-2, respectively, annual O&M costs associated with the requirements for many of the Power Sector Transformation (PST) Plan projects do not fit within the statutorily prescribed categories of the Infrastructure, Safety, and Reliability Plan. Also, as the Company explained in its response to NERI 1-2, a copy of which is included as Attachment NERI 5-12-3, capital costs associated with the requirements for many of the PST Plan projects do not fit within the statutorily prescribed categories of the Energy Efficiency provision, and the System Reliability Procurement plans have a very limited budget (approximately \$400,000 per year), so it cannot be used for any major expenses. Finally, the Company's other various reconciling mechanisms allow for the recovery of specific types of costs, such as electric transmission, renewable generation-related obligations (*i.e.*, net metering, long term renewable energy contracts), pension and post-retirement benefits other than pensions, gas environmental remediation activities, and electric and gas commodity. The costs of the PST Plan projects proposed by the Company do not meet the requirements of the type of costs allowed for recovery through these various reconciling mechanisms.

(This response is identical to the Company's response to NERI 27-12 in Docket No. 4770.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Nineteenth Set of Data Requests
Issued January 29, 2018

Division 19-2

Request:

Referring to Chapter 3 of Power Sector Transformation Book PST-1, Bates pages 46-47, are there any reasons why the Company could not propose the installation of feeder monitoring systems within the ISR process and recover the costs through the pre-existing ISR mechanism, rather than recovering the costs through the proposed PST cost tracker tariff?

Response:

Chapter 3 of the Company's Power Sector Transformation (PST) Plan provides a holistic view of investments to enable a modern electric distribution system; feeder monitoring sensors are an important part of the PST Plan. Presenting these investments as a holistic suite provides clarity and transparency for stakeholders in Rhode Island on the overall investment roadmap and associated costs. Furthermore, the annual nature of the Plan facilitates a level of flexibility and the ability to respond to advances in National Grid's Massachusetts and New York jurisdictions.

Although feeder monitoring sensors would meet the safety and reliability requirements of the Infrastructure, Safety, and Reliability (ISR) Plan, the ongoing annual operating and maintenance costs associated with data and communications elements of this investment would not fit within the statutorily prescribed categories of the ISR Plan.

(This response is identical to the Company's response to Division 6-2 in Docket No. 4780.)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Nineteenth Set of Data Requests
Issued January 29, 2018

Division 19-4

Request:

Referring to Chapter 3 of Power Sector Transformation Book PST-1, Bates page 53, are there any reasons why the Company could not propose the RTU Separation within the ISR process and recover the costs through the pre-existing ISR mechanism, rather than recovering the costs through a PST cost tracker tariff?

Response:

The Company presented the remote terminal unit (RTU) separation project in the Power Sector Transformation (PST) Plan filing because it is directly linked with the proposed DSCADA and ADMS investments associated with the control center upgrades in the PST Plan. In addition to the capital costs associated with the RTUs, there are annual operating and maintenance costs associated with the data and communications requirements for the project that do not fit within the statutorily prescribed categories of the Infrastructure, Safety, and Reliability (ISR) process.

(This response is identical to the Company's response to Division 6-4 in Docket No. 4780.)

Prepared by or under the supervision of: Robert Sheridan

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4780
Responses to NERI's First Set of Data Requests
Issued February 27, 2018

NERI 1-2

Request:

Reference Chapter 3, p. 16, and the Company's statement during the January 26 Conference that the Company proposes to "align" various programs and filings going forward, but does not intend to "fully integrate" all of them into a single filing.

- a. Please provide a list of all of the various programs and filings that would be included in this process of alignment.
- b. Please describe how the Company proposes to align the various interrelated programs and filings in the future.
- c. Please describe the stakeholder process the Company proposes to use in soliciting feedback regarding aligning its programs and filings, including timelines and process stages.

Response:

- a. The Company has a history of aligning the System Reliability Procurement (SRP) and Energy Efficiency (EE) processes and has worked with the Energy Efficiency Resources Management Council (EERMC) since 2009 on this effort. Going forward, the Company will add alignment of the plans presented in the Power Sector Transformation (PST) and Infrastructure, Safety, and Reliability (ISR) to the SRP and EE alignment process, so the Company will ensure that all of the plans complement each other without replication.
- b. Appropriate Company personnel familiar with each of these filings reviews the content of each filing to ensure alignment.
- c. As described in the response to part a. above, the Company has a history of aligning processes and will expand this effort to include future PST and ISR plans. The Company foresees an effort similar to the one currently in place with the EERMC. As the statutory requirement for the EERMC never contemplated capital work (that is instead covered in the ISR plan), a similar process still needs to be developed. To be engaged in the process, a stakeholder should be required to have sufficient technical knowledge of utility planning and construction practices to make the process constructive for all parties.

(This response is identical to the Company's response to NERI 18-2 in Docket No. 4770)

Prepared by or under the supervision of: Robert Sheridan

NERI 5-13

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 30, lines 13-15. Please provide a consolidated Gantt chart or similar consolidated table of timelines for proposed PST projects, investments, and spending over time.

Response:

Table 3-23 and Table 3-24 in Schedule PST-1, Chapter 3 - Modern Grid (Bates Page 66 of PST Book 1) provide a consolidated table of timelines for the proposed Power Sector Transformation projects, investments, and spending over time. These tables have been updated in Attachment NERI 5-13-1 using the latest project cost information described in the Company's response to Division 19-8 in Docket 4770, including shifting costs for the Distribution Supervisory Control and Data Acquisition (DSCADA) and Advanced Distribution Management System (ADMS) initiative by one fiscal year to better align with the New York jurisdiction; and the Company's response to Division 19-6 in Docket 4770, a copy of which is provided as Attachment NERI 5-13-2 for ease of reference, including removing an initial \$80,000 operating and maintenance (O&M) expense in Fiscal Year 2019 to begin work on the System Data Portal project, which has been approved for funding through the System Reliability Procurement mechanism.

(This response is identical to the Company's response to NERI 27-13 in Docket No. 4770.)

Table 3-23: Power Sector Transformation Cash Flow Estimate – Rhode Island Only Deployment Scenario (updated 3/27/18)

RI Only Scenario		Capex (\$m) - Cash Flow						O&M (\$m) - Cash Flow						Total (\$m) - Cash Flow					
Project	Op Co.	FY19	FY20	FY21	FY22	FY23	5-Yr Sum	FY19	FY20	FY21	FY22	FY23	5-Yr Sum	FY19	FY20	FY21	FY22	FY23	5-Yr Sum
System Data Portal	NECO	0.000	0.000	0.000	0.000	0.000	0.0	0.00	0.70	0.70	0.70	0.00	2.1	0.00	0.70	0.70	0.70	0.00	2.1
Feeder Monitoring Sensors	NECO	0.000	0.455	0.455	0.455	0.455	1.8	0.00	0.00	0.01	0.01	0.00	0.0	0.00	0.46	0.46	0.47	0.46	1.8
Control Center Enhancements																			
DSCADA & ADMS	SvcCo	0.000	0.000	2.524	3.425	1.797	7.7	0.00	0.44	0.00	0.09	0.14	0.7	0.00	0.44	2.52	3.51	1.93	8.4
RTU Separation	NECO	0.000	0.570	0.950	0.190	0.000	1.7	0.00	0.06	0.06	0.06	0.00	0.2	0.00	0.63	1.01	0.25	0.00	1.9
GIS Data Enhancement (IS)	SvcCo	0.000	0.000	0.000	0.000	0.000	0.0	3.05	0.00	0.00	0.00	0.00	3.0	3.05	0.00	0.00	0.00	0.00	3.0
GIS Data Enhancement (BR)	NECO	0.000	0.000	0.000	0.000	0.000	0.0	0.00	0.00	1.03	1.03	1.03	3.1	0.00	0.00	1.03	1.03	1.03	3.1
Operational Data Management																			
Enterprise Service Bus	SvcCo	0.000	5.501	8.919	1.492	0.000	15.9	0.00	0.80	1.95	2.05	0.00	4.8	0.00	6.30	10.87	3.54	0.00	20.7
Data Lake	SvcCo	0.000	1.394	0.000	0.000	0.000	1.4	0.00	0.84	1.21	1.64	1.73	5.4	0.00	2.24	1.21	1.64	1.73	6.8
PI Historian	SvcCo	0.000	0.451	0.000	0.000	0.000	0.5	0.00	0.05	2.05	2.05	0.05	4.2	0.00	0.50	2.05	2.05	0.05	4.7
Advanced Analytics	SvcCo	0.000	4.727	5.419	3.309	0.622	14.1	0.00	0.11	1.35	1.59	1.95	5.0	0.00	4.84	6.77	4.90	2.57	19.1
Telecommunications	SvcCo	0.000	0.304	0.152	0.152	0.000	0.6	0.00	0.00	1.95	2.93	3.90	8.8	0.00	0.30	2.10	3.08	3.90	9.4
Cybersecurity	SvcCo	0.000	13.844	6.734	4.427	12.330	37.3	0.00	8.37	4.22	3.37	3.65	19.6	0.00	22.22	10.96	7.79	15.98	57.0
TOTAL		-	27.2	25.2	13.5	15.2	81.1	3.0	11.4	14.5	15.5	12.4	56.9	3.0	38.6	39.7	29.0	27.7	138.0

Table 3-24: Power Sector Transformation Cash Flow Estimate – Multi-Jurisdiction Deployment Scenario (updated 3/27/18)

Multiple Jurisdiction Scenario		Capex (\$m) - Cash Flow						O&M (\$m) - Cash Flow						Total (\$m) - Cash Flow					
Project	Op Co.	FY19	FY20	FY21	FY22	FY23	5-Yr Sum	FY19	FY20	FY21	FY22	FY23	5-Yr Sum	FY19	FY20	FY21	FY22	FY23	5-Yr Sum
System Data Portal	NECO	0.000	0.000	0.000	0.000	0.000	0.0	0.00	0.70	0.70	0.70	0.00	2.1	0.00	0.70	0.70	0.70	0.00	2.10
Feeder Monitoring Sensors	NECO	0.000	0.455	0.455	0.455	0.455	1.8	0.00	0.00	0.01	0.01	0.02	0.0	0.00	0.46	0.46	0.47	0.47	1.9
Control Center Enhancements																			
DSCADA & ADMS	SvcCo	0.000	0.000	2.524	3.425	1.797	7.7	0.00	0.44	0.00	0.09	0.14	0.7	0.00	0.44	2.52	3.51	1.93	8.4
RTU Separation	NECO	0.000	0.570	0.950	0.190	0.000	1.7	0.00	0.06	0.06	0.06	0.00	0.2	0.00	0.63	1.01	0.25	0.00	1.9
GIS Data Enhancement (IS)	SvcCo	0.000	0.000	0.000	0.000	0.000	0.0	0.43	0.00	0.00	0.00	0.00	0.4	0.43	0.00	0.00	0.00	0.00	0.4
GIS Data Enhancement (BR)	NECO	0.000	0.000	0.000	0.000	0.000	0.0	0.00	0.00	1.03	1.03	1.03	3.1	0.00	0.00	1.03	1.03	1.03	3.1
Operational Data Management							0.0												
Enterprise Service Bus	SvcCo	0.000	2.063	3.770	0.375	0.000	6.2	0.00	0.27	0.62	0.78	0.00	1.7	0.00	2.34	4.39	1.15	0.00	7.9
Data Lake	SvcCo	0.000	0.350	0.000	0.000	0.000	0.4	0.00	0.37	0.60	0.84	0.93	2.7	0.00	0.72	0.60	0.84	0.93	3.1
PI Historian	SvcCo	0.000	0.113	0.000	0.000	0.000	0.1	0.00	0.01	0.52	0.52	0.01	1.1	0.00	0.13	0.52	0.52	0.01	1.2
Advanced Analytics	SvcCo	0.000	3.148	1.470	0.940	0.622	6.2	0.00	0.11	0.46	0.52	0.61	1.7	0.00	3.26	1.93	1.46	1.24	7.9
Telecommunications	SvcCo	0.000	0.120	0.060	0.060	0.000	0.2	0.00	0.00	0.66	0.98	1.31	3.0	0.00	0.12	0.72	1.04	1.31	3.2
Cybersecurity	SvcCo	0.000	3.958	1.926	1.275	3.243	10.4	0.00	2.42	1.24	0.96	1.42	6.0	0.00	6.38	3.16	2.24	4.66	16.4
TOTAL		-	10.8	11.2	6.7	6.1	34.8	0.4	4.4	5.9	6.5	5.5	22.6	0.4	15.2	17.0	13.2	11.6	57.4

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Responses to Division's Nineteenth Set of Data Requests
Issued January 29, 2018

Division 19-6

Request:

Referring to Chapter 3 of Power Sector Transformation Book PST-1, Bates page 44-46, why is the Company waiting until FY20 to fully implement the System Data Portal and not starting sooner? Are there any practical impediments to commencing sooner?

Response:

The Company is starting implementation of the System Data Portal sooner than FY20. In collaboration with interested parties, the Company secured \$80K in System Reliability Procurement (SRP) funding for FY19 to jump start and begin the initial work on developing new data sets for the System Data Portal. Because the Company believes the System Data Portal project better aligns with the Power Sector Transformation (PST) goals and stakeholder review process, the Company included System Data Portal funding for FY20 and beyond for illustrative purposes in the PST filing. PST funding for FY20 and beyond will be to perform the detailed studies associated with desired data sets to be posted on the portal.

(This response is identical to the Company's response to Division 6-6 in Docket No. 4780.)

NERI 5-14

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 31, line 11. Please detail all elements considered in the "least cost" analysis, including a description of the methodology used to identify and quantify costs.

Response:

Please refer to the Company's responses to Division 2-3, Division 2-4, and Division 2-5.

(This response is identical to the Company's response to NERI 27-14 in Docket No. 4770.)

NERI 5-15

Request:

Subject: Joint Pre-Filed Testimony of the Power Sector Transformation Panel

Reference p. 31, lines 14-18. Please describe how the “needs of the system” are reflected in specific performance metrics associated with proposed PST projects, investments, and spending over time.

Response:

As discussed in the Joint Pre-Filed Direct Testimony of the Power Sector Transformation (PST) Panel filed with the Public Utilities Commission in Docket No. 4780, at Bates Page 31, the “needs” of the system include: (1) increased transparency of system performance for distributed energy resources providers; (2) real time situational awareness for distribution system operators and distribution system planners; and (3) the ability to manage significantly increased data in a secure environment to accommodate the desired penetration of distributed energy resources without adverse impacts. As these “needs” are met, the Company will be able to improve the Power Sector Transformation performance metrics shown in the table below and described in detail in Schedule PST-1, Chapter 9 - Performance (Bates Pages 161-183 of PST Book 1).

PST Performance Incentive Mechanism	Increased Transparency for DER Providers	Real Time Situational Awareness	Manage Data to Accommodate DERs
Monthly Transmission Peak Demand Reduction	x	x	x
Forward Capacity Market Peak Demand Reduction	x	x	x
EV Off-Peak Charging Rebate Participation			x
Demand Response- Connected Solutions Participation		x	x
Demand Response- C&I Participation		x	x
Electric Vehicles			x
Behind-the-Meter Storage	x	x	x
Company-Owned Storage		x	x
VVO Pilot Delivery		x	x
Interconnection Support – Time to ISA	x		x
The Interconnection Support – Average Days to System Modification	x		x
Interconnection Support – Estimate versus Actual Cost	x		x

(This response is identical to the Company's response to NERI 27-15 in Docket No. 4770.)