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January 23, 2020

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

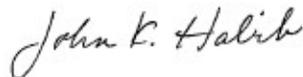
Re: Episcopal Diocese of Rhode Island Petition for Declaratory Judgment – Docket No. 4981

Dear Ms. Massaro:

On behalf of The Narragansett Electric Company d/b/a National Grid (the Company), enclosed are the Company's Comments in the above-captioned matter, pursuant to the Rhode Island Public Utilities Commission's Second Notice to Solicit Comments issued on January 2, 2020.

Thank you for your attention to this matter. Please contact me if you have any questions.

Sincerely,



John K. Habib, Esq.

Enclosures

cc: Docket No. 4981 Service List

Connecting Distributed Generation, RIPUC 2180 (Interconnection Tariff) as approved by the Commission in Standards for Connecting Distributed Generation, Docket No. 4763, Report and Order (2019).

The Commission considered this matter at an open meeting on December 17, 2019 and voted to schedule the matter for further consideration. On January 2, 2020, the Commission issued a second notice, inviting additional comments or legal memorandum from interested persons or entities until January 23, 2020. In accordance with that notice, Narragansett submits the following comments.

I. Transmission Studies And Any Potential Transmission Upgrades Are Required By ISO-NE Tariffs.

In its reply brief, the Diocese claims that the “jurisdictional context frames this advocacy.” Diocese Reply Brief at 5. This is incorrect. To the contrary, the “jurisdictional context” that the Diocese presents in its petition and reply brief is little more than a red herring. The Diocese devotes significant energy to establish what has never been in dispute – that the interconnection of the Diocese’s proposed projects would be subject to Rhode Island state laws and procedures, specifically Narragansett’s Interconnection Tariff used to interconnect projects to Narragansett’s electric distribution system. Where the Diocese goes wrong is its assertion that because its proposed projects are subject to Rhode Island state-jurisdictional interconnection procedures, it “cannot be assessed the cost of improvements to the transmission system.” *Id.* at 7. The Diocese cites no statute, precedent or other authority to support such a novel position. Nor can it, because the Diocese’s contention that it is categorically exempt from allocation of transmission system costs necessary to safely and reliably interconnect its projects because such costs are incurred pursuant to a FERC-jurisdictional tariff is directly at odds with both federal and state law.

In order to fully appreciate the fundamental nature of the flaw in the Diocese's argument, it is helpful to revisit the context of this dispute, which begins with ISO-NE's determination that the large amount of distributed generation planning to interconnect to the electric distribution system owned by Narragansett in the Rhode Island area, including the Diocese's proposed projects, could potentially result in impacts to the transmission system that would require upgrades in order to ensure needed transmission facilities are in place to interconnect the generation facility to the distribution system and sufficient capacity is in place to prevent any degradation in reliability on the electric transmission and distribution systems. This determination implicates Section I.3.9 of ISO-NE's Transmission, Markets, and Services Tariff (ISO-NE Tariff), which obligates ISO-NE Market Participants and Transmission Owners to submit to ISO-NE certain plans for the addition of new generators, demand resources or transmission facilities for review to determine whether a new addition would have a significant effect on the stability, reliability or operating characteristics of the Transmission Owner's transmission facilities, or those of another Transmission Owner or Market Participant. ISO-NE Tariff, Section I.3.9. Section I.3.9 makes no distinction based on whether a proposed generator or other resource is interconnected subject to FERC or state jurisdictional interconnection procedures. Indeed, ISO-NE has stated unequivocally that the interconnection of distributed generation resources may trigger review pursuant to I.3.9, regardless of their jurisdictional status. FERC Docket No. RM18-9-000, ISO New England Inc. Response to Letter Dated September 5, 2019, at 5 (October 7, 2019).

Pursuant to Section I.3.9 (which is often referred to as the Proposed Plan Application process or PPA) ISO-NE directed Narragansett's transmission affiliate, New England Power Company (NEP) to undertake a Transmission Study involving the review of approximately 161 MW of proposed distributed energy generation facilities to assess potential impacts to the

transmission system operated by NEP as well as the systems of other Affected System Operators in the area, including Eversource Transmission, Pascoag Municipal and Block Island Power. This includes the Diocese's proposed project.

Despite conceding that the ISO-NE Proposed Plan Application process is subject to FERC jurisdiction, the Diocese asks this Commission to find that it is "not subject to the ISO's study requirements, by ISO's own terms." Diocese Reply Brief at 12. The issue of whether ISO-NE has correctly interpreted or applied Section I.3.9, or indeed, any other provision of its Tariff, is a matter within FERC's authority, and not an issue for this proceeding. To be clear, however, ISO-NE explicitly determined that a full transmission analysis is required for the Diocese's project before it can receive approval under the Proposed Plan Application process. Narragansett has already explained this to the Diocese in the parallel dispute resolution proceeding under review in Docket 4973. To ensure a complete and accurate record in this proceeding, Narragansett has enclosed ISO-NE's April 3, 2019 determination as Attachment A to these comments.¹

In addition, Section I.3.10 of the ISO-NE Tariff addresses the responsibility and allocation of costs of such studies and any necessary upgrades in the first instance. That provision provides that if ISO-NE determines that a proposed new addition to the system will have a significant adverse effect upon the reliability or operating characteristics of a Transmission Owner's transmission facilities or those of other Transmission Owners or Market Participants, such additions cannot be made unless the Transmission Owner "takes such action or constructs at its expense such facilities that the ISO determines to be reasonably necessary to avoid such adverse effect." ISO-NE Tariff, Section I.3.10.

¹ Customer names included in ISO-NE's materials other than the Diocese have been redacted to protect confidential customer information.

Pursuant to Section I.3.10, the costs of the Rhode Island transmission studies, and any resulting upgrades to the transmission system administered by NEP, would be incurred by NEP, as the applicable ISO-NE Transmission Owner.² NEP would then allocate and recover such costs from its transmission customers in accordance with the ISO-NE Tariff. This includes Schedule 21-NEP, which provides the mechanisms by which NEP allocates and recovers from its transmission customers costs associated with its local transmission facilities, as well as for any other transmission facilities for which costs are not otherwise recovered under the ISO-NE Tariff.³ Thus, costs that NEP incurs to perform the Rhode Island transmission studies, and for certain facilities that it must construct or modify as a result, will be allocated to Narragansett, as a transmission customer of NEP.⁴

This aspect of the allocation and recovery process is solely subject to FERC jurisdiction, and therefore outside the scope of this proceeding. No party disputes this. Accordingly, the only issue before the Commission relating to the allocation of costs from the Rhode Island transmission studies is the appropriate mechanism by which Narragansett ultimately recovers any such costs from its retail customers. As set forth in Narragansett's memorandum of law, Rhode Island state law provides that such costs should be recovered from the customers who caused them to be incurred, consistent with well-established principles of cost causation – i.e. DG customers such as

² To the extent a project affects the transmission system of Eversource Transmission, the costs would be incurred by Eversource Transmission as the applicable ISO-NE Transmission Owner.

³ See ISO-NE Tariff, Schedule 21-NEP at Section 2 (“Pursuant to this Schedule . . . NEP . . . provides for the recovery of costs associated with the Transmission Facilities and Ancillary Services that are not recovered pursuant to the [ISO-NE] OATT.”)

⁴ If the ISO-NE determines through the PPA process that any transmission facilities are Pool Transmission Facilities that provide regional system benefits, the costs of those facilities could be subject to regional cost allocation under the ISO-NE Tariff.

the Diocese.⁵ Regardless, the Diocese’s assertion that it is somehow exempt from having to pay for costs of improvements to the transmission system because those costs are “FERC jurisdictional” is simply wrong.

In its memorandum of law, Narragansett provided substantial authority for the principle that a state cannot prohibit recovery from retail customers of costs incurred pursuant to a FERC-approved tariff. Narragansett Memorandum of Law at 11-15. One of the seminal cases on this subject involved costs that Narragansett incurred pursuant to a contract with NEP for the purchase of power at wholesale. Narragansett Electric Co. v. Burke, 381 A.2d 1358 (1977). The Supreme Court of Rhode Island concluded that because the question of whether that contract was reasonable was subject to the FPC’s jurisdiction (the predecessor to FERC), the Commission was required to treat the costs incurred under the contract as a reasonable operating expense for purposes of allowing Narragansett to pass those costs through to its retail customers. Id. at 1363. Similarly, because any costs incurred and ultimately allocated to Narragansett pursuant to the ISO-NE I.3.9 process are subject to FERC jurisdiction, the Commission has no authority to prevent Narragansett from recovering these costs from its retail customers, such as the Diocese. Tellingly, the Diocese’s only response to the exhaustive citations provided by Narragansett on this issue is to accuse Narragansett of “egregiously fallacious utility doublespeak.” Diocese Reply Brief at 15. But empty invective cannot make up for the lack of any cogent legal argument. There is absolutely no

⁵ Narragansett’s initial Memorandum of Law explained that charging Interconnecting Customers for transmission-related interconnection costs is consistent with the cost causation principles adopted by the Commission. See Narragansett Memorandum of Law at 15-16 (citing United States v. Pub. Utilities Comm’n, 120 R.I. 959, 968 (1978); United States v. Pub. Utilities Comm’n, 635 A.2d 1135 (R.I. 1993); Pascoag Utility District General Rate Filing, Docket Nos. 3546 and 3580, Report and Order at 21 (2004)). The Commission should also be aware that while in this case the Diocese’s project involves potential impacts to NEP’s transmission system, other DG projects in Rhode Island could involve potential impacts to the transmission system operated by Eversource Transmission or other transmission systems, depending on the location of the project. If the Commission decides not to follow cost causation principles, and instead socializes transmission-related interconnection costs among all Narragansett electric customers as the Diocese suggests, Narragansett’s customers could end up paying for system upgrades on Eversource’s transmission system that are only necessary to support a specific Interconnection Customer’s project..

merit to the Diocese’s assertion that its status as a retail customer immunizes it from allocation of costs incurred by Narragansett pursuant to the ISO-NE Tariff.

To summarize, there is no conflict between federal and state jurisdiction here. Both state and federal precedent are clear that not only *can* the Commission permit the recovery of costs incurred to study the impacts of DG projects in Rhode Island, as well as any resulting upgrades, from retail customers such as the Diocese, it *must* permit such recovery. The only question for the Commission is the appropriate allocation amongst Narragansett’s retail customers. Narragansett has demonstrated that the relevant state statutes and tariffs provide for passing through these costs to DG customers such as the Diocese. However, even if the Commission were to conclude otherwise, it must still permit Narragansett to recover these costs from retail customers generally. The practical implications of a Commission ruling to the contrary would be profoundly damaging to both Narragansett and its customers, and Rhode Island’s clean energy policy goals. It would put Narragansett in an untenable position in terms of its ability to fully satisfy all of its applicable federal and state obligations – on one hand, the requirements relating to its role as a Market Participant and Transmission Customer under the ISO-NE Tariff, and on the other, its obligations as an interconnection service provider to facilities connecting to its distribution system. At a minimum, the resulting uncertainty would significantly delay the efforts to study and address potential transmission system impacts caused by the proliferation of DG projects in Rhode Island and other New England states, thereby undermining the achievement of the region’s ambitious clean energy objectives.

II. Rhode Island General Laws § 39-26.3-4.1 Does Not Prohibit Charging For Transmission-related Interconnection Costs.

R.I. Gen. Laws § 39-26.3-4.1(a) states that “the electric distribution company may only charge an interconnecting, renewable-energy customer for any system modifications to its electric

power system specifically necessary for and directly related to the interconnection.” The Diocese has argued that this provision prohibits Narragansett from charging for any costs not related to its own distribution system. Diocese Reply Brief at 17-18. Narragansett’s previously-filed Memorandum of Law explained that R.I. Gen. Laws § 39-26.3-4.1 is silent as to system modifications to transmission facilities or other affected systems and cannot be read to preclude passing on necessary transmission study costs to interconnecting customers. In fact, Legislative Council’s explanation of An Act Relating to Public Utilities and Carriers, H 5483 Substitute B, which added Section 39-26.3-4.1, states the following:

This act would prohibit electrical distribution companies from charging an interconnecting renewable energy customer for system modifications that are not directly related to the interconnection, except accelerated modifications for which the developer is repaid when the modification would have otherwise been made. It would require that any system modifications be completed no later than fourteen (14) calendar months from the effective date of the interconnecting renewable energy customer’s interconnection service agreement subject to all payments being made in accordance with the interconnection service agreement, or the renewable energy customer’s agreed upon expected interconnection date as set forth in the executed interconnection service agreement and full payment for all required system modifications. The act would enable replacement of a renewable energy resource with limitations on study time and system modification costs.

H.R. 5483 Substitute B (2017) (attached hereto as Attachment B).

Thus, the legislative history of Section 39-26.3-4.1 does not support the Diocese’s argument that the statute “also prohibits charges for modifications to anything other than its own distribution system.” Diocese Reply Brief, at 17.

Moreover, this issue was also discussed at some length in Docket 4763, in which the Commission approved revisions to the Interconnection Tariff submitted in response to the amendments to Chapter 39-26.3, including the addition of Section 39-26.3-4.1. During the November 28, 2017 technical session in that docket, National Grid witness Timothy Roughan introduced the fact that due to increased levels of distributed generation development in Rhode

Island, ISO-NE is increasingly requiring transmission system analysis for large projects interconnecting to the distribution system. Mr. Roughan explained that there will be charges for such reviews that will flow through to the interconnecting customer. See Standards for Connecting Distributed Generation, Docket 4763, Tech. Session Tr. at 13-17 (Nov. 28, 2017) (attached hereto as Attachment C). Mr. Roughan also explained that when system upgrades to assets owned by NEP are necessary to interconnect a distributed generation facility, Narragansett will “get estimates from New England Power for their work and we then flow them through the interconnection service agreement, connect those and credit those accounts to New England Power so they can do those upgrades on their side of the house.” Id. at 25-26. He also noted that if upgrades are required to other affected systems not under the ownership of Narragansett or NEP, such as the Eversource transmission system, the interconnecting customer would have to pay that entity directly for those system modification costs before the facility could be interconnected. Id. at 98-99.

The Company reaffirmed these points during the evidentiary hearing in Docket 4763. Under questioning from Commission counsel regarding how the mechanics of charges for affected system operator study or system upgrades would operate, Mr. Roughan explained that if NEP is required to make transmission upgrades to interconnect a project, NEP will incur costs and will charge Narragansett, and Narragansett will in turn pass that cost on to the interconnecting customer. Standards for Connecting Distributed Generation, Docket 4763, Evid. Hearing Tr. at 15-18 (Jan. 25, 2018) (attached hereto as Attachment D). Mr. Roughan confirmed that such costs would originate from NEP and be charged to the interconnecting customer by Narragansett on NEP’s behalf. Id. at 18. If the costs originate from an unaffiliated affected system operator, such as in the case of necessary upgrades to Eversource’s transmission system, that entity will charge

the interconnecting customer directly. *Id.* Thus, Narragansett was clear that it would pass transmission study and transmission upgrade costs through to interconnecting customers under the terms of the Interconnection Tariff. Following the hearing, the Commission approved the Interconnection Tariff, including revisions to Section 5.4 of the tariff providing that the “Interconnecting Customers shall be directly responsible to any Affected System operator for the costs of any system modifications necessary to the Affected Systems.”

Thus, the Commission has already reviewed this issue and determined that transmission study costs and any resulting transmission system modification costs can be passed on to the interconnecting customer in accordance with the terms of the Interconnection Tariff.

III. Any Transmission Upgrades Necessary To Interconnect The Diocese’s Project Will Not Be Considered “Public Policy Transmission Upgrades.”

The Diocese asserts that because its project is not subject to the ISO-NE’s generator interconnection procedures, any transmission system upgrades related to the Diocese’s project must be Public Policy Transmission Upgrades that are subject to the cost allocation methodology for that type of upgrade set forth in Section B.6 of Schedule 12 of the ISO-NE Tariff.⁶ Diocese Reply Brief at 16. The Commission should decline to entertain this argument. As the Diocese itself repeatedly states, the ISO-NE tariff is subject to federal, not state, jurisdiction. Thus, the question of whether transmission system impacts of DG projects are evaluated pursuant to the ISO-NE’s Public Policy transmission planning process, or through the Proposed Plan Application mechanism, is a matter within FERC’s authority.

Even if the Commission were inclined to consider the Diocese’s arguments on this issue, the Diocese’s interpretation of the ISO-NE Tariff and Order No. 1000 is in error. Any transmission

⁶ The entirety of the ISO-NE Tariff is available at <https://www.iso-ne.com/participate/rules-procedures/tariff/>.

system upgrades required as a result of the Diocese’s project would not meet the criteria of Public Policy Transmission Upgrades under the ISO-NE Tariff. In order to qualify as a Public Policy Transmission Upgrade, an upgrade must have “been included in the Regional System Plan [RSP for short] and RSP Project List as a Public Policy Transmission Upgrade pursuant to the procedures described in Section 4A of Attachment K of the [ISO-NE] OATT.”⁷ But no upgrades related to the Diocese’s project have been identified through the system planning process set forth in Attachment K of the ISO-NE OATT (Attachment K), much less been included in the Regional System Plan or the RSP Project List as Public Policy Transmission Upgrades, for the reasons noted below.

The procedures in Section 4A of Attachment K specify how transmission needs are considered in Public Policy Transmission Studies, which is the initial step toward the possible designation of transmission upgrades to meet such transmission needs as Public Policy Transmission Upgrades.⁸ Under these procedures, the New England States Committee on Electricity (NESCOE) is responsible for requesting a new Public Policy Transmission Study or an update to a previously conducted study, based on input provided by ISO-NE’s Planning Advisory Committee. Each such NESCOE request “identif[ies] the Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and may identify

⁷ ISO-NE Tariff, Section I.2.2, definition of “Public Policy Transmission Upgrade”. The same section of the ISO-NE Tariff defines the Regional System Plan as “the plan developed under the process specified in Attachment K of the [ISO-NE] OATT.” The RSP Project List is a cumulative list that ISO-NE develops and maintains to reflect the regulated transmission solutions proposed in response to Needs Assessments, *i.e.*, assessments of the adequacy of the Pool Transmission Facilities (“PTF”) owned by Participating Transmission Owners in ISO-NE, as a whole or in part, to maintain the reliability of such facilities and promote the operation of efficient wholesale electric markets in New England. Sections 1 and 4.1 of Attachment K of the ISO-NE Tariff. The ISO-NE OATT (short for Open Access Transmission Tariff) is Section II of the ISO-NE Tariff.

⁸ A Public Policy Transmission Study is a two-phase study conducted by ISO-NE pursuant to the process set forth in Section 4A.3 of Attachment K. ISO-NE Tariff, Section I.2.2, definition of “Public Policy Transmission Study”.

particular NESCOE-identified public policy-related transmission needs as well.”⁹ Along with its request, NESCOE also provides ISO-NE with a written explanation of which transmission needs driven by state or federal Public Policy Requirements ISO-NE will evaluate for potential solutions in the regional planning process, including why other suggested transmission needs will not be evaluated. Attachment K, Section 4A.1. NESCOE has never identified a transmission need related to the Diocese’s project, or DG projects generally, that satisfies these provisions of Section 4A of Attachment K.

The procedures in Section 4A of Attachment K also state that, if a stakeholder believes that a federal Public Policy Requirement that may drive transmission needs relating to the New England Transmission System has not been appropriately addressed by NESCOE, the stakeholder can raise the issue in a filing submitted to ISO-NE that explains the stakeholder’s reasoning and seeks reconsideration by ISO-NE of NESCOE’s position regarding that requirement.¹⁰ The Diocese has not submitted such a filing to ISO-NE. Consequently, ISO-NE has never considered any transmission upgrades related to the Diocese’s project or other DG projects for inclusion in a Public Policy Transmission Study pursuant to the Attachment K procedures,¹¹ which would be a prerequisite for any such upgrades to be included in the Regional System Plan and the RSP Project List as Public Policy Transmission Upgrades. Therefore, any transmission upgrades needed in

⁹ Attachment K, Section 4A.1. A Public Policy Requirement means a requirement reflected in a statute enacted by, or a regulation promulgated by, the federal government or a state or local (*e.g.*, municipal or county) government. ISO-NE Tariff, Section I.2.2, definition of “Public Policy Requirement”.

¹⁰ Attachment K, Section 4A.1.1. That section of the ISO-NE OATT also states that ISO-NE will post the stakeholder’s filing and other materials on the ISO-NE website. *Id.* Further, ISO-NE will post on its website an explanation of those transmission needs driven by local Public Policy Requirements that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by local Public Policy Requirements will not be evaluated. *Id.*

¹¹ See Attachment K, Section 4A.2.

order to accommodate the Diocese’s project would not be considered Public Policy Transmission Upgrades and would not be subject to the cost allocation methodology set forth in Section B.6 of Schedule 12 of the ISO-NE Tariff.

The Diocese’s suggestion that Narragansett and NEP have somehow acted contrary to Order No. 1000 because they did not identify transmission upgrades relating to DG interconnections as Public Policy Transmission Upgrades fails for the same reasons. See Diocese Reply Brief at 8-9. NEP conducts transmission planning functions with respect to its local transmission facilities¹² in accordance with Attachment K – Local to the ISO-NE OATT. Nothing in Attachment K – Local directs or requires NEP to engage in transmission planning to account for the impacts of DG-interconnected projects. Doing so would present significant practical impediments, such as forecasting where specific DG projects will locate and the potential for system overbuild, and resulting increased ratepayer costs, if such estimates turn out to be incorrect. Such forecasting would be particularly challenging given the high percentage of DG projects that ultimately withdraw from the interconnection queue – a DG project attrition rate that has consistently been approximately 30%.

Regardless, the Diocese’s assertion that NEP should have planned for DG-driven transmission upgrades pursuant to Public Policy Requirements is at odds with the plain language of Attachment K - Local. Attachment K- Local provides that as part of the local planning process each ISO-NE Transmission Owner will “review the Public Policy Requirements posted by the ISO to determine and evaluate at a high level any public policy needs potentially driving transmission needs on their respective Non-PTF systems Each PTO will then determine if any of the posted

¹² Under the ISO-NE Tariff, transmission facilities are divided into Pool Transmission Facilities and Non-Pool Transmission Facilities. ISO-NE conducts planning functions with respect to the former, while individual Transmission Owners conduct planning for the later.

state, federal or local Public Policy Requirements are driving a need on its Non-PTF transmission system and will include the Non-PTF needs in its local planning process.” ISO-NE Tariff, Attachment K-Local, Section 1.6A. Thus, a Transmission Owner such as NEP is limited to planning for those Public Policy Requirements “posted” by ISO-NE, which, as described above, are identified in the first instance by NESCOE. ISO-NE has not posted any Public Policy Requirement for transmission upgrades relating to DG projects such as the one proposed by the Diocese, presumably because NESCOE has never identified any such need. And last, but not least, these are provisions of the ISO-NE Tariff, and their implementation is therefore subject to FERC, not state, oversight. The fact that the Diocese continues to emphasize the FERC-jurisdictional nature of these documents and procedures, while at the same time asking this Commission to interpret or enforce them, evinces a fundamental misunderstanding of respective federal and state roles and authority regarding transmission planning.

IV. CONCLUSION

The Diocese’s attempts to shift necessary transmission study and transmission system upgrade costs needed to interconnect their generation projects and to maintain electric transmission and distribution system capacity from its projects onto other Rhode Island customers must be denied. There is no basis in state or federal law to support the Diocese’s position, and the Diocese has failed to demonstrate otherwise. For all the reasons stated above, and in Narragansett’s initial Protest and Memorandum of Law, the Diocese’s Petition should be denied.

Respectfully submitted,

**THE NARRAGANSETT ELECTRIC
COMPANY d/b/a NATIONAL GRID**

John K. Habib

John K. Habib, Esq. (R.I. Bar #7431)
Keegan Werlin LLP
99 High Street, Suite 2900
Boston, MA 02110
617-951-1400

Dated: January 23, 2020

ATTACHMENT A

ISO-NE APRIL 3, 2019 TRANSMISSION STUDY DETERMINATION

From: [Marszalkowski, Bradley](#)
 To: [Martin, John W. \(Jack\)](#)
 Cc: [Chailfoux, Jennifer](#); [Riser, Abhinav](#); [Perez-Perez, Carlos](#); [Marszalkowski, Kevin](#); [McSlide, Abby](#); [Aheri, Barry \(IS\)](#)
 Subject: EXT || RE: [EXT] March GNF transfer analysis - Group 2
 Date: Wednesday, April 3, 2019 4:46:56 PM
 Attachments: [NSD\kpolizator1@-NeedsSubv.xlsx](#)

Hello Jack,
 Thank you for running this analysis. After reviewing the results, and reviewing the new list of GNF's, we have determined that full level III analysis will be required in order to ensure no adverse impact for these areas, and others, moving forward. The accumulations are too large for only TLTG analysis to be sufficient.

These projects highlighted in green below are acceptable to submit as GNF's without any analysis.

SEMA central	RI-26868525/187416		51F1, 12.47kV	Bristol	117396	Bristol	4.98	NEP-19-GNF73	1/4/2020	4.98	Bristol
Nantucket	MA-25745601/178585		101L5, 13.2kV	Candle St	115976	Nantucket	1	NEP-19-GNF83	10/28/2019	1	Candle St
South Shore	MA-26266788/184675		93W43, 13.8kV	Plymouth St	115488	Hanson	1.328	NEP-19-GNF91	7/31/2020	1.328	Plymouth St
WRI	RI-25188641/17843		27F5, 12.47kV	Pontiac	117386	Cranston	2.375	NEP-19-GNF81	12/20/2019	2.375	Pontiac
South Shore	MA-26025993/178285		910W25, 13.8kV	Water Street	115489	Pembroke, MA	3.2	NEP-19-GNF67	4/3/2019	3.2	Water Street

All projects listed in the attached excel sheet will need level III analysis before receiving I.3.9 approval. You'll see that these include a number of the items that were not approved last month as well.

Also, at the request of Barry I have removed all projects that are within the area of the Western MA cluster study. This includes the applications at these substations:

- Adams
- Belchertown
- Crystal Lake
- E. Winchendon
- E. Longmeadow
- Little Rest Rd.
- Milbury
- North Oxford
- Thorndike
- West Hampden

I will consider those GNF's as I go through the list of substations for the WMA cluster study to determine which, if any, can receive I.3.9 approval without study.

If there are any questions, or if this is unclear, please let me know.

Thank You,

Brad Marszalkowski
 Associate Engineer | Transmission Strategies & Services
 ISO New England Inc.
 One Sullivan Road, Holyoke, MA 01040-2841
 T: 413-535-4050

The information in this message and in any attachments is intended solely for the addressee(s) listed above. If you have received this message in error, please notify us immediately and delete the original message.

From: Martin, Jack
 Sent: Monday, April 01, 2019 8:09 PM
 To: Marszalkowski, Bradley <bmarszalkowski@iso-ne.com>
 Cc: Chailfoux, Jennifer <jchailfoux@nationalgrid.com>; Rawat, Abhinav <Abhinav.Rawat@nationalgrid.com>; Perez-Perez, Carlos <carlos.perez-perez@nationalgrid.com>
 Subject: [EXT] March GNF transfer analyses - Group 2

*** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. ***

Transfer analyses for the Group 2 set of March GNF forms

----- Following section is a repeat of previous info on case stresses and assumptions-----

Recapping the groupings, for everyone's convenience:

- "central" SEMA stations - Beaver Pond, Uxbridge, Whitins Pond, Union Loop (Chartley Pond, South Wrentham, West Street) - with an emphasis on generation additions at Brayton for QP618 & QP625 respectively
- RI stations - Chase Hill Wood River, Kent County, Naasoville - with an emphasis on generation additions at Davisville and Kent County for QP781 & QP782 respectively
- "eastern" SEMA stations - Dighton & Mill Street - with an emphasis on generation in the SEMA area (versus RI)
- Central/Western MA stations - Crystal Lake and Thorndike
- NEMA stations - King Street - with an emphasis on imports from North

General assumptions (applicable to all analyses):

Cases were stressed as Goodarz and I discussed with you. Striving for high East to West and SEMA/RI exports for Groups 1 thru 3; high E-W for group 4; and high Boston Import for Group 5. Because a lot of analyses involved buses in the SEMA/RI area, for Groups 1 thru 3, we did a 2020 case (essentially with today's configuration) and a 2023 case (with SEMA/RI projects in place). QP619 was in service for the 2020 case; QP625 was added to the 2023 Group 1 case; QP781 and QP782 were added to the 2023 Group 2 case. The negative loads in the cases representing small PV was increased for each group from the nominal 26% to 100%, tailoring to the area of buses of interest for each group. Contingencies and monitoring done in accordance to the zones in which the various buses are situated, as noted in the con files and the sub files for each group.

----- Above was a repeat of previous supplied info on case stresses and assumptions-----

For your review of **Group 2 analyses**, attached please find:

Results Summary - 2019 March GNF Results.xlsx (note: contains Group 1 & 2 results at present)

Of note:

In the near-term, three of the four sub injections (exception being Kent County) are limited by their distribution xfr ratings. Kent County injection is limited by the L-190 line rating for a G-185S related contingency. In the longer-term, similar situation with three of the four sub injections again limited by distribution xfr ratings. But now Wood River injection becomes the exception, limited by the 1870S line rating for a Killingly stuck breaker contingency. Addition of the QP781 ring bus at Davisville relieves the earlier congestion on L-190, but the additional generation at QP781, QP782, and the proposed PV injection loads up the line to Connecticut.

Case Summary files - "2020_SUM_EW_Group2_PV adjusted.lis" & "2023_SUM_EW_Group2_PV adjusted.lis"

Contingency files - 2020_Group2.con & 2023_Group2.con

Subsystem file - Group2.sub

Monitor file - GNF.mon (note this monitors "AREA1" which is defined by zone in the Subsystem file and changes with each Group)

TLTG Results - by substation for 2020 and 2023 - transfers run from sub of interest against Canal for 2020 and against Tiverton for 2023 are presented here. Some exploration against other transfers was also done (e.g. against Ocean State Power or RISE) with no significant change in results. Note that Canal was OOS in 2023 cases.

Please review these and contact me if any questions.

Thanks,

-Jack-

John W. (Jack) Martin
 Consulting Engineer / Transmission Planning-NE
 nationalgrid
 Office (781) 807-2494
 e-mail: john.w.martin@nationalgrid.com

Mind your wake.

AREA	WR#	Cust Name & Type	Voltage, Feeder	Substation	Bus Numbl	Town	Size in MW	GNF ID	Projected in Service Date
Newport	MA-26936782/186693		115W52, 13.8kV	Bates Street	115733	Westport, MA	3.3	NEP-19-GNF94	6/30/2020
SEMA central	MA-2465170/177757		344W6, 13.8kV	Beaver Pond	114795	Franklin	1.248	NEP-19-GNF108	1/28/2020
	MA-26363804		344W5, 13.8 kV	Beaver Pond	114821	Franklin, MA	4.98	NEP-19-GNF37	
SEMA central - Union Loop	MA-26579695/188158		8L3, 13.2kV	Chartley Pond	114809	Attleboro	4.5	NEP-19-GNF117	6/20/2020
	MA-2712596006		8L4, 13.2 kV	Chartley Pond	114809	Rehoboth, MA	4.99	NEP-19-GNF26	
	MA-27345808		8L4, 13.2 kV	Chartley Pond	114809	Attleboro, MA	2	NEP-19-GNF35	
SEMA central - Union Loop	MA-25021125/177644		8L4, 13.2kV	Chartley Pond	114809	Attleboro	4.268	NEP-19-GNF84	6/16/2020
	RI-26084927		155F2, 12.47 kV	Chase Hill	117459	Bradford, RI *	4.08	NEP-19-GNF22	
WRI	RI-24703422/177831		155F4, 12.47kV	Chase Hill	117459	Ashaway	2.46	NEP-19-GNF55	10/14/2019
WRI	RI-23821979/177772		155F8, 12.47kV	Chase Hill	117459	Hopkinton	3.88	NEP-19-GNF59	10/15/2019
	RI-27023228		155F4, 12.47 kV	Chase Hill	117459	Hopkinton, RI	2.9	NEP-19-GNF21	
WRI	RI-25498917/178570		34F3, 12.47kV	Chopmist (via Johnston)	117362	Foster	2.59	NEP-19-GNF42	12/16/2019
WRI	RI-21529421/176506		34F3, 12.47kV	Chopmist (via Johnston)	117362	Scituate	2	NEP-19-GNF43	1/10/2020
WRI	RI-25728432/178542	Episcopal Diocese of RI - Reservoir Rd PV2	34F2, 12.47kV	Chopmist (via Wolf Hill)	117390	Gloucester	2.4	NEP-19-GNF101	2/4/2020
WRI	RI-27789796/203074		34F1, 12.47kV	Chopmist (via Wolf Hill)	117390	Scituate	3.5	NEP-19-GNF113	1/23/2020
WRI	RI-25672190/178426	Episcopal Diocese of RI - Reservoir Rd PV	34F2, 12.47kV	Chopmist (via Wolf Hill)	117390	Gloucester	4.32	NEP-19-GNF99	2/4/2020
SEMA central	MA-25429337/178416		335W3, 13.8kV	Depot Street	114840	Upton, MA	2.45	NEP-19-GNF65	4/9/2020
Newport	RI-23640014/177397		36W44, 13.8kV	Dexter	118188	Portsmouth, RI	4.5	NEP-19-GNF45	7/29/2019
Newport	RI-23031444/177191		36W44, 13.8kV	Dexter	118188	Portsmouth, RI	3	NEP-19-GNF74	7/15/2019
	MA-27187611		19W73, 13.8 kV	Dighton	115736	Swansea, MA	1.5	NEP-19-GNF24	
SEMA eastern	MA-25558786/178152		19W74, 13.8kV	Dighton	115736	Dighton	2.97	NEP-19-GNF85	2/7/2020
SEMA eastern	MA-22960289/177123		19W74, 13.8kV	Dighton	115736	Dighton	3.75	NEP-19-GNF86	10/19/2019
SEMA eastern	MA-24080909/178080		19W72, 13.8kV	Dighton	115736	Dighton	2.8	NEP-19-GNF88	8/14/2019
WRI	RI-25816419/178199		61F1, 12.47kV	Division St (via Kent County 34kV)	117385	W Warwick	3.5	NEP-19-GNF44	10/21/2019
SEMA eastern	MA-27486025/192138		797W42, 13.8kV	E Bridgewater	115493	E Bridgewater	4.975	NEP-19-GNF93	6/30/2020
SEMA eastern	MA-26346794/185512		92W79, 13.8kV	Easton	115480	Norton	4	NEP-19-GNF110	7/31/2020
WRI	RI-25558953/178153		23F5, 12.4kV	Farnum Pike	117380	Smithfield	2.64	NEP-19-GNF58	8/20/2019
WMA 115	MA-24028610/178009		909W3, 13.8kV	Florence Jct	113090	Goshen, MA	3.995	NEP-19-GNF97	5/1/2019
WRI	RI-26678608/189283		63F2, 12.47kV	Hopkins Hill (via Kent County 34 kV)	117385	W Greenwich	3.34	NEP-19-GNF07	12/31/2019
WRI	RI-24360566/177903		63F2, 12.47kV	Hopkins Hill (via Kent County 34 kV)	117385	W Greenwich	3.34	NEP-19-GNF39	12/15/2019
WRI	RI-24231343/177711		18F14, 12.47kV	Johnston T4	117423	Weymouth	3	NEP-19-GNF68	12/6/2019
WRI	RI-23454281/177093		3311, 34.5kV	Kent County	117385	W Greenwich	3.56	NEP-19-GNF75	1/24/2020
WRI	RI-23941071/177924		22F4, 12.47kV	Kent County	117417	Warwick, RI	4.78	NEP-19-GNF77	9/18/2019
WRI	RI-27544211/198789		68F4, 12.47kV	Kenyon	117366	Wood River	3.5	NEP-19-GNF112	1/23/2020
WRI	RI-25667045/178420		68F2, 12.47kV	Kenyon	117366	Wakefield	3.2	NEP-19-GNF48	9/19/2019
	MA-25861839		2329, 23 kV	King Street	114039	Haverhill, MA	4.98	NEP-19-GNF13	
WMA 69	MA-25667535/178421		525I2, 13.2kV	Lashaway	113070	Brookfield	3.375	NEP-19-GNF63	4/12/2021
SEMA central	MA-26522769/186698		332W1, 13.8kV	Mendon 332 (via Uxbridge)	114843	Blackstone	4.99	NEP-19-GNF89	12/9/2020
SEMA central	MA-27213982/184667		332W1, 13.8kV	Mendon 332 (via Uxbridge)	114843	Blackstone	2.2	NEP-19-GNF90	7/15/2019
	MA-26407969		912W55, 13.8 kV	Mill Street	115484	Bridgewater, MA	4.99	NEP-19-GNF11	
	MA-22960940		912W75, 13.8 kV	Mill Street	115484	Halifax, MA	1.67	NEP-19-GNF27	
	MA-25560293		912W75, 13.8 kV	Mill Street	115484	Halifax, MA	4.95	NEP-19-GNF29	
SEMA central	MA-26913193/194753		7L4, 13.2kV	Mink Street	114810	Rehoboth	4.45	NEP-19-GNF102	6/30/2020
SEMA central	MA-26066680/178485		7L5, 13.2kV	Mink Street	114810	Rehoboth	1	NEP-19-GNF100	3/31/2020
	RI-27098988		127W41, 13.8 kV	Nasonville	117019	Burrillville, RI	4	NEP-19-GNF19	

WRI	RI-23918686/177857		127W42, 13.8kV	Nasonville	117019	Burrillville	2.54	NEP-19-GNF82	6/20/2019
WRI	RI-27512298/198235		29F1, 12.47kV	Natick (via Drumrock)	117377	Cranston	3	NEP-19-GNF111	2/20/2020
WRI	RI-xxxxxxx/203331		38F3, 12.47kV	Putnam Pike	117415	Johnston	2.1	NEP-19-GNF115	1/18/2020
WRI	RI-25600863/178191		38F1, 12.47kV	Putnam Pike	117415	N Scituate	3.16	NEP-19-GNF78	10/8/2019
WRI	MA-25962920/178665		108W60, 13.8kV	Riverside	117028	Blackstone	4.95	NEP-19-GNF114	9/1/2020
SEMA central - Union Loop	MA-26489201/188112, MA-26495153/188233, MA-26495247/188239, MA-26505614/188280, MA-26505793/188300		3422W2, 13.8kV	South Wrentham	114815	Wrentham	4.44	NEP-19-GNF106	6/30/2020
SEMA central - Union Loop	MA-26489617/188139, MA-26494373/188144, MA-26494383/188151, MA-26494319/188212, MA-26502513/188301, MA-26505670/188309, MA-26505685/188304, MA-26505695/188306		3422W1, 13.8kV	South Wrentham	114815	Wrentham	1.987	NEP-19-GNF107	6/25/2020
	MA-26360031		3422W1, 13.8kV	South Wrentham	114815	Franklin, MA	2.18	NEP-19-GNF36	
WMA 115	MA-27137525/193884		1102W1, 13.8kV	Stockbridge (via Pleasant Street)	113061	Great Barrington	2.225	NEP-19-GNF79	3/20/2020
SEMA eastern	MA-24606498/177712		11W84, 13.8kV	Swansea 11B	115735	Somerset, MA	1	NEP-19-GNF66	1/6/2020
SEMA eastern	MA-25370932/178294		11W84, 13.8kV	Swansea 11B	115735	Somerset, MA	2.05	NEP-19-GNF80	6/23/2020
SEMA eastern	RI-25916613/178437		33F1, 12.47kV	Tiverton	117410	Tiverton	4.752	NEP-19-GNF104	3/12/2020
SEMA eastern	RI-26678764/207003		33F4, 12.47kV	Tiverton	117410	Tiverton	1.66	NEP-19-GNF105	2/8/2020
SEMA eastern	RI-26618971/188903		33F4, 12.47kV	Tiverton	117410	Tiverton	1.66	NEP-19-GNF116	2/8/2020
SEMA eastern	RI-26094041/178639		33F3, 12.47kV	Tiverton	117410	Tiverton	2.44	NEP-19-GNF69	6/7/2019
WRI	RI-229897422/177156		88F5, 12.47kV	Tower Hill	117363	N Kingstown	1.9	NEP-19-GNF49	10/1/2019
WRI	RI-24580958/177675		88F1, 12.47kV	Tower Hill	117363	Exeter	2	NEP-19-GNF70	8/30/2019
SEMA central	MA-26396687/184555, MA-26396861/184559		348W7, 13.8kV	Union Street	114849	Franklin	1.98	NEP-19-GNF92	7/31/2020
	MA-26958918		321W1, 13.8kV	Uxbridge	114843	Uxbridge, MA	4.28	NEP-19-GNF34	
SEMA central	MA-22741511/177451		321W9, 13.8kV	Uxbridge	114843	Uxbridge	4	NEP-19-GNF87	10/17/2019
	MA-26558766		321W9, 13.8kV	Uxbridge 1	114843	Whitman, MA	3.3	NEP-19-GNF23	
SEMA central	RI-26127300/178223		5F2, 12.47kV	Warren	117414	Warren	3.75	NEP-19-GNF46	6/21/2019
SEMA central	RI-26429196/184910		5F2, 12.47kV	Warren	117407	Warren	1.6	NEP-19-GNF71	2/3/2020
WMA 115	MA-25379008/178297		415L3, 13.2kV	West Charlton	113390	Charlton	2.64	NEP-19-GNF51	12/31/2019
	MA-14761415 & MA-15477748		2248, 23 kV	West Street	114818	Seekonk, MA	4.95 TBD	NEP-19-GNF28	
	MA-24079885		320W5, 13.8 kV	Whitins Pd T1	114844	Northbridge, MA	4.75	NEP-19-GNF30	
	MA-26856007		320W2, 13.8 kV	Whitins Pd T2	114794	Douglas, MA	4.99	NEP-19-GNF25	
SEMA central	MA-26099579/178674		320W5, 13.8kV	Whitins Pond	114844	Sutton	1	NEP-19-GNF50	4/16/2021
	MA-25187666 & MA-25188219		320W3, 13.8 kV	Whitins Pond T1	114844	Northbridge, MA	4.98 TBD	NEP-19-GNF33	
	MA-26333846		320W2, 13.8 kV	Whitins Pond T2	114794	Douglas, MA	4.98	NEP-19-GNF38	
WMA 69	MA-21050697/176601		507L1, 13.2kV	Wilbraham	113078	Monson	2	NEP-19-GNF98	4/1/2019
WRI	RI-24981680/177606		2221, 23kV	Wolf Hill	117390	Gloicester	3	NEP-19-GNF72	3/31/2020
	RI-27180601		85T3, 34.5 kV	Wood River	117391	Hopkinton, RI	3.1	NEP-19-GNF14	
WRI	RI-25668992/178423		85T1, 34.5kV	Wood River	117391	Hopkinton	3.75	NEP-19-GNF41	9/25/2019
WRI	RI-23498655/177170		85T3, 34.5kV	Wood River	117391	Charlestown	3.34	NEP-19-GNF47	7/1/2019
WRI	RI-23494905/177169		85T3, 34.5kV	Wood River	117391	Charlestown	4.5	NEP-19-GNF56	10/31/2019
WRI	RI-23459169/177094		85T1, 34.5kV	Wood River	117391	Richmond	4.5	NEP-19-GNF57	1/31/2020
WRI	RI-27341724/192798		85T3, 34.5kV	Wood River	117391	Hope Valley	4	NEP-19-GNF64	12/31/2019
SEMA central	RI-20344133/176300		26W3, 13.8kV	Woonsocket	117448	N Smithfield	1.5	NEP-19-GNF103	9/18/2019
WRI	MA-27561442/201084		26W3, 13.8kV	Woonsocket	117448	Cumberland	4.482	NEP-19-GNF109	1/3/2020

ATTACHMENT B

H.R. 5483 SUBSTITUTE B (2017)

2017 -- H 5483 SUBSTITUTE B

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LC000960/SUB B
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STATE OF RHODE ISLAND

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2017

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A N A C T

RELATING TO PUBLIC UTILITIES AND CARRIERS

Introduced By: Representatives Marshall, Regunberg, Ruggiero, McKiernan, and Handy

Date Introduced: February 15, 2017

Referred To: House Corporations

It is enacted by the General Assembly as follows:

1 SECTION 1. Section 39-26.3-2 of the General Laws in Chapter 39-26.3 entitled
2 "Distributed Generation Interconnection" is hereby amended to read as follows:

3 **39-26.3-2. Definitions.**

4 The following terms shall have the meanings given below for purposes of this chapter:

5 (1) "Applicant" means an electric distribution customer or distributed generation
6 developer who submits an application to the electric distribution company for the installation of a
7 renewable distributed generation interconnection to the distribution system for a renewable
8 distributed generation project that, as contemplated, meets the eligibility requirements for net
9 metering contained within title 39 or the eligibility requirements for a standard contract contained
10 within title 39.

11 (2) "Impact study" means an engineering study that includes an estimate of the cost of
12 interconnecting to the distribution system that would be assessed on the applicant for an
13 interconnection that is based on an engineering study of the details of the proposed generation
14 project. Such estimate generally will have a probability of accuracy of plus or minus twenty five
15 percent (25%). Such an estimate may be relied upon by the applicant for purposes of determining
16 the expected cost of interconnection, but the distribution company may not be held liable or
17 responsible if the actual costs exceed the estimate as long as the estimate was provided in good
18 faith and the interconnection was implemented prudently by the electric distribution company.

19 (3) "Impact study fee" means a fee that shall be charged to the applicant to obtain an

1 impact study as specified in § 39-26.2-4 of this chapter.

2 (4) "Feasibility study" means a high-level project assessment that includes an estimate of
3 the cost of interconnecting to the distribution system that would be assessed on the applicant for
4 an interconnection. Such estimate is not based on any engineering study, but is based on past
5 experience and judgment of the electric distribution company, taking into account the information
6 in the application, the location of the interconnection, and general knowledge of the distribution
7 and transmission system. Such estimate cannot be relied upon by the applicant for purposes of
8 holding the electric distribution company liable or responsible for its accuracy as long as the
9 electric distribution company has provided the estimate in good faith. The feasibility study
10 estimate shall be a range within which the electric distribution company believes the
11 interconnection costs are likely to be and shall include a disclaimer that explains the nature of the
12 estimate.

13 (5) "Feasibility study fee" means a fee that shall be charged to the applicant to obtain a
14 feasibility study as specified in § 39-26.2-4 of this chapter.

15 (6) "Renewable energy resource" means those resources set forth in §39-26-5.

16 SECTION 2. Chapter 39-26.3 of the General Laws entitled "Distributed Generation
17 Interconnection" is hereby amended by adding thereto the following section:

18 **39-26.3-4.1. Interconnection standards.**

19 (a) The electric distribution company may only charge an interconnecting renewable
20 energy customer for any system modifications to its electric power system specifically necessary
21 for and directly related to the interconnection.

22 (b) If the public utilities commission determines that a specific system modification
23 benefiting other customers has been accelerated due to an interconnection request, it may order
24 the interconnecting customer to fund the modification subject to repayment of the depreciated
25 value of the modification as of the time the modification would have been necessary as
26 determined by the public utilities commission. Any system modifications benefiting other
27 customers shall be included in rates as determined by the public utilities commission.

28 (c) If an interconnecting renewable energy customer is required to pay for system
29 modifications and a subsequent renewable energy or commercial customer relies on those
30 modifications to connect to the distribution system within ten (10) years of the earlier
31 interconnecting renewable energy customer's payment, the subsequent customer will make a
32 prorated contribution toward the cost of the system modifications which will be credited to the
33 earlier interconnecting renewable energy customer as determined by the public utilities
34 commission.

1 (d) An electric distribution company shall acknowledge to the interconnecting renewable
2 energy customer receipt of an application to initiate the interconnection process within three (3)
3 business days of receipt. The electric distribution company shall notify the interconnecting
4 renewable energy customer in writing within ten (10) business days of receipt that the application
5 is or is not complete and, if not, advise what is missing. Any disputes regarding whether and
6 when an application to initiate the interconnection process is complete shall be resolved
7 expeditiously at the public utilities commission. The maximum time allowed between the date of
8 the completed application and delivery of an executable interconnection service agreement shall
9 be one hundred seventy-five (175) calendar days or two hundred (200) calendar days if a detailed
10 study is required. All electric distribution company system modifications must be completed by
11 the date which is the later of: (1) No longer than two hundred seventy (270) calendar days, or
12 three hundred sixty (360) calendar days if substation work is necessary, from the date of the
13 electric distribution company's receipt of the interconnecting renewable energy customer's
14 executed interconnection service agreement; or (2) The interconnecting renewable energy
15 customer's agreed upon extension of the time between the execution of the interconnection
16 services agreement and interconnection as set forth in writing. All deadlines herein are subject to
17 all payments being made in accordance with the distributed generation interconnection tariff on
18 file with the public utilities commission and the interconnection service agreement. These system
19 modification deadlines cannot be extended due to customer delays in providing required
20 information, all of which must be requested and obtained before completion of the impact study.
21 The deadlines for completion of system modifications will be extended only to the extent of
22 events that are clearly not under the control of the electric distribution company, such as extended
23 prohibitive weather, union work stoppage or force majeure, or third party delays, including,
24 without limitation, delays due to ISO-NE requirements not attributable to electric distribution
25 company actions, and which cannot be resolved despite commercially reasonable efforts. The
26 electric distribution company shall notify the customer of the start of any claimed deadline
27 extension as soon as practicable, its cause and when it concludes, all in writing. Any actual
28 damages that a court of competent jurisdiction orders the electric distribution company to pay to
29 an interconnecting renewable energy customer as a direct result of the electric distribution
30 company's failure to comply with the requirements of this subsection shall be payable by its
31 shareholders and may not be recovered from customers, provided that the total amount of
32 damages awarded for any and all such claims shall not exceed, in the aggregate, an amount equal
33 to the amount of the incentive the electric distribution company would have earned as provided
34 for in §§39-26.6-12(j)(3) and 39-26.1-4 in the year in which the system modifications were

1 required to be completed. In no event shall the electric distribution company be liable to the
2 interconnecting renewable energy customer for any indirect, incidental, special, consequential, or
3 punitive damages of any kind whatsoever as a result of the electric distribution company's failure
4 to comply with this section.

5 (e) On or before September 1, 2017, the public utilities commission shall initiate a docket
6 to establish metrics for the electric distribution company's performance in meeting the time
7 frames set forth herein and in the distributed generation interconnection standards approved by
8 the public utilities commission. The public utilities commission may include incentives and
9 penalties in the performance metrics.

10 (f) The proposed interconnection of any new renewable energy resource that replaces the
11 same existing renewable energy resource of the same or less nameplate capacity that has been in
12 operation in the twelve (12) months preceding notification of such replacement shall be subject to
13 a sixty (60) day review. The purpose of such sixty (60) day review is to allow the electric
14 distribution company to determine whether any system modifications are required to support the
15 interconnection of the replacement renewable energy resource. If there is a need for system
16 modifications because of an interconnection policy change implemented by the electric
17 distribution company then the system modification may be included in rates as determined by the
18 public utilities commission. If there is a need for system modifications only because of a change
19 in the rating or utility disturbance response that adversely affects the impact of the facility on the
20 distribution system then the interconnecting renewable energy customer shall be responsible for
21 the cost of the system modifications

22 SECTION 3. This act shall take effect upon passage.

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LC000960/SUB B
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EXPLANATION
BY THE LEGISLATIVE COUNCIL
OF
A N A C T
RELATING TO PUBLIC UTILITIES AND CARRIERS

1 This act would prohibit electrical distribution companies from charging an
2 interconnecting renewable energy customer for system modifications that are not directly related
3 to the interconnection, except accelerated modifications for which the developer is repaid when
4 the modification would have otherwise been made. It would require that any system
5 modifications be completed no later than fourteen (14) calendar months from the effective date of
6 the interconnecting renewable energy customer's interconnection service agreement subject to all
7 payments being made in accordance with the interconnection service agreement, or the renewable
8 energy customer's agreed upon expected interconnection date as set forth in the executed
9 interconnection service agreement and full payment for all required system modifications. The act
10 would enable replacement of a renewable energy resource with limitations on study time and
11 system modification costs.

12 This act would take effect upon passage.

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LC000960/SUB B
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ATTACHMENT C

DOCKET 4763 TECHNICAL SESSION TRANSCRIPT (NOV. 28, 2017)

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
PUBLIC UTILITIES COMMISSION

TECHNICAL RECORD SESSION IN RE:

THE NARRAGANSETT ELECTRIC COMPANY
D/B/A NATIONAL GRID'S STANDARDS FOR
CONNECTING DISTRIBUTED GENERATION

DOCKET NO. 4763

-----/

NOVEMBER 28, 2017
9:30 A.M.
89 JEFFERSON BOULEVARD
WARWICK, RHODE ISLAND

BEFORE THE COMMISSION:

MARGARET E. CURRAN, CHAIRPERSON
MARION GOLD, COMMISSIONER
ABIGAIL ANTHONY, COMMISSIONER
CYNTHIA WILSON-FRIAS, LEGAL COUNSEL
ALANT NAULT, RATE ANALYST
TODD BIANCO, POLICY ASSOCIATE

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IN ATTENDANCE:

RAQUEL WEBSTER, ESQ.
LIANA MOORE, ESQ.
TIMOTHY ROUGHAN
JOHN KENNEDY
ANDREW MARCACCIO, ESQ.
SETH HANDY, ESQ.
RUSSELL MAYNON

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(COMMENCED AT 9:35 P.M.)
MS. WILSON-FRIAS: Good morning,
everybody. We're here for a tech session in
Docket 4763 which is National Grid's
standards for connecting distributed
generation, RIPUC No. 2180 which would
supersede 2163.

When we were conducting the
prehearing conference, it seemed to make
sense that review of this tariff would lend
itself more to a tech session in order to
maybe try to reduce some of the written
discovery that would be necessary that
seemed to be the type of review that might
end with a lot of back and forth with
written requests and answers.

So in setting up the tech session
we talked about not having a Power Point,
which is what National Grid usually does,
but in really just going through the tariff
and understanding where the places were that
the company added language or subtracted
language for purposes of meeting the
requirements from House Bill 5483 Substitute

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B which is codified at Rhode Island General
Laws 39-26.3-4.1 which introduced new
interconnection standards.

In the back of the filing,
Attachment 3, National Grid provided a chart
that showed where the law changes were made
to the tariff and then in the filing letter
they indicate that there are other places
where they have made changes as a result of
I guess experience with the current tariff.
So if that makes sense to everybody, we
might want to go around the table and then
open it up to National Grid. I'm Cindy
Wilson-Frias, Commission counsel.

MR. MARCACCIO: Andrew Marcaccio,
Office of Energy Resources.

COMMISSIONER ANTHONY: Abigail
Anthony, Commission.

THE CHAIRPERSON: Meg Curran,
Commission.

COMMISSIONER GOLD: Marion Gold,
Commission.

MS. MOORE: Liana Moore, Bowditch &
Dewey, outside counsel for National Grid.

1 MS. WEBSTER: Raquel Webster,
 2 National Grid.
 3 MR. ROUGHAN: Tim Roughan, National
 4 Grid.
 5 MR. KENNEDY: John Kennedy,
 6 National Grid.
 7 MR. HANDY: Seth Handy, Handy Law.
 8 MR. NAULT: Alan Nault with the
 9 Commission.
 10 THE CHAIRPERSON: And then we have
 11 AI Contente from the Division and -- what's
 12 your name?
 13 MR. MAYNON: Russ Maynon from
 14 Energy Development Partners.
 15 MS. WILSON-FRIAS: Commission, do
 16 you have any problem with Russ coming and
 17 sitting at the table if he wants to?
 18 THE CHAIRPERSON: None at all.
 19 MR. BIANCO: Todd Bianco,
 20 Commission.
 21 MS. WEBSTER: Good morning,
 22 everyone. Again, Raquel Webster for
 23 National Grid. And as Attorney Wilson-Frias
 24 mentioned earlier, we're here to answer any

1 questions and present what we have as
 2 proposed changes to our distributed
 3 generation interconnection tariff, and the
 4 new number would be RIPUC No. 2180 and it
 5 would supersede RIPUC 2163, and we seek to
 6 amend the tariff to comply with the DG
 7 interconnection standards which was passed
 8 on July 1st, 2017 and codified at Rhode
 9 Island General Law Section 39-26.3-4.1.
 10 And we have Tim Roughan from
 11 National Grid and John Kennedy here to
 12 answer questions and explain what some of
 13 the changes were as detailed in Attachment 3
 14 of the tariff advice filing that the company
 15 submitted to the PUC on October 31st, 2017.
 16 So we're not sure how the Commission prefers
 17 to do this. We can answer questions or walk
 18 you through Attachment 3.
 19 MS. WILSON-FRIAS: I think what
 20 might make most sense is -- to what we
 21 discussed is walking through Attachment 3
 22 and then going through the tariff, and there
 23 are several places where National Grid has
 24 made changes and additions or deletions that

1 were not part of the tariff, so to go
 2 through those. And I don't know if people
 3 want to take their filing apart a little bit
 4 so that we can skip around.
 5 MR. ROUGHAN: Sure. Why don't we
 6 just start with Attachment 3. That's where
 7 we specifically made the changes in
 8 reference to the new legislation that went
 9 into effect July 1st of 2017. And if we
 10 start from there, we can just kind of work
 11 through all the different parts of the new
 12 legislation, and in the first -- on
 13 Attachment 3, Page 1 of 4 we added a new
 14 definition of renewable energy resource, and
 15 that's on Sheet 7 of the tariff itself,
 16 again, just as referenced by the statute
 17 itself.
 18 So if you go to Attachment 1, Sheet
 19 7, that's -- yeah, Attachment 1, Sheet 7,
 20 that's where this new definition exists and,
 21 again, it's just referencing the -- another
 22 statute. So it's a pretty minor change
 23 there.
 24 The next note -- I want to go

1 through the legislation changes first and
 2 then go back to the other modifications
 3 we're proposing.
 4 THE CHAIRPERSON: Would you, when
 5 you're sending us to a particular page, item
 6 on a particular page, could you wait until
 7 we get there?
 8 MR. ROUGHAN: By all means.
 9 THE CHAIRPERSON: Thanks.
 10 MS. WILSON-FRIAS: And I think it
 11 might -- if the language is different from
 12 the actual language in the box, that might
 13 be where we need to go to the different
 14 places, but if the language is exactly
 15 what's in the box, I don't know that we need
 16 to go to the specific pages.
 17 COMMISSIONER GOLD: Could I just,
 18 it would be helpful for me to just provide a
 19 little context about where this came from.
 20 I mean, just to kind of get me on the same
 21 page with everyone. I know that there was a
 22 long order that -- preceding interconnection
 23 issues, and then that led to the legislation
 24 session, just a little quick context and

1 including the work that's been done with
 2 stakeholders up until this point.
 3 MR. ROUGHAN: Okay. Great. No
 4 problem at all with that, Commissioner.
 5 MS. WILSON-FRIAS: I think actually
 6 I'll take a first stab at this one. So we
 7 had -- as you indicated, Commissioner,
 8 Docket 4483 was the result of a long process
 9 that came about from a complaint that was
 10 filed by Wind Energy Development, and that
 11 was several years ago now. It was followed
 12 by a second one that got absorbed into the
 13 first. The -- one of the main issues in
 14 that case was the timing of whether or not
 15 National Grid was complying with the tariff,
 16 whether or not National Grid was complying
 17 with the statute with regard to
 18 interconnection timelines and -- primarily.
 19 This -- the law that I referenced earlier
 20 today, I think this was about the third
 21 year, Seth? Was it --
 22 MR. HANDY: Yes.
 23 MS. WILSON-FRIAS: So a Bill had
 24 been introduced about three years ago to

1 include some mandatory deadlines, and we
 2 were engaged with Wind Energy Development at
 3 the time. Certain changes were made. It
 4 was reintroduced the next year and it had
 5 some additions to it to address some issues
 6 that had arose out of the Portsmouth wind
 7 turbine.
 8 And then last year, or this past
 9 legislative session which is actually 2017
 10 still, Office of Energy Resources, Chris
 11 Kearns and I met with the developers and
 12 National Grid to try to work out some
 13 language issues between developers and
 14 National Grid as far as these timelines go
 15 to address certain penalty provisions. The
 16 law that passed was, for the most part, a
 17 compromise piece of legislation. So this --
 18 this tariff is now what is required to
 19 implement the provisions of that law.
 20 MR. ROUGHAN: That's my
 21 understanding as well, Commissioner, and
 22 many of the items we discussed in those
 23 earlier days were codified in a prior
 24 release of the interconnection tariff as

1 well and then this new legislation provided
 2 some additional language that needed to be
 3 put into the tariff. It may just be
 4 simpler, and if folks are interested, we can
 5 just go through page by page and talk to the
 6 changes and then answer questions that way.
 7 COMMISSIONER GOLD: I think that
 8 might be a little bit more linear for those
 9 of us who haven't been deeply --
 10 MS. WILSON-FRIAS: I think, too,
 11 Todd is going to get the Elmo so we can
 12 actually put the pages underneath it if we
 13 need to reference anything.
 14 MR. ROUGHAN: Okay. Great. So
 15 starting right from Sheet 3 of Attachment 1
 16 which is a redline of the existing tariff,
 17 we start with the applicability clause.
 18 Everyone got the -- okay.
 19 So in the applicability clause we
 20 did want to make it crystal clear that the
 21 first change is to the company's electric
 22 distribution system and not its affiliates,
 23 New England Power Company's transmission
 24 system, and that's really the only reason

1 for this electric distribution system here
 2 to make that crystal clear, because there
 3 have been a number of entities who had
 4 proposed fairly large projects that would
 5 have required a transmission level voltage
 6 connection.
 7 Typically, distribution connection
 8 DG on our 1247 kV system is, you know, the
 9 conductor sizing only allows for
 10 approximately nine or so megawatts on that
 11 voltage. When you get to the 23,000 volt
 12 distribution, you can get closer to about 15
 13 megawatts, and as you get up to the very few
 14 places in Rhode Island where we have 34,000
 15 volt distribution, that's where you can get
 16 into the 25 megawatt type of
 17 interconnection. If you have projects which
 18 are larger than that, which we have
 19 currently in the queue, they then would
 20 typically require a transmission level line
 21 extension at either 69,000 volts or 115,000
 22 volts. And ultimately, all the projects
 23 that are proposed that we see are expecting
 24 to take advantage of either net metering or

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1 renewable energy growth which are both
 2 distribution company programs and,
 3 therefore, they must be connected to the
 4 distribution company assets to participate.
 5 So that's that change.

6 The last sentence of the first
 7 paragraph is specific to some changes the
 8 ISO New England is making relative to the --
 9 just the high saturation of distributed
 10 generation they're seeing throughout New
 11 England, not only in Rhode Island, but in
 12 Connecticut, Massachusetts, Maine, Vermont
 13 and New Hampshire, obviously. And what
 14 they've specifically made it clear -- we
 15 made a change in the prior tariff in terms
 16 of they're requiring it to look at projects
 17 of five megawatts or larger if it's a single
 18 project of that size or if it's an aggregate
 19 of projects that are five megawatts or
 20 higher that are connected to a new line that
 21 we've had to construct to connect those to
 22 the distribution system.

23 At this point in time the ISO New
 24 England, rightly so, is concerned when they

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1 see these 21 or 40 megawatt projects being
 2 proposed, it doesn't matter the state we
 3 have them in, Massachusetts as well as Rhode
 4 Island, and being proposed in locations that
 5 have relatively -- that are -- are a
 6 perfectly fine transmission and distribution
 7 system to serve the existing load in the
 8 footprint but aren't actually of a size
 9 enough to accommodate that amount of
 10 distributed generation. And they want to
 11 make sure that when there's that much
 12 proposed in a location, prior to it being
 13 energized, that the systems around that
 14 location are properly studied because there
 15 are locations in Rhode Island where the
 16 transmission system then goes into
 17 Connecticut, and in that case now the system
 18 in Connecticut is owned by a separate
 19 transmission company.

20 Most of the transmission assets are
 21 administered by the ISO New England but are
 22 still owned by the base companies like New
 23 England Power owns the transmission in Rhode
 24 Island, Eversource owns the transmission in

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1 Connecticut, but once you go through the --
 2 over the state line, now the Eversource
 3 system can be considered what we call an
 4 affected system. And the ISO New England
 5 has also made clear to us now that they also
 6 want to be considered an affected system so
 7 that they can make sure all the studies that
 8 are done that will allow interconnection
 9 will be such that won't affect the integrity
 10 of the larger system.

11 So we tried to clarify a bit more.
 12 We go into a bit more detail farther on
 13 which I'll get to, but specifically in this
 14 case, this is just where we're just making
 15 it clear that once you get to this size, it
 16 will -- in the past it might require further
 17 analysis. It's been made very clear to us
 18 recently that they will require further
 19 analysis. And they'll work hand in hand
 20 with our transmission planning people. The
 21 ISO won't conduct their own independent
 22 study, they'll be part of the study that we
 23 do with our distribution group, our
 24 transmission group and now we'll add the ISO

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1 to that team that will scope out what the
 2 study requires and then as they run
 3 different scenarios, they'll then comment on
 4 those results from those runs and ultimately
 5 also comment to the ultimate study result
 6 and any modifications that are proposed and
 7 agree with those.

8 There is a process at the ISO
 9 called the reliability committee that any
 10 transmission change has to go through
 11 whether it's caused by distributed
 12 generation or caused by some transmission
 13 upgrade that needs to be built for other
 14 reasons. And the challenge was projects
 15 were being introduced through the
 16 reliability committee which is very late in
 17 the process of interconnection and that they
 18 hadn't seen or heard of, and if they were
 19 very small projects, they really weren't
 20 concerned. Apparently there were some
 21 fairly large projects that showed up and
 22 they hadn't seen, hadn't heard about them
 23 yet in other areas of New England.

24 So long story short, they're going

1 to be part of the studies now where we
 2 started some of those transmission level
 3 studies for some of these larger projects
 4 with them being involved as we speak and
 5 there will be -- they'll have charges for
 6 their review of this work that will flow
 7 through the impact or detailed study and
 8 then we'll pay the ISO out of that money
 9 collected and work with them in that case
 10 there.

11 COMMISSIONER ANTHONY: Tim, did I
 12 miss -- how exactly did ISO New England
 13 inform you that this was going to be their
 14 operating mode going forward?

15 MR. ROUGHAN: There was a meeting
 16 of the reliability committee in June or
 17 July.

18 MS. MOORE: July.

19 MR. ROUGHAN: I'm sorry? Oh, okay.
 20 The reliability committee again is the
 21 committee at the ISO that reviews any
 22 transmission upgrade or change. So in --
 23 when was that date?

24 MS. WEBSTER: July 18.

1 MR. ROUGHAN: July 18th they
 2 provided a presentation that talked to their
 3 criteria as to how they're going to move
 4 forward here.

5 COMMISSIONER ANTHONY: Are these
 6 finalized criteria? It's a written protocol
 7 that is publicly available at this point?

8 MR. ROUGHAN: We actually
 9 challenged what they were looking to do,
 10 concerned about could they handle, frankly,
 11 the volume of projects. We have 41 projects
 12 currently between Massachusetts and Rhode
 13 Island that are affected by this. When I
 14 say 41, I actually mean probably close to
 15 150 because those 40 projects --

16 COMMISSIONER GOLD: So you mean 150
 17 not 41?

18 MR. ROUGHAN: Well, this is a
 19 challenge that we have with the ISO. So a
 20 project that's proposed at -- it would be
 21 proposed at six five-megawatt projects,
 22 that's actually a cumulative of 30
 23 megawatts. So the ISO sees it as a single
 24 30 megawatt project where we see that as six

1 five-megawatt projects.

2 COMMISSIONER ANTHONY: I
 3 understand. I'm just looking for the title
 4 of the document that you're referring to.

5 MS. WEBSTER: So it's the
 6 reliability committee presentation and it's
 7 publicly available on the ISO website. It's
 8 dated July 18, 2017. And the title of the
 9 document is Distributed -- Distribution
 10 Connected Generation Guidance. So it
 11 includes what Tim is speaking of in terms of
 12 these study requirements in addition to
 13 other things.

14 COMMISSIONER GOLD: And this
 15 applies to all jurisdictions?

16 MS. WILSON-FRIAS: And could
 17 National Grid provide us at least with the
 18 link to that so that we could have a copy of
 19 that in the docket?

20 MS. WEBSTER: Yes. I think to make
 21 it easy, because the documents are
 22 scattered, Attorney Moore is pointing me to
 23 the transmission operating agreement which
 24 is something that's also publicly available.

1 But what we will do is file these documents
 2 in this docket with the Commission and just
 3 highlight what they are.

4 MS. WILSON-FRIAS: Thank you.

5 MS. WEBSTER: You're welcome.

6 MR. ROUGHAN: So that was the
 7 applicability clause. The last paragraph of
 8 that that we added, we wanted to make sure
 9 that the term interconnecting customer
 10 actually included a renewable
 11 interconnection customer and, again, just
 12 for clarification on that piece there.

13 Moving to the definitions in the
 14 middle of Sheet 3, under the definitions of
 15 affected system, here, again, this is where
 16 any neighboring system that the lines
 17 connect to, and they can be, again, another
 18 transmission company, it can also be the ISO
 19 New England and it can be in the State of
 20 Rhode Island, actually a municipal utility
 21 like Pascoag or Block Island. So those are
 22 utilities that are physically connected to
 23 our system that we don't own or control and
 24 have to work closely with them to make sure

1 a customer's interconnection won't affect
 2 their system either. So that's what that's
 3 trying to do, again, just to be crystal
 4 clear about what we're doing here.
 5 MS. WILSON-FRIAS: And Tim, you
 6 said -- so Pascoag, Block Island and then
 7 the transmission, you said Eversource?
 8 MR. ROUGHAN: Eversource would be
 9 the -- I think the only other transmission
 10 company we have to worry about because they
 11 connect to -- well, New England Power
 12 naturally.
 13 MS. WILSON-FRIAS: Thank you.
 14 MR. ROUGHAN: On the application,
 15 just a minor correction in which actual form
 16 it was. It wasn't B, it was C, so we wanted
 17 to clean that up.
 18 Moving to Sheet 2 has no changes.
 19 Sheet 3, no changes. So Sheet 7. This is
 20 where we have the construct of
 21 pre-application report already in the tariff
 22 and -- but we never have defined it, so we
 23 simply added a definition. That's all that
 24 is. And we'll get to some of the changes

1 for that in a minute here. The definition
 2 of renewable energy resource, one of the
 3 first ones specific to the legislation and
 4 as well renewable interconnection customer.
 5 Moving to Sheet 8, so specifically
 6 here under system improvement, what we are
 7 trying to point out here is that in some
 8 cases, and the tariff already speaks to this
 9 and has spoken to it for a number of years,
 10 but in some cases there are -- a system
 11 improvement is what the customer actually
 12 pays for the upgrades, but if we're in an
 13 area anyway and/or we find out while we're
 14 doing the upgrade that, for example, we
 15 discover some of the wooden poles are well
 16 past their prime, we will replace those
 17 under the ISR funding as rate based assets
 18 because when a pole has hit the end of its
 19 useful life, it should be replaced under
 20 standard rate base methodologies and not
 21 charged to the interconnection customer, and
 22 while we're there, we're going to do the
 23 work.
 24 So there are projects, and it

1 depends where they are, but that can have
 2 either very small amounts of system
 3 improvement which is what gets rate based,
 4 or sometimes fairly large amounts depending
 5 what's already going to happen. For
 6 example, if there's an upgrade that a DG
 7 customer prompts, but we were going to do
 8 something anyway relatively shortly, well,
 9 then, there might be a significant piece of
 10 the upgrade a customer wouldn't be asked to
 11 pay for specifically if it's already in the,
 12 ISR it wouldn't be something that we would
 13 charge the customer for.
 14 MS. WILSON-FRIAS: And Tim,
 15 something that I think that has maybe
 16 tripped people up is the system improvement
 17 and system modification definitions. I have
 18 heard them used -- on the words used
 19 interchangeably, but could you just explain
 20 how they're different? So the modification
 21 is the one that the interconnecting customer
 22 has to pay for and the improvement is the
 23 one that you just described?
 24 MR. ROUGHAN: Yes.

1 MS. WILSON-FRIAS: Okay.
 2 MR. ROUGHAN: So moving to system
 3 modification, we just took the distribution
 4 related term out because company facilities
 5 are considered distribution facilities
 6 anyway.
 7 So under forms and agreements,
 8 again --
 9 MS. WILSON-FRIAS: Can I back you
 10 up for one second, and I'm probably going to
 11 make something much more complicated than it
 12 needs to be. So when we're working on ISR,
 13 particularly where we're talking about
 14 substations, there's demarkations between
 15 distribution and transmission. There's
 16 facilities that are labeled one thing or the
 17 other.
 18 MR. ROUGHAN: Yes.
 19 MS. WILSON-FRIAS: Have you had any
 20 experiences where there's needed to be
 21 upgrades to transmission for any of these
 22 projects within the substations and, if so,
 23 how does that work and what covers that type
 24 of work?

1 MR. ROUGHAN: So yes, there are.
 2 Specifically there are ground fault
 3 detection upgrades once we exceed a minimum
 4 load for DG during minimum load conditions
 5 requires sensing of the voltage on the
 6 transmission level. So there's two parts
 7 that have to be constructed. One is to put
 8 the centers and connect them into that as
 9 transmission voltage, for example, 115,000
 10 volts, and there are also changes that have
 11 to be made to the breaker that's for the
 12 feeder, the distribution feeder that that
 13 customer is on.

14 So typically in most areas the
 15 point of demarkation is at the secondary
 16 terminals of the substation transformer. So
 17 the transmission company would own the
 18 115,000 volt stuff plus the transformer and
 19 then Narragansett Electric picks it up from
 20 the wires that connect to the transformer,
 21 go to the protective devices like the
 22 breaker and the feeder. That's all
 23 distribution level work. So in those cases,
 24 there is a contribution that's needed from

1 the customer to pay for those transmission
 2 upgrades and also the contribution for the
 3 distribution upgrades. So that's how those
 4 are connected.

5 And we then get estimates from New
 6 England Power for their work and we then
 7 flow them through the interconnection
 8 service agreement, connect those and credit
 9 those accounts to New England Power so they
 10 can do those upgrades on their side of the
 11 house.

12 Now, there are substations where
 13 the point of demarkation is actually on the
 14 high side of the transformer, so it's not
 15 uniform because, as you recall, there were a
 16 number of different distribution utilities
 17 in Rhode Island until relatively recent with
 18 the merger of Eastern Utilities Associates
 19 and Blackstone Valley Electric. So there's
 20 different ownership models that we now have
 21 in our footprint that some locations it will
 22 be clear the transformers is a transmission
 23 asset and at other locations it's a
 24 distribution asset so it's not completely

1 standardized at this point, and as we move
 2 forward and upgrade transformers and such,
 3 we try to go to the model that the
 4 transmission asset is to the secondary
 5 terminals of that substation transformer.

6 So where the 1247 kV starts, 12,000
 7 volt distribution system starts coming out
 8 of the substation. That's Narragansett
 9 Electric distribution plant and everything
 10 upstream, the transformer and other work on
 11 the high side of the transformer is New
 12 England assets and transmission related
 13 assets.

14 MS. WILSON-FRIAS: So when you're
 15 making that shift, so that -- towards
 16 uniformity of where the line of demarkation
 17 is between distribution and transmission,
 18 are you actually changing the ownership at
 19 that point? Are you purchasing something or
 20 is the transmission -- is NEP purchasing
 21 something at that point?

22 MR. ROUGHAN: I don't have enough
 23 detail around --

24 MS. WILSON-FRIAS: Is that a rate

1 case question?

2 MR. ROUGHAN: It's -- I don't know
 3 what it is, actually. I do know that as we
 4 upgrade substations, if the transformer is
 5 currently a distribution asset, the new
 6 substation, the transformer becomes a
 7 transmission asset. And I can't ask -- I
 8 don't really know how that works through the
 9 process. But the more things that are
 10 transmission assets, frankly, benefit the
 11 State of Rhode Island, right, because
 12 they're socialized by load ratio share
 13 throughout the whole system, New England
 14 Power's system. So there's -- whereas on
 15 the distribution, it's all solely borne by
 16 Rhode Island ratepayers.

17 MR. BIANCO: So my question was
 18 going to be, and I think you're saying that
 19 so far all of those changes to get the
 20 transformer, the demarkation line for the
 21 transformer on the transmission ends up as
 22 pool transmission facilities.

23 MR. ROUGHAN: I can't -- I would
 24 assume they do, they are, however, we

1 probably should take a record request to
 2 confirm.
 3 MR. BIANCO: Okay.
 4 MR. ROUGHAN: Develop the right
 5 series of questions for that.
 6 MS. WILSON-FRIAS: Can you restate
 7 your record request?
 8 MR. BIANCO: Sure. What fraction
 9 of transformers or equipment where a
 10 demarkation line between transmission and
 11 distribution company has changed have become
 12 eligible or been treated as pool
 13 transmission facilities.
 14 THE CHAIRPERSON: Do you want to
 15 ask and how that change is actually
 16 reflected?
 17 MR. BIANCO: I think that's
 18 Cindy's. Do you want to state that one
 19 better?
 20 MS. WILSON-FRIAS: I think
 21 Chairperson Curran just stated it. So when
 22 the distribution assets are upgraded and
 23 become a transmission asset, how is that
 24 reflected on the books of the distribution

1 Tim or Cindy, can you summarize the key
 2 point that you're trying to make here with
 3 respect to how the rate classification of
 4 equipment is distribution or transmission
 5 relates to these standards?
 6 MS. WILSON-FRIAS: I'm not sure if
 7 it relates more to ISR and the rate case
 8 than to these standards, but I could
 9 potentially maybe --
 10 COMMISSIONER ANTHONY: If it
 11 doesn't, that's fine. Maybe that's why I
 12 was missing the point.
 13 MS. WILSON-FRIAS: I think
 14 potentially, though, I think that as far as
 15 estimate of cost and whether it's going --
 16 when the developer receives the estimate of
 17 costs, I think it would be important for the
 18 developer to know from where those charges
 19 are coming.
 20 MR. ROUGHAN: In the
 21 interconnection service agreement we do
 22 detail the distribution costs as well as the
 23 transmission related costs -- if there are
 24 transmission related costs, I should say.

1 company.
 2 MR. NAULT: Narragansett Electric.
 3 MS. WILSON-FRIAS: Narragansett
 4 Electric.
 5 MR. NAULT: It seems it would just
 6 be a reduction in rate base or an
 7 elimination of those assets from rate base.
 8 MR. ROUGHAN: Depending on
 9 typically -- it could be. If there's still
 10 plant on the books from that distribution
 11 transformer that was there. Typically when
 12 we're upgrading the substation we'll either
 13 at or close to its depreciated life anyway
 14 by itself so it depends on what's left, if
 15 you will, on the books.
 16 MR. NAULT: I guess my question is
 17 if it's not fully depreciated, how is that
 18 treated? Is it taken as a write-off or is
 19 it an intercompany transfer? If you could
 20 just add that to the record request.
 21 MR. ROUGHAN: Will do.
 22 COMMISSIONER ANTHONY: Excuse me.
 23 I think I missed a key point of this
 24 conversation which is interesting. Either

1 So moving on --
 2 THE CHAIRPERSON: What if they -- a
 3 new interconnection requires substantial
 4 enough modification that a new transformer
 5 is required and that transformer was a
 6 distribution asset but should be a
 7 transmission related asset being done in the
 8 context of interconnection, how does that
 9 work?
 10 MR. ROUGHAN: If the increase in
 11 substation transformer size is solely
 12 related to the distributed generation that's
 13 being proposed at that location, then,
 14 obviously, the customer pays those full
 15 costs for that upgrade. Whether it ends up
 16 making a payment to the distribution company
 17 or the transmission company I don't think is
 18 relevant because if you reduce transmission
 19 costs by a payment, you then reduce all
 20 costs to all of the customers just like with
 21 distribution planning. So at the end of the
 22 day, how it's treated going forward I think
 23 is where the record request will be able to
 24 help us a bit better because I'm not -- I'm

1 kind of out of my league here, and I hate to
 2 admit that publicly on the record. I know
 3 when I don't know something. And that's
 4 something I'm not sure of.

5 MR. HANDY: Can I ask a follow-up
 6 possibly? I'm just wondering how I think of
 7 distribution related facilities, distributed
 8 generation and transmission being quite
 9 separate things. Transmission is designed
 10 to move power long distances and
 11 distribution typically is designed to be
 12 local generation. So how could a
 13 transmission system upgrade be related to a
 14 distribution generation -- distribution
 15 facility? I would think that if the
 16 facility is large enough to require
 17 interconnection to the transmission system,
 18 that that, as you said, would be handled
 19 separately, that that would be handled as a
 20 transmission interconnection with ISO and
 21 whoever oversees that.

22 So I'm curious. This seems to get
 23 to the statute's point of, you know, if it's
 24 related to the distributed generation

1 ago which was actually behind the customer
 2 meter and behind the customer load, and
 3 typically -- and it was less than the size
 4 of the customer's peak load, rarely would
 5 you have an upgrade at all because you
 6 already had the facilities to handle the
 7 load. So if you had generation the same
 8 size, you wouldn't need to do anything.

9 Unfortunately, the reality of what
 10 we're seeing are these massive solar farms
 11 and other resources that are well in excess
 12 of the -- most of the minimum load in the
 13 area. The key for us isn't so much what
 14 happens on a hot July afternoon. It's more
 15 what happens on a Sunday afternoon on
 16 Memorial Day Weekend when there's very
 17 little electric load running and the bulk
 18 power generation has all been ramped way
 19 down because there's no electric load going
 20 on in New England or minimal amounts and
 21 then you have lots of distributed generation
 22 running anyway, that has a tendency to
 23 increase voltage and that's where the
 24 studies are really driving at is what's

1 facility, then the distribution --
 2 distributed generation facility should pay
 3 for it, but if it's related to a
 4 transmission asset, it seems inherently not
 5 distribution -- distributed generation
 6 related.

7 MR. ROUGHAN: And you're right. By
 8 right a 30 or 40 megawatt project should
 9 connect to transmission. That's how it
 10 typically works. However, because that 30
 11 or 40 megawatt project is actually comprised
 12 of multiple smaller projects designed solely
 13 to take advantage of the distribution
 14 company programs like net metering and
 15 renewable energy growth, they -- the
 16 developers insist on a distribution
 17 interconnection. But the sheer size of what
 18 they propose does require additional
 19 transmission review. It may or may not
 20 require a transmission upgrade, and that's
 21 where it comes together.

22 If the distributed generation we
 23 were seeing in Rhode Island was solely the
 24 type that we saw up until four or five years

1 happening at the minimum load conditions and
 2 that's when energy that normally would be
 3 consumed at the distribution level will --
 4 because there's no place for it to go at the
 5 distribution level, will flow up and flow
 6 into the transmission system and that's, for
 7 example, when the ISO New England gets
 8 involved when you have reverse power flow
 9 through the substation transformer up into
 10 the 115,000 volt system.

11 So that's where the challenge for
 12 stability of the system and voltage control
 13 is really critical is at that point in time,
 14 not on a hot July afternoon. It's not
 15 really the case -- unless the shear amount
 16 of generation exceeds the capacity of the
 17 existing facilities, then you have to
 18 upgrade those facilities because it doesn't
 19 matter which way the power flows, it's still
 20 -- if you have 25 megawatts of generation
 21 going into a 20 MVA transformer and the
 22 loads are two megawatts on that Sunday
 23 afternoon on Memorial Day Weekend, you're
 24 going to see two, three, four megawatts flow

1 into the transmission system out of that
 2 substation.
 3 MR. KENNEDY: If I could just add
 4 to what Tim just mentioned, that's when a
 5 system modification is required on the
 6 transmission asset, and it's a protection
 7 scheme. It's not -- you know, we're not
 8 changing the wire out but changing the
 9 station transformer out. It's strictly a
 10 ground fault protection solution.
 11 MR. ROUGHAN: So to move us along
 12 -- sorry.
 13 MR. BIANCO: You may have been
 14 saying that it's necessary for these
 15 facilities, certainly for the renewable
 16 growth program, also for net metering to be
 17 interconnected to your distribution system.
 18 I wanted to ask if a facility requires
 19 transmission side upgrades and it's only for
 20 that interconnecting customer, that cost is
 21 borne by the interconnecting customer?
 22 MR. ROUGHAN: Yes, it is.
 23 MR. BIANCO: Do they have to -- and
 24 they have to pay the cost to

1 interconnection. Do they also pay O&M costs
 2 for the life of the project or is it
 3 diminimus and not --
 4 MR. ROUGHAN: That's an outstanding
 5 issue, right, at the -- if you connect to
 6 transmission under the ISO rules, there are
 7 ongoing O&M costs based on a percentage of
 8 average O&M, based on the initial cost that
 9 the upgrade was. So if your O&M costs are
 10 five percent and it was a million dollar
 11 upgrade, you're assessed \$50,000 a year in
 12 O&M costs.
 13 The tariff we have here has
 14 language relative to O&M costs. We have yet
 15 to implement that in terms of charging for
 16 those mostly because up until really the
 17 last couple, three years the upgrade costs
 18 weren't tremendous, but as we get into cases
 19 where they become multi-million dollar
 20 upgrade costs and, you know, assuming our
 21 O&M is five percent, there is that
 22 additional burden other customers pay for
 23 the ongoing O&M if we don't collect it from
 24 the developer that put in the large system

1 that prompted a large upgrade. So it's not
 2 specifically addressed here. And depending
 3 where and how much that becomes over time,
 4 we may need to revisit that and require
 5 customers to pay those.
 6 So just the last piece on Sheet 8
 7 was just another clarification about the
 8 proper exhibit number and the fact that the
 9 company develops it, not the developer
 10 developing the agreement.
 11 Sheet 9, again, we've added the
 12 pre-application report form as a formal form
 13 here. It was actually there but we never
 14 actually mentioned it on this sheet so we're
 15 now clarifying that as well. And then,
 16 obviously, once you introduce that exhibit
 17 you've got to change the exhibit names of
 18 the other ones and that's all that does
 19 there.
 20 Getting to Sheet -- and please stop
 21 me if I'm going too fast here. Sheet 10 is
 22 where we first introduce specifically that
 23 before a customer actually purchases
 24 anything or spends any serious money, they

1 really should contact the company to find
 2 out what the current state of the system is,
 3 if you will, and that's where the
 4 pre-application report is so critical for
 5 customers and developers to fill out and
 6 send to us, because with that report we can
 7 provide them, "Here's what's already out
 8 there." I mean, every month we do post on
 9 our DG website the -- all the projects that
 10 are out there. Every month you can download
 11 an Excel spreadsheet and it tells you
 12 everything over 15 kilowatts as suggested a
 13 couple years ago. That's there.
 14 But if you have a specific location
 15 and you're curious about what's there, we
 16 can tell you how much is already in place,
 17 how much is proposed in that location. Is
 18 -- if you've got a large project like 250
 19 kilowatts or up, you need three-phase power,
 20 not single-phase power, so we'll tell you
 21 where the closest three-phase is if it's not
 22 right in front of your facilities, and
 23 that's really designed to get people, "Gee,
 24 if that three-phase is two miles away, well,

1 I'm going to have to pay for that upgrade to
 2 three-phase in front of my facility." If
 3 I've got a location that's got already 15
 4 megawatts of distributed generation
 5 connected or proposed and I'm proposing
 6 another ten, well, pretty likely there is
 7 going to be some sort of upgrade versus if I
 8 propose five megawatts and there's nothing
 9 in the area. There may be a likelihood that
 10 the upgrades, if any, could be minimal. So
 11 that just gives them that sense of what
 12 they're doing out there.

13 And what we've done, this is our
 14 first example, instead of 500 kilowatts, we
 15 did want to get that advance notice of 250
 16 kilowatts and it's purely due to the
 17 increasing saturation and the amount of
 18 proposed DG in the state, and the earlier we
 19 can tell people that, "Caution, there's a
 20 lot of other stuff that could complicate
 21 this," versus, "There's not a lot of other
 22 stuff that could complicate it," because we
 23 also provide on that application any sort of
 24 -- we don't call them deal breakers, but we

1 kilowatts. You must ask for a
 2 pre-application report so you know what
 3 you're getting yourself into versus walking
 4 in blind and being surprised later with
 5 these huge, huge projects. And the 250
 6 kilowatts was specifically brought from 500
 7 because of some locations where saturation
 8 is already getting high enough that even a
 9 250 kilowatt project could prompt an
 10 upgrade.

11 MR. KENNEDY: I was just going to
 12 add to what Tim said that just yesterday we
 13 had a 200 kilowatt application that did
 14 trigger a modification at the transmission
 15 level. So we're seeing that type of
 16 saturation. We'd rather notify that
 17 interconnecting customer right at the front
 18 end before they even apply that their
 19 interconnection could be challenging or
 20 expensive.

21 MS. WILSON-FRIAS: And how long --
 22 how early do those pre-application reports
 23 come in and how long do they take to respond
 24 to?

1 essentially say, "Look. The last customer
 2 used up all the capacity before a substation
 3 upgrade has to occur. We're happy to do the
 4 study. We're happy to run through it.
 5 Let's get a service agreement and all the
 6 rest of it, but just understand that that's
 7 the condition in this area."

8 MS. WILSON-FRIAS: So it was 500
 9 kW, as you just said, now it's 250. Have
 10 you been noticing that there are areas where
 11 smaller projects are having those impacts
 12 that you just discussed, or what is the
 13 problem you're seeing and that you're trying
 14 to solve here?

15 MR. ROUGHAN: That's one of them,
 16 but the other one was people, frankly,
 17 weren't even asking for the pre-application
 18 report and were just sending in proposals
 19 for very large projects without any advance
 20 warnings to the company or them
 21 understanding the existing lay of the land
 22 there. So we're really trying to -- trying
 23 to enforce that as part of the
 24 interconnection application in the over 250

1 MR. ROUGHAN: We typically turn
 2 them around within ten business days if not
 3 sooner. We do push back when developers
 4 give us 200 of them to review because we've
 5 seen that many times. So we do try to
 6 restrict entities to a certain number a week
 7 so that we're not flooded with those
 8 requests. But we think it's a very
 9 important first step to helping people
 10 understand it, specifically it's before --
 11 as we talked multiple times in the past year
 12 or two the, system portal and/or the hosting
 13 capacity for distributed generation, this is
 14 kind of the first step of that because
 15 eventually the data you get from a
 16 pre-application report, you'll be able to
 17 look at a map, click on a location, it will
 18 give you virtually all the same data so that
 19 will help developers figure out siting for
 20 projects as well. And then -- so to be
 21 clear, the pre-application report was -- was
 22 meant as a stopgap until we got to the
 23 hosting capacity maps specifically.

24 So moving down the page here under

1 the process overview --
 2 MS. WILSON-FRIAS: Can I you just
 3 interrupt you?
 4 MR. ROUGHAN: Go ahead.
 5 MS. WILSON-FRIAS: So this
 6 pre-application report, it takes
 7 approximately ten business days to turn
 8 around. Can the developer then file the
 9 application the next day?
 10 MR. ROUGHAN: Yes, it can.
 11 MS. WILSON-FRIAS: Okay. So it's
 12 not like you're putting this into place buy
 13 the company 30 extra days or something else
 14 like that before the statute is triggered?
 15 MR. ROUGHAN: No. It's meant
 16 specifically to make sure customers know
 17 what they're getting themselves into and we
 18 can set expectations as early as we can
 19 because that's been our challenge is that --
 20 MS. WILSON-FRIAS: Is there a cost
 21 with the pre-application report?
 22 MR. ROUGHAN: There is not.
 23 COMMISSIONER ANTHONY: If a
 24 developer submits -- gets a report that says

1 important that projects that are out there
 2 move forward as well because if they don't,
 3 they're simply going to hold up other
 4 projects behind them. It's a systematic
 5 issue worldwide with queues clogged up with
 6 old, stale projects. So we do our best to
 7 keep those people moving through the system,
 8 and if they don't, we'll cancel the
 9 application on them.
 10 MS. WILSON-FRIAS: So sort of the
 11 next part of Commissioner Anthony's
 12 question, there have been instances in the
 13 past that we've heard about where in the
 14 application the developer I think sort of
 15 points you to the area they want studied or
 16 the interconnection point that they want
 17 studied and sometimes the closest one has
 18 not resulted in the lowest cost of
 19 interconnection. Have there been -- has the
 20 company made any changes to try to address
 21 that issue in order to avoid having the
 22 developer have to file multiple
 23 interconnection applications if the first
 24 one comes back very expensive?

1 this is going to be costly, is there then a
 2 process by which the developer can work with
 3 you to find ideas to make it less costly,
 4 perhaps?
 5 MR. ROUGHAN: We do require the
 6 application itself before we'll do that.
 7 And that -- because back in the good old
 8 days where we saw, you know, a fair -- you
 9 know, only a few dozen or three or four
 10 dozen applications a year, we always sat
 11 with developers and worked through those
 12 challenges, but we just don't have the
 13 resources to do that anymore and we found
 14 out that, frankly, we were engineering a lot
 15 of their projects for them and we just
 16 simply don't have the depth of staff to do
 17 that for people anymore. And we want to
 18 make sure that if you want that advice,
 19 essentially, you need to be a formal
 20 interconnection application.
 21 So the clock starts on both sides.
 22 It's really critical that projects move
 23 forward. A, that we move them forward as
 24 expeditiously as we can, but it's equally as

1 MR. ROUGHAN: Yes. I think
 2 ultimately those were some of the older
 3 challenges we had when folks said, "I want
 4 to connect to the 1247 that's here because I
 5 think the other option is going to be too
 6 expensive," and so we move forward and do
 7 the study as requested and then we get to an
 8 estimate for that option that's higher than
 9 they wanted to see. And then that's when
 10 we'll go back and look for other options
 11 there and look at -- the other thing --
 12 frankly, until the last few years we weren't
 13 considering building brand new 23,000 volt
 14 or 34,000 volt lines to serve distribution
 15 -- distributed generation. It just wasn't
 16 the way you would typically -- because
 17 distributed generation was always meant, as
 18 we know by the definition, to be built on
 19 the existing system so it can provide value
 20 to the system. And brand new construction
 21 doesn't do that, right? That's just --
 22 you're building a generator lead is what
 23 you're building. You're not providing any
 24 opportunity for that distributed generation

1 to relieve load at peak hours, for example,
 2 on the existing system.
 3 So yes, we've definitely worked
 4 through the change from an independent
 5 engineering group that did just
 6 interconnection studies and bringing them
 7 back into our larger distribution planning
 8 team has resulted in a lot of efficiencies
 9 at work that weren't being seen prior to
 10 that. And frankly, it did take a developer
 11 or two to guide us on that path but I think
 12 it's been working out very well since.
 13 So the bottom of Sheet -- I'm
 14 sorry, Commissioner Anthony?
 15 COMMISSIONER ANTHONY: No.
 16 MR. ROUGHAN: Sheet 10, again, more
 17 of a clarification. We wanted to make sure
 18 that the maximum days was from the completed
 19 application until we delivered the
 20 executable ISA. It doesn't mean that the
 21 customer signed it or anything, but we've
 22 done all the work we're supposed to do under
 23 the tariff, we've given them a contract and
 24 they then are deciding what to do with that

1 contract.
 2 The top of Sheet 11 is simply an
 3 extension of that to some degree in terms of
 4 how specific extensions can occur and in all
 5 occasions by mutual agreement.
 6 The next paragraph, another
 7 specific reference to the statute.
 8 MS. WILSON-FRIAS: Tim, if I can
 9 interrupt you, this was a -- this specific
 10 language that you just talked about, the
 11 mutual agreement language was a specific
 12 discussion that was had when the Bill was
 13 being talked about last year.
 14 MR. ROUGHAN: Yes.
 15 MS. WILSON-FRIAS: And I think the
 16 issue -- could you just explain why that was
 17 important to both sides of the discussion if
 18 you recall? I think there was a question
 19 about position in your queue and financing
 20 and that sort of stuff. If you could just
 21 maybe summarize that a bit for the
 22 Commissioners so they can understand why
 23 that came about.
 24 MR. ROUGHAN: Okay. No problem.

1 Yes, specifically, as I mentioned just
 2 briefly, it's imperative on both parties to
 3 work as quickly as they can and move these
 4 projects forward. And there can be
 5 occasions on our side from Narragansett
 6 Electric that something challenging has
 7 popped up, whether it's permitting or -- it
 8 could have been procurement, and there are a
 9 lot of occasions where on the customer side
 10 there are challenges because of, again,
 11 maybe local permitting, zoning, maybe their
 12 financing arrangements aren't quite solid
 13 yet and they don't have, frankly, the funds
 14 to pay for the system modifications yet, and
 15 in those cases as long as it won't affect
 16 parties behind them in the queue, we
 17 typically allow that extension.
 18 Now, those days are running short,
 19 right? With the saturation we're seeing,
 20 it's going to be the case where we may not
 21 be able to do that for fear of affecting
 22 another customer behind them. So that's why
 23 that was put in there for both the
 24 customer's advantage as well as if the

1 customer agreed with the company's concern
 2 at the time.
 3 So the next paragraph specifically
 4 is one of the first ones from the tariff.
 5 All applications for renewable
 6 interconnection customers received on or
 7 after July 1st will be as set forth in Table
 8 1 of the timelines. And specifically that's
 9 for -- this is verbatim from the law, right,
 10 the language there, so that's one of those
 11 locations.
 12 Farther down on the same page,
 13 specifically just clarifying again to the
 14 legislation that if not complete, the
 15 company will advise what's missing in
 16 accordance with the timelines. That's
 17 actually lifted from another place in the
 18 tariff. That was always part and parcel of
 19 the tariff. We just threw it in there to
 20 clean it up a bit more.
 21 On Page Sheet 12, this is another
 22 paragraph from the legislation specifically
 23 that says again, top of Sheet 12, this is
 24 where we talk to the interconnection of the

1 resource and if it's been in operation for
 2 12 months -- this was the Portsmouth issue
 3 where the turbine failed and the window of
 4 time between when it stopped operating to
 5 when they wanted to install the new one,
 6 other distributed generation went in in the
 7 area that changed the circumstances for
 8 their interconnection. Fortunately, as you
 9 may recall, our engineering team figured out
 10 a nice solution to it and Portsmouth paid
 11 minimal upgrades for the new turbine and,
 12 specifically, this is where the legislation
 13 wanted to talk to that if there's the same
 14 system going in from when it failed, then
 15 the company would only have 60 days to
 16 review the interconnection.

17 MS. WILSON-FRIAS: And I think the
 18 other issue, Tim, was when the costs would
 19 be included in all rates and when the costs
 20 would be borne by the developer. Could you
 21 just explain that distinction to the
 22 Commission, when which side pays?

23 MR. ROUGHAN: Specifically, that's
 24 why we're using the term system

1 modifications here because that is the
 2 defined term, that's specifically when the
 3 customer pays.

4 MS. WILSON-FRIAS: And I was
 5 looking further on in that sentence. I
 6 think the real issue that was discussed was
 7 the next clause, "Because of an
 8 interconnection policy change." It's my
 9 understanding from the discussion that the
 10 issue in Portsmouth was that the company had
 11 implemented some new policies with regard to
 12 protections on the system versus something
 13 in the turbine or the facility that
 14 necessitated work. So if you could just
 15 explain that.

16 MR. ROUGHAN: So as we -- and you
 17 may recall, Portsmouth dates back to 2008 or
 18 '9. It goes back quite a ways when it first
 19 went in. And frankly, there weren't a whole
 20 lot of interconnections that we were
 21 studying at the time. It was very simple
 22 throughout our New England footprint. As we
 23 got better at it, as we actually did a lot
 24 more of them, we recognized that there was a

1 challenge with what we call islanding for
 2 certain types of equipment. And so one of
 3 the policy changes that we made was an extra
 4 review to determine if the system could
 5 island, and islanding means that if the
 6 feeder that the system is on is disrupted by
 7 car accidents or something else and the
 8 power goes off and our substation breaker at
 9 the substation opens and de-energizes that
 10 circuit, there can be occasions where
 11 certain types of generation can actually
 12 continue to energize a portion of the
 13 distribution system that we think is dead
 14 and, unfortunately, is not. It can't last
 15 for very long, but it can last long enough
 16 for either physical or public safety
 17 challenges, and that's why we can't allow
 18 these systems to island unless they're
 19 designed to island like a microwave, and
 20 that's where the policy change was, this
 21 implementation of this direct transfer trip
 22 methodology, and that's what prompted some
 23 of the original review that we did for the
 24 new Portsmouth turbine. That change

1 occurred between the 2007 original study and
 2 the subsequent 2013 or '14.

3 MR. KENNEDY: '13 or '14.

4 MR. ROUGHAN: '13 or '14 study, and
 5 that was prompted by the sheer amount of
 6 saturation, the amount of DG that's on the
 7 system now.

8 So the next piece is a big chunk we
 9 elected to delete only because we've never
 10 had a customer request this. Specifically,
 11 this said, "Look. If you've got a bunch of
 12 different suppliers, you haven't selected
 13 what you're going to buy, you know you want
 14 to put 500 kilowatt solar array up, but you
 15 haven't picked some of the equipment out, if
 16 you want, we will study up to three types of
 17 arrangements you want us to study, we'll
 18 price the study, we'll do it and we'll be
 19 happy to do that." We just haven't had --
 20 no one has actually ever asked for that so
 21 we've never done it. And we find it's
 22 confusing to customers when they say, "What
 23 can I do here? What can I do there?" It
 24 was more important -- some of the base

1 language in the tariff does date to 2004 and
 2 this language specifically does date to that
 3 far back. So even though it was approved
 4 initially in here in Rhode Island in 2005,
 5 some language was derived from some of the
 6 Massachusetts work prior to that. And
 7 again, because the -- it's more because the
 8 manufacturers of equipment did things very
 9 differently back then, they still do to a
 10 limited degree, but not as much as they do
 11 now. So that's why we eliminated that
 12 paragraph. Pretty straight forward.

13 Under 3.1, Sheet 13, there was a
 14 statement here that always bothered me
 15 because it -- well, it set the expectation
 16 that if you go through the simplified
 17 process, there's nothing to it, lickety
 18 split, boom, bang, you're done, which for
 19 the bulk of the projects is still very, very
 20 true. We process most residential
 21 applications within a couple of days and
 22 then we give them the green light to build
 23 it. When they're done, they give us the
 24 right documents. Within a few days they get

1 their meter and they're online.
 2 The problem is in the same
 3 saturation challenge we have even in a small
 4 residential neighborhood. If every person
 5 in that little street puts on a ten kilowatt
 6 array and you've got a single 25 kilowatt
 7 transformer serving five or six homes, which
 8 isn't unusual, once you get to the third and
 9 fourth one, you're going to overload that
 10 transformer and you've got to either update
 11 that and add a new one and split up how you
 12 serve those homes. And as the saturation
 13 continues to grow, we're starting to see
 14 more and more of this effect because, you
 15 know, when my neighbor Joe does it, well,
 16 darn it, I want to do it and then Billy and
 17 Suzie does it across the street. So that's
 18 where we see -- the saturation isn't just at
 19 the high -- at the transmission level, it's
 20 also at the residential level.

21 COMMISSIONER GOLD: Are you seeing
 22 that with Solar Wise. I mean, that's the
 23 whole point of Solar Wise -- I'm not sure
 24 I'm using the right term. Which is the one

1 that you're not --
 2 MR. ROUGHAN: Solar Wise is the one
 3 that we've suspended.

4 COMMISSIONER GOLD: What's the next
 5 one?

6 MR. BIANCO: Solarize.

7 MS. WEBSTER: That's why you all
 8 didn't like the name.

9 COMMISSIONER GOLD: So in the Solar
 10 Wise communities, that's the point.

11 MR. ROUGHAN: It's not just those
 12 locations. Renewable energy growth is still
 13 paying 35 plus cents a kilowatt hour for 15
 14 year terms --

15 COMMISSIONER GOLD: I knew that
 16 wouldn't be happening.

17 MR. ROUGHAN: So we're seeing it
 18 throughout different programs and we just
 19 kind of wanted to -- it just set an
 20 expectation that gee, it's going to be
 21 really fast and really simple. And the
 22 reality is some of them do cost. When you
 23 have to add a new transformer or change
 24 something out, it can be a 2- to \$5,000

1 upgrade.
 2 COMMISSIONER GOLD: How does that
 3 work if there's a bunch of small projects on
 4 the street that then require --

5 MR. ROUGHAN: The one that comes
 6 along and breaks the camel's back is the one
 7 that pays for the upgrade.

8 COMMISSIONER GOLD: Just like the
 9 ISO New England.

10 MR. ROUGHAN: Same with this
 11 tariff, right? No matter what size you are,
 12 if you're the one who causes the upgrade,
 13 even though a lot of projects got in
 14 underneath it, if you will, and we actually
 15 study projects and say, "Look. You propose
 16 two megawatts, you know, if you go to two
 17 megawatts, we've got to do all this work,"
 18 but if you say, "Look. I'll only put in
 19 1,200 kilowatts," well, now, you don't
 20 prompt the upgrade. So we've been able to
 21 provide that option to lots of projects, but
 22 now the next one -- that's why the 200 to
 23 250 project that John talked about prompted
 24 the upgrade because the other person slipped

1 underneath this load level that caused the
 2 upgrade.
 3 MS. WILSON-FRIAS: Tim, if we look
 4 at -- I'm sorry, if we skip ahead and look
 5 at Sheet 39, Section 5.3, that middle
 6 paragraph that doesn't have any changes in
 7 it, does that address the issue at all with
 8 some of these residential neighborhoods if
 9 you've got a developer going through and
 10 signing up a whole bunch of people at the
 11 same time?
 12 COMMISSIONER GOLD: I was wondering
 13 about that, actually.
 14 MR. ROUGHAN: We actually had that
 15 occasion through the Navy, right? That
 16 particular project --
 17 MS. WILSON-FRIAS: So the language
 18 I'm looking at is, "As appropriate, to the
 19 extent that subsequent interconnecting
 20 customers benefit from system modifications
 21 that were paid for by an earlier
 22 interconnecting customer, the company may
 23 assess a portion of the costs to such
 24 subsequent interconnecting customers, which

1 will be refunded to the earlier
 2 interconnecting customer if actually
 3 collected." And this was the five-year
 4 period. This is the old language. Have you
 5 invoked that with some of these residential
 6 areas you're talking about where maybe a
 7 developer has come along and signed up a
 8 whole bunch of people?
 9 MR. ROUGHAN: We have not. I mean,
 10 we don't typically -- it's not the developer
 11 who pays the upgrade, it's typically the
 12 individual customer. We had the occasion
 13 with the Navy, right, where they were going
 14 to install a lot of projects in all the
 15 housing?
 16 MR. KENNEDY: Yes, we did a --
 17 actually, it was 500 homes, Navy housing.
 18 It was, what, Balfour Beatty I think was the
 19 developer. But they came in and we did a
 20 group study, if you will. And we studied --
 21 did the whole neighborhood. There's
 22 actually three neighborhoods, one in
 23 Newport, two in Middletown. And we studied
 24 it. It was basically one customer, being

1 the Navy, so we were able to accomplish
 2 that. And then we gave them the results of
 3 the impact study and this is what has to
 4 happen for this geographic footprint. But
 5 we call it cost sharing.
 6 So that paragraph does apply. We
 7 have implemented it for some of the larger
 8 applicants where they may have paid for
 9 system modification, say, on the wholesale
 10 side of the substation transformer and then
 11 anybody that comes in after them, yeah,
 12 they'd be a participant in that cost
 13 sharing, they would be that subsequent
 14 customer, but for residential we haven't
 15 done that.
 16 MS. WILSON-FRIAS: Have you had
 17 this situation yet where you've had that
 18 next customer who's had to pay 1- to 2,000
 19 for interconnection and all of his or her
 20 neighbors didn't have those costs, and how
 21 have you handled that?
 22 MR. ROUGHAN: Yeah. That's the
 23 standard way it works. A couple, three
 24 customers before get in, you know, minimal

1 upgrades and the one who now prompts a
 2 transformer change out, they would pay for
 3 that transformer change out.
 4 MS. WILSON-FRIAS: How have you
 5 handled that? I assume that that customer
 6 is not real happy that all of his friends
 7 and neighbors were able to have minimal cost
 8 to upgrade. How does that get handled at
 9 the company, because I'm sure that that
 10 customer is fairly dissatisfied with that
 11 situation.
 12 MR. ROUGHAN: They can be a tad
 13 anxious about that, I won't disagree, but we
 14 specifically spell out the tariff, and, "If
 15 you want to install your system, this is a
 16 requirement." Are they real happy about it?
 17 I don't think so. But I think they at least
 18 understand why, right? They may not be
 19 happy about it, but they at least understand
 20 the reason why, which is really important.
 21 COMMISSIONER ANTHONY: Would it be
 22 -- would it be possible for a developer in
 23 that situation to try to recruit multiple
 24 customers and spread that marginal cost

1 among those customers at that point? Could
 2 they possibly do that, or do you have to
 3 attribute that upgrade cost to one customer?
 4 MR. ROUGHAN: No. If there was a
 5 third-party solar installer, Joe Solar, that
 6 signs up four or five people in the
 7 neighborhood and it gets prompted, we have
 8 heard, and I don't know where to find
 9 verification of this, but we have heard that
 10 some of the larger third-party leasing
 11 companies like the Sun Edisons or the Tariff
 12 Form Today or the Solar Cities or Tesla will
 13 typically absorb that cost on behalf of the
 14 customer because it's a lease arrangement,
 15 it's not specifically being -- the customer
 16 hasn't bought the project, and Solar City or
 17 whoever else owns the system on the
 18 customer's roof and they'll typically pay
 19 that as part of the cost of doing business.
 20 But again, we don't have independent
 21 verification of that.
 22 THE CHAIRPERSON: For individual
 23 owners that seems like it can be unfair.
 24 How could it be remedied?

1 that could be used to pay for these
 2 upgrades. That gets complicated as well,
 3 right, in terms of administering that, you
 4 know, will people say, "Oh, well, if I only
 5 have to pay \$10 a kilowatt, I am going to
 6 buy that cheap land ten miles away and I'm
 7 only going to pay ten bucks a kilowatt,"
 8 when it really cost that customer \$2,000 a
 9 kilowatt to build there versus the one who's
 10 in the -- right? So that's the challenge
 11 with that, too. So there's not an easy
 12 answer.
 13 The only easy answer is you rate
 14 base it, but, obviously, there's enough
 15 challenges with rate base and the costs on
 16 people's bills already in Rhode Island. So
 17 that's -- I think as we get to a place where
 18 it becomes more commonplace and there's more
 19 issues surrounding it, we could revisit. I
 20 think for now it's been working pretty well.
 21 THE CHAIRPERSON: I'm concerned
 22 particularly about the example which may
 23 never actually occur, or infrequently, where
 24 a number of individuals have solar systems

1 MR. ROUGHAN: Well, I mean, the
 2 challenge we get as more and more customers
 3 install these facilities is that you start
 4 to have to split any initial costs up first
 5 -- the first person pays, then a second one
 6 comes along and somehow you do a split
 7 between those two. A third one comes along,
 8 oops, fourth, fifth, sixth. And you get to
 9 a condition eventually that you might have
 10 10, 20, 30 parties that you're trying to
 11 split, and for a \$100,000 upgrade, it's real
 12 money, but for a \$5,000 upgrade it becomes
 13 pretty much diminimus in terms of each
 14 customer. So it becomes complicated to
 15 continue to do that. Again, we haven't had
 16 a big pushback in terms of customers
 17 challenging it specifically because the only
 18 simple way to remedy it is to have a flat
 19 fee per kilowatt -- well, I'm just
 20 suggesting, if we had a flat fee per
 21 kilowatt for every customer who
 22 interconnected no matter the size, whatever,
 23 two bucks a kilowatt, 20 bucks, whatever
 24 that number is and that went into a fund

1 installed and they're all relatively small,
 2 and then the last one tips it and has to pay
 3 a substantial amount higher than all of the
 4 preceding people.
 5 MR. ROUGHAN: On the residential
 6 sized programs you will get three to five
 7 customers go in for -- at no cost. There's
 8 no application fee, no upgrade costs. We
 9 don't -- we're using essentially the same
 10 meter, just reprogrammed for the net meter,
 11 so there's no cost for the meter. So right
 12 now you're going to get two to five
 13 customers get in for nothing. And Customer
 14 No. 6 or 7 will pay \$3,000. And that's how
 15 it works.
 16 COMMISSIONER GOLD: That's
 17 certainly true in some of the other
 18 utilities or gas. I happen to be at the end
 19 of the gas line, so if I wanted to get gas,
 20 it would cost my neighbors not much, it
 21 would cost me 10,000. So, I mean, it's
 22 different. And the other thing that occurs
 23 to me is there must be places in other parts
 24 of the country or even in Massachusetts

1 where they're ahead of the game on this and
 2 have more experience with neighborhoods
 3 being saturated and figuring out how to
 4 allocate costs, which is off topic, but it
 5 might be something we could look to.
 6 MR. ROUGHAN: Well, we've got
 7 plenty of experience with it in
 8 Massachusetts, too, but we do it the same
 9 way in Massachusetts.
 10 COMMISSIONER GOLD: So you haven't
 11 come up with a different method?
 12 MR. ROUGHAN: Not that we would
 13 consider fair at all to the customers.
 14 MR. BIANCO: But pursuant to the
 15 legislative changes, in the past one or two
 16 legislative sessions in Rhode Island a
 17 potential solution for residential customers
 18 is remote net metering and remote DG shared
 19 facilities -- I'm sorry -- community
 20 distributed generation, is that correct? So
 21 is that customer -- yes?
 22 MR. ROUGHAN: Yes. I'm sorry.
 23 MR. BIANCO: So that customer, they
 24 could go through this process, find out they

1 need to pay to interconnect could also then
 2 instead opt to join some type of remote
 3 facility where they might not have to bear
 4 those costs.
 5 MR. ROUGHAN: However, they'll
 6 likely -- they really should do a financial
 7 analysis over the lifetime of the system.
 8 They will more than likely be better off
 9 paying the upgrade cost and owning the
 10 system outright, getting all the savings
 11 versus getting a fairly small percentage of
 12 savings that those community shared solar
 13 projects provide. The average for those
 14 we've seen is, like, around five percent is
 15 what people get versus getting 100 percent
 16 of the savings when they install themselves.
 17 MR. BIANCO: And it's related to
 18 this, but for larger sizes, I was wondering
 19 if the pre-application report and the
 20 eventual product you guys might release
 21 related to information on DG
 22 interconnection, would a customer see in
 23 that report in addition to what's on it
 24 whether or not they potentially are looking

1 at a good place to interconnect in terms of
 2 how much capacity there is for the
 3 interconnection, but that somebody else has
 4 actually paid for that capacity and they
 5 would bear some charges because that
 6 customer is entitled to recoup those costs?
 7 MR. ROUGHAN: That will be part of
 8 the process. It's not out there yet. We
 9 do -- in the pre-application report we do
 10 highlight locations where, for example,
 11 these large -- a large substation upgrade
 12 has occurred already. And one of our
 13 proposals going forward is actually to make
 14 that more public so folks know where that is
 15 and ultimately then the cost share would
 16 come into play. Although -- and I mentioned
 17 it at a couple other sessions with this
 18 group, we are contemplating fairly actively
 19 certain upgrades to the system that simply
 20 due to the changing nature of the
 21 distribution system shouldn't be borne by
 22 any one customer but should be borne by all
 23 customers together. And that includes some
 24 of these large substation upgrades simply

1 because of the protection systems that are
 2 required.
 3 As I said, once you start to try
 4 splitting costs between 10, 20, 30, 40, 50,
 5 100 parties over the next five or ten years,
 6 it's just going to become a huge
 7 administrative burden, and because the new
 8 system needs to be built to manage large
 9 amounts of distributed generation, that's
 10 where we're very much leaning toward looking
 11 to, frankly, rate base some of those larger
 12 upgrades so that -- because it's just --
 13 it's the constant evolution of the system
 14 that we're talking about here and things
 15 that weren't part of the normal course of
 16 business customers pay for. If going
 17 forward this is the normal cost of business,
 18 as we fully expect it to be, then perhaps
 19 this is another cost that should be borne by
 20 all customers.
 21 COMMISSIONER GOLD: Have you
 22 started to incorporate or done any high
 23 level analysis where you're looking at PV
 24 and EV in the same neighborhood? The Navy

1 didn't ask for that?

2 MR. ROUGHAN: No, that was simply a

3 PV approach. We haven't had a lot of those.

4 COMMISSIONER GOLD: We've been

5 talking about that a lot, and I'm sure that

6 Ryan Constable is thinking about it.

7 MR. ROUGHAN: He is.

8 COMMISSIONER GOLD: And comes into

9 the question of how do you model and

10 forecast what we might be seeing. And you

11 do hear when you talk about a lot of EVs in

12 the neighborhood that that could have big

13 ramifications on the system.

14 MR. ROUGHAN: It's a little bit

15 different with EV, because at the end of the

16 day -- the only reason that distributed

17 generation customers pay for the upgrades is

18 because there's no distribution revenue that

19 offsets it. Any other new customer coming

20 in, we look at how much distribution revenue

21 we expect to get from them and we offset the

22 construction costs by that amount. So some

23 customers don't pay anything for upgrades.

24 But if you're distributed generation

1 customer, you don't have new revenues, in

2 fact, you have reduced revenues, and that's

3 the only reason that we have our

4 construction advance formula has what's the

5 D? What's the distribution revenue in the

6 formula? For DG customers it's zero; for

7 load customers it's a number.

8 COMMISSIONER GOLD: Maybe you get a

9 discount if you have EV and PV at the same

10 time.

11 MR. ROUGHAN: Possibly.

12 COMMISSIONER GOLD: Somebody would

13 have to pay to pull all my trees down, but

14 that's a different issue.

15 MR. ROUGHAN: Let's move on. I

16 thought I jumped to Sheet 14. Sheet 14, a

17 little bit more clarification at the bottom

18 about the pre-application reports. Here's

19 the language I talked to specifically and,

20 again, we wanted to make it clear that if

21 you don't have a pre-application report with

22 your application, the application isn't

23 considered complete. And it just -- that's

24 another -- that's something from the law.

1 We want to make sure we're getting as much

2 as we can upfront from these customers.

3 If you go to the next paragraph

4 down, we're saying within ten business days

5 assuming a reasonable number of applicants

6 to review. And then what we're also trying

7 to do is to put a limit of how many they can

8 ask for in one window of time. And this is

9 a stopgap until we have some other process

10 to do this like a hosting capacity map and

11 we're just trying to make it fair to all

12 entities who ask for this information.

13 We've had people look for 50 to 100 of these

14 and then give us 50 or 100 the next week and

15 then 50 or 100 a week after that, just

16 complete fishing expeditions out there.

17 MS. WILSON-FRIAS: What's a

18 reasonable number? It says applicants under

19 review. So is it applicants or

20 applications, and what's a reasonable

21 number?

22 MR. ROUGHAN: It's the

23 pre-application request, that's what the

24 applicants means. A reasonable number, I

1 think, John, we were talking at one point

2 processing -- I think the team processes 50

3 to 100 a week anyway? It varies I know.

4 MR. KENNEDY: It does vary. You

5 know, the team, they can process probably

6 about 20 a day, but it really -- also, it's

7 the same individuals that conduct our

8 screening, so it depends. It's a little bit

9 of a jump every given day based just on the

10 volume that we've seen because it swings.

11 Tim is right, we can get 100 in one day,

12 then we might go a few days seeing 10 or 20.

13 MR. ROUGHAN: We haven't had an

14 issue yet here in Rhode Island not meeting

15 the ten days. Again, it could be revisited

16 if we needed to, but at this point in time,

17 I think it's appropriate. So there's no

18 real number there, Cindy. I apologize for

19 that, but --

20 So jumping to the next page, Sheet

21 17, Sheet 17, and this is under the standard

22 process, larger projects out there. There

23 are rare occasions where we've -- the

24 specific systems -- there are instances

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1 where a project is required to have system
 2 modifications constructed as part of the
 3 ISA, however, depending on the exact
 4 circumstances at the time, there may be
 5 cases, and this requires significant review
 6 internally by the company up to our Vice
 7 Presidential level on our engineering
 8 operations groups, that in certain cases,
 9 again, I talked about the minimum load
 10 condition on Memorial Day. If a substation
 11 upgrade is required to prevent a problem
 12 during that window of time but everything
 13 else was done prior to that substation
 14 modification being done but we were highly
 15 confident it would be done in time for that
 16 Memorial Day Weekend, we in that case may
 17 allow a project to operate even before that
 18 modification is complete knowing it's going
 19 to be done well before there's any sort of
 20 challenge of that minimum load timeframe.
 21 Again, very rare. It's not
 22 something we do very often, but it's
 23 something that we just wanted to make sure
 24 we -- in those cases that the company has

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1 the right to allow for that because there
 2 have been cases -- because one of the
 3 challenges with substation upgrades is the
 4 work can be constructed but cannot be tested
 5 without an outage at that substation, and
 6 outages at substations are extremely
 7 difficult to schedule because of loading
 8 issues and there's only a few windows a year
 9 the ISO New England allows for those outages
 10 and, again, it's their -- even though it's
 11 our system, they've got to give us
 12 permission for the outage.
 13 So the challenge we ran into in one
 14 particular case where the outage was
 15 scheduled, we went to do the work and there
 16 was a -- there wasn't a blizzard, but there
 17 was enough of a snowstorm where we couldn't
 18 get the work done. The next window wasn't
 19 for another six months, but we were
 20 confident that the next window wasn't going
 21 to be a snowstorm because it was going to be
 22 in the fall and the customer was ready to go
 23 and we were ready to go, everything else was
 24 done. So in that case we did allow that

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1 particular project to come online prior to
 2 the final testing of that facility being
 3 done. There were caveats that if something
 4 occurred later, caused some challenges, that
 5 we may have to ask for curtailments in the
 6 window while we did the work, but the
 7 customer agreed to all those because,
 8 ultimately, as I'm sure you've heard enough
 9 times, the faster these projects get online,
 10 the better it is for the whole -- for the
 11 project, for all the participants, et
 12 cetera, et cetera. So we're trying not to
 13 unduly stretch out how long it takes to
 14 allow these people to operate. But again,
 15 it's a very rare condition, it's not done
 16 very frequently and there's a lot of
 17 additional work and study that's got to be
 18 done. It's got to be blessed by the
 19 officers of the company before we'll allow
 20 it to happen. Again, it's just to get it in
 21 the tariff itself that that option exists at
 22 the company's sole discretion.
 23 Another minor change for the
 24 exhibits. You'll notice we were correcting

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1 those as we went through it.
 2 Sheet 18, again, this is more of
 3 the specific language, again, through the
 4 standard process of the tariff that talks
 5 specifically to the affected system, how
 6 it's dealt with, how the costs of any
 7 studies or upgrades are dealt with, and
 8 again, clarifying that when this occurs, the
 9 company still manages the whole process on
 10 behalf of the customer, but there are
 11 occasions where we have no control over
 12 those other parties in terms of schedules
 13 and timeframes, and this language is
 14 reflected as well in our study agreements in
 15 the back. We'll point those out when we get
 16 to them.
 17 Sheet 19 is simply adding the same
 18 caveat about allowing interconnection prior
 19 to all system modifications as was allowed.
 20 This is a standard process. That language
 21 was in the expedited process. We just added
 22 it in there in both locations. The bottom
 23 of Sheet 19 is where we then clarify
 24 specifically to the statute and remove some

1 of the language here. In terms of what the
 2 timeframes are and the Note 1 to the table
 3 in Table 1 is where that clarification from
 4 the tariff -- from the legislation is, and
 5 we'll get to that in a second here.
 6 Additional language here from the
 7 legislation. All our company timeframes are
 8 subject to all payments being made. And the
 9 last change on this page is specifically to
 10 how the extensions would work under the
 11 legislation. And that's verbatim, I think,
 12 from the legislation. Fairly confident.
 13 And we've got our good old sheets here.
 14 Sheet 23, again, as I said, the
 15 base language here goes back to 2004 and
 16 actually goes back to the small generator
 17 interconnection procedures at the FERC level
 18 from 2003 actually. At the time there
 19 wasn't standardization around listed
 20 inverters and that sort of work and that's
 21 well past. We're very comfortable. We
 22 don't need any of this California, New York
 23 stuff. In '03 and '04 we did because they
 24 were the only two states that actually kept

1 a list of inverters that had passed all the
 2 tests. Today it's completely unnecessary
 3 because everybody complies by it. They know
 4 they can't interconnect without them. Back
 5 then they could. You can still, but there's
 6 other stuff you have to do.
 7 And getting to Sheet -- so the
 8 tables of 26 and 27 are the timeframes based
 9 on the type of project that's out there.
 10 And just some clarifications. This is where
 11 the site review of the simplified spot
 12 network which really we've had none of those
 13 applied for anyway. They would be something
 14 in Downtown Providence or a small piece of
 15 Woonsocket.
 16 MR. KENNEDY: Pawtucket.
 17 MR. ROUGHAN: Pawtucket. It's a
 18 different system. Renewable DG, 175
 19 calendar/200 calendar days for -- of maximum
 20 days from a completed application to
 21 delivery of the executable ISA customer.
 22 That's where we insert that. And then we
 23 added a line that wasn't in here before that
 24 talked about the total maximum days of --

1 from the receipt of an executed ISA to the
 2 completion of the system modifications and
 3 that's where we put the language from the
 4 legislation here.
 5 Table 2, we specifically just
 6 changed -- oh, sorry. Sheet 28, system
 7 modification. We just modified it. It said
 8 facility upgrades. We wanted to just keep
 9 the same language that we've been using
 10 right along that they're system
 11 modifications. And here are where in the
 12 note, Sheet 29 and Sheet 30 that we
 13 specifically put in and corrected language
 14 from the notes to comply with the
 15 legislation. And these were pretty
 16 self-explanatory here on this whole page.
 17 MS. WILSON-FRIAS: Do you know, did
 18 you for the most part just transfer the
 19 language from the statute into these notes?
 20 Are there any places in here where the
 21 company changed -- not changed, added
 22 anything that wasn't in the statute?
 23 MR. ROUGHAN: I don't believe so,
 24 but it wouldn't -- it's probably worth a

1 record request to have us double check it.
 2 MS. MOORE: I think 1 through 6 is
 3 kind of -- sorry. I think 1 through 6 is
 4 kind of chopped up to consolidate and make
 5 it all work together, and subject to
 6 confirmation, I think 7 is from the statute,
 7 but I think from 1 through 6 -- 1 through 6
 8 is kind chopped up to make it work together
 9 and flow properly. I'm almost positive Note
 10 7 is from the statute, and I can double
 11 check that and I can actually double check
 12 it while you guys do the rest.
 13 MR. HANDY: If I can weigh in, it
 14 looks to me, as I recall it from the
 15 statute, there were no delays in -- based on
 16 the customer's failure to provide
 17 information. That was expected to happen at
 18 the time of the impact study. So I believe
 19 that that language in the middle of Sheet 20
 20 is inconsistent with the language of the
 21 statute. I was just looking at the language
 22 in the statute and I believe it says that
 23 these deadlines cannot be extended due to
 24 customer delays in providing required

1 information, all of which must be requested
 2 and obtained before completion of the impact
 3 study.
 4 MS. MOORE: All throughout the
 5 tariff we reference with respect to that
 6 specific statutory requirement, Table 1,
 7 Note 7 which does contain that because that
 8 requirement is a little different from
 9 renewable energy customers, and it's only
 10 with respect to information. So we quoted
 11 the statute in Note 7 and then just referred
 12 back to that note with an exception.
 13 MR. HANDY: I don't see it in Note
 14 7. I was looking for Note 7, but I didn't
 15 see it.
 16 MR. ROUGHAN: Note 7 is on Sheet
 17 29. It's a note --
 18 MR. HANDY: I don't see it in the
 19 sheet. Oh, I'm sorry. I'm looking at Sheet
 20 25, Note 7.
 21 MS. MOORE: It's on Sheet 30 about
 22 the fifth line down is where that customer
 23 delay comes in.
 24 MS. WILSON-FRIAS: So where it

1 these.
 2 MR. HANDY: I appreciate it.
 3 THE CHAIRPERSON: Break?
 4 Ten-minute break.
 5 (RECESS)
 6 MS. WEBSTER: So if it would help
 7 the Commission, Attorney Moore, who did work
 8 closely on these revisions, can walk the
 9 Commission through what changes are
 10 statutory versus which ones aren't if that
 11 would be helpful.
 12 MS. MOORE: So just back to your
 13 question on Note 7, 99 percent of that is
 14 straight from the statute. Obviously we
 15 defined terms where term is defined.
 16 Instead of electric distribution company we
 17 used company. Instead of system
 18 modification lower case, we used capital.
 19 We did add a portion on Page Sheet 30, the
 20 third line down where there is a comma and
 21 it says, "And any delay by the renewable
 22 interconnecting customer to make said
 23 payments will interrupt the applicable
 24 clock," that was added just for clarity,

1 reads, "Subject to Section 3.5, the system
 2 modification deadlines cannot be extended
 3 due to customer delays in providing required
 4 information, all of which must be requested
 5 and obtained before completion of the impact
 6 study." Do you see that, Seth?
 7 MR. HANDY: Yes.
 8 MS. WILSON-FRIAS: Does that
 9 address your concern?
 10 MR. HANDY: I referenced the wrong
 11 table. That's the problem. I referenced
 12 Table 1, Note 7, and it's really Table 2,
 13 Note 7.
 14 MR. ROUGHAN: Table 2 is a fee
 15 schedule. Table 1 is the timeframes.
 16 MR. HANDY: All right. Table 1
 17 comes after the fee schedule.
 18 MS. WILSON-FRIAS: Table 1 is on
 19 Sheets 26 and 27. Table 2 is on Sheet 28.
 20 MR. HANDY: So the notes -- okay.
 21 Excuse me. I'm sorry. I'm just confused.
 22 That's fine.
 23 MS. WILSON-FRIAS: That's why we're
 24 doing this today to try to move some of

1 right, because the statute requires that all
 2 payments be made when the timeline starts,
 3 so just clarity as to what happens if
 4 payments are not made on time.
 5 We added Section 3.5 because that's
 6 the generic timeframe reference. And the
 7 only other two things that were left out
 8 midway down where it talks about when system
 9 modifications will be extended, there was a
 10 system modification will be extended only in
 11 the tariff, and I'm not sure why we left out
 12 the word "only". And then where it talks
 13 about events of force majeure, in the
 14 statute it just says force majeure instead
 15 of events. That's about all I can see as
 16 far as the differences between the statutory
 17 language and this language. Oh, I'm sorry.
 18 One more.
 19 In the second to the last line, the
 20 statute says, "The customer at the start of
 21 any claimed system modification deadline."
 22 In the statute it just says, "At the start
 23 of any claimed deadline," but it's within
 24 the system modification timeline piece of

1 the statute so we just added that for
 2 clarification.
 3 MR. ROUGHAN: The only other change
 4 on this Sheet 30 was under Note 5, and it's
 5 just more clarification around more
 6 simplified where if there are upgrades that
 7 are attributable to that one customer, they
 8 will pay us.
 9 Jumping to Sheet 31 --
 10 MS. WILSON-FRIAS: Can I back you
 11 up? Can I back you up here and -- to
 12 Liana's last -- Ms. Moore's last -- the
 13 addition of claimed system modification
 14 deadline, is that because it's within the
 15 system modification section of the table
 16 that you added that?
 17 MS. MOORE: No. In the legislation
 18 where -- in the legislation where it talks
 19 about the deadlines being subject to
 20 payments, you know, in accordance with the
 21 tariff and the agreement and then it says,
 22 "These system modification deadlines cannot
 23 be extended," and then the next sentence
 24 after that is, "Will notify the customer of

1 payments for studies and right after the
 2 statute goes through the deadlines for the
 3 system modifications. It says, "All
 4 deadlines herein in the statute are subject
 5 to the payments being made on time." And
 6 then it talks about specific extensions for
 7 the system modification deadlines and then
 8 it talks about the company having to notify
 9 the customer for an extension of those
 10 deadlines. So that extension piece is why
 11 we added the system modification deadline
 12 extension language, but earlier in the
 13 tariff in Section 3.5 we do have the generic
 14 statement that all deadlines are subject to
 15 payments being made on time by the
 16 interconnecting customer.
 17 MS. WILSON-FRIAS: So if we look on
 18 the public law, we're looking at Page 3 of 5
 19 and Lines 25 to 27 is what we are debating
 20 here, the company -- it says, "The electric
 21 distribution company shall notify the
 22 customer of the start of any claimed
 23 deadline extension as soon as practical, its
 24 cause and when it concludes all in writing."

1 the start of any claimed deadline
 2 extension." So because it said the system
 3 modifications deadlines cannot be extended
 4 and then it went on, and then it said, "Will
 5 notify the customer of the start of any
 6 claimed extension," we -- we read that, we
 7 interpret that to mean the start of a
 8 substation modification extension deadline.
 9 Does that makes sense?
 10 MS. WILSON-FRIAS: So let me ask
 11 you this. With regard to the other
 12 deadlines that were in the statute -- and
 13 the statute is in Attachment 4 for the
 14 Commission, but I don't know that you need
 15 to turn to it. So there are several
 16 deadlines in there. Are there payments due
 17 between any of those other deadlines?
 18 Because I remember the discussion was all
 19 deadlines wasn't about system modifications.
 20 So I mean, if the company wants to limit it
 21 to that, that might be a discussion, but my
 22 -- and unfortunately, Mr. Handy --
 23 MS. MOORE: I think you're exactly
 24 right. In that first piece of it there are

1 And my recollection is that it was the
 2 notification piece that was very important
 3 to developers of any claimed extension of
 4 deadlines. So I'm concerned that by
 5 limiting it to system modifications, that if
 6 there were any other deadlines that came in,
 7 a huge storm that took everybody from
 8 distribution system planning out into the
 9 field so interconnection studies weren't
 10 happening, that there would now be no
 11 requirement to notify the developers in
 12 writing, and I thought that that was really
 13 the crux of that sentence more than where it
 14 was placed in the paragraph. And Mr.
 15 Kennedy, do you recall that discussion at
 16 all?
 17 MR. KENNEDY: I do. I think you're
 18 correct, that it wasn't just about -- it
 19 wasn't just about, you know, making a
 20 deadline to system modifications, but it was
 21 more about communicating what the cause is
 22 and what the new deadline would be. For
 23 example, it could be payment. If the
 24 payment wasn't made on a certain date per

1 the ISA, that could extend the deadline
2 also.
3 MS. WILSON-FRIAS: So I think that
4 limiting that to system modification might
5 change the meaning of the -- that provision
6 within the statute, and I think it was -- it
7 really was meant to apply to all deadlines
8 and not just system modification deadlines.
9 Mr. Handy?
10 MR. HANDY: I mean, I would just
11 say that over three years the language was
12 negotiated extremely carefully, so I would
13 just suggest that we should just use the
14 language in the statute. That would avoid
15 problems in terms of the tariff's
16 consistency with the statute. I mean, there
17 was quite detailed negotiation on specific
18 language.
19 MS. WILSON-FRIAS: If you want to
20 take that back with the -- specifically the
21 question would be so that we can get this
22 into the record so the Commission can
23 highlight it -- wait. I have to get my
24 numbering here. This is Record Request 3, I

1 think. Yes. Record Request 3 would be why
2 only notification -- why the company has
3 included the limitation that it shall notify
4 the -- let me start over.
5 On Sheet 30, the language is that,
6 "The company shall notify the customer of
7 the start of any claimed system modification
8 deadline extension as soon as practicable,
9 its cause and when it concludes all in
10 writing," whereas in the public law, or at
11 least the Bill, on Page 3, Lines 25 through
12 27 does not have the qualifier of system
13 modification. So that's the start of the
14 record request. The question then is why it
15 is appropriate to only notify developers in
16 writing or customers in writing of delays to
17 system modification and not all delays.
18 MR. ROUGHAN: And I guess we can
19 take that back. I think that for all
20 practical purposes, though, that's the real
21 deadline folks are talking about here,
22 right? The whole premise behind the whole
23 paragraph was --
24 MR. KENNEDY: It was the

1 completion.
2 MR. ROUGHAN: That our work had
3 been done.
4 MS. WILSON-FRIAS: I think, though,
5 that I could see where -- okay. So let me
6 ask a question, then, instead of making an
7 argument. If there's a really big storm, if
8 -- where there's widespread power outage, is
9 the distribution system planning team,
10 whatever the right name is, are they all
11 still in the office doing interconnection
12 studies or are they actually on storm duty?
13 MR. ROUGHAN: No. They're on storm
14 duty, so there would be a delay that would
15 flow through to the total timeframe of the
16 -- well, it says prohibitive weather, right,
17 extended prohibitive weather. So if there
18 was a major storm event, everything would be
19 delayed by that schedule, whatever that was.
20 If it was five days, it would be delayed
21 five days. If it was three days, it would
22 be delayed three days.
23 MS. WILSON-FRIAS: So I guess
24 looking at the -- on Line 7 through 10 of

1 that same page, it talks about the maximum
2 time allowed from the date of the completed
3 application and delivery of an executable
4 interconnection service agreement.
5 Shouldn't customers have notification in
6 writing if there's going to be a delay in
7 that timeframe as well?
8 MS. WEBSTER: They would. That
9 would fall -- a storm would definitely fall
10 under force majeure which would require
11 notice.
12 MS. WILSON-FRIAS: Is that
13 somewhere else in the tariff, because I
14 focussed only on this note?
15 MS. WEBSTER: We're actually
16 looking for that now.
17 (BRIEF PAUSE)
18 MS. WILSON-FRIAS: You're welcome
19 to take that back as part of the record
20 request rather than looking for it now.
21 MR. ROUGHAN: Do you know what? Do
22 you want to take it back, ladies?
23 MS. MOORE: Yes.
24 MS. WEBSTER: Yes.

1 MR. ROUGHAN: All right. We'll
 2 take that back and continue on to Sheet 31.
 3 And this was just a clarification. Industry
 4 standards change, so we reference -- we
 5 always use the latest version. That's all
 6 that really was, and that's why at the
 7 bottom of the same page we took out what had
 8 been referred to as 1547-2003. Obviously,
 9 that's two iterations ago, so we wanted to
 10 take that out and say the current version of
 11 IEEE 1547 is what we're going to use.
 12 Going on to Sheet 32, again,
 13 similar language about current standards as
 14 amended from time to time. And then we also
 15 have our internal document ESB 756C --
 16 MR. KENNEDY: D.
 17 MR. ROUGHAN: D. Sorry D which is
 18 applicable to Rhode Island. There's just
 19 other information in that that -- our
 20 electric service volts are used for all
 21 sorts of stuff and we have one for
 22 interconnection as well, so that's that
 23 clarification.
 24 Moving on to the next one will be

1 Sheet 39, the whole Section 5.3, system
 2 modification costs. And this was language
 3 directly from the legislation. We had
 4 similar language before but inserted the
 5 language from the legislation there. And
 6 then at the bottom on Sheet 39 there's a
 7 ten-year extension for renewable energy
 8 interconnection customers to sort out cost
 9 share, if any, so that's in there.
 10 Sheet 40, separation of costs.
 11 This is where -- if we combine, as I
 12 mentioned earlier, the system improvements
 13 which is rate base and system modifications
 14 which are customer borne costs, we will --
 15 just being clear we don't assess the system
 16 costs -- the system improvement costs to
 17 customers.
 18 One other clarification is that if
 19 there are actual upgrades required by an
 20 affected system that's not on our system,
 21 like, for example, if the Eversource
 22 transmission system needed something, then
 23 the customer would have to pay them
 24 directly, and that's just to keep that

1 contract between those two entities. We
 2 still manage the process. But we would have
 3 that. We already have a template we've used
 4 Eversource in Massachusetts that we're
 5 likely to use down here for the same sort of
 6 reasons for our customers. There's just a
 7 lot more locations in Mass. where we have to
 8 take distribution level voltages from
 9 Eversource in the Berkshires, a ski area,
 10 for example, from a distribution circuit of
 11 Eversource's and so when Jiminy Peak put in
 12 their wind turbines and solar farm, there
 13 were upgrades they had to pay to the
 14 Eversource's substation as well as the
 15 extension for ourselves.
 16 MS. WILSON-FRIAS: I have a process
 17 question as opposed to a substance question.
 18 So back on Page 39, the last paragraph, this
 19 says, "Effective for renewable
 20 interconnecting customer applications filed
 21 on or after July 1st, 2017 if a renewable
 22 interconnecting customer is required to pay
 23 for system modifications and a subsequent
 24 renewable energy or commercial customer

1 relies on those modifications to connect to
 2 the distribution system within ten years of
 3 the earlier renewable interconnecting
 4 customer's payment, the company will require
 5 that the subsequent customer make a prorated
 6 contribution to the cost of the system
 7 modifications and will credit such amount to
 8 the earlier renewable interconnecting
 9 customer as determined by the Commission."
 10 How do you do that and what's the process?
 11 MR. ROUGHAN: So when you do a cost
 12 share, you typically do it based on -- it's
 13 prorated by capacity of the line. So if a
 14 line was built to accommodate a five
 15 megawatt project and we then served more
 16 projects off of that line, again, either
 17 renewable interconnecting customers or a
 18 body shop or a strip mall, if that customer
 19 is five megawatts and the new electric load
 20 was 50 kilowatts, we take the total value
 21 and prorate between those two numbers so we
 22 look at the total value is now for 5,050 and
 23 we prorate it between those two. If the
 24 next project was a two-megawatt solar farm,

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1 we'd do the same sort of proration.
 2 I think the only complicating fact,
 3 frankly, is that under our current
 4 construction advance policies, the actual
 5 value of the upgrades is prorated over a set
 6 number of years. So the size of the pie
 7 drops over a five-year period. It goes down
 8 by 20 percent a year. This doesn't have
 9 that language in it, but -- so perhaps it's
 10 not important enough to talk to, but I think
 11 the only question is when it says, "As
 12 determined by the Commission," and so
 13 there's two ways we could do this. One is
 14 for anyone we have we would then file it
 15 with the Commission and they would either
 16 agree or disagree. It seems a bit
 17 excessive. Or we could come up with an
 18 internal process that we would propose and
 19 as long as we follow that process and then
 20 that process would be approved by the
 21 Commission, as long as we follow that
 22 process, we would just do it with any one
 23 customer and upon any sort of issue or
 24 concern from a customer, we could point to

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1 that analysis and show how it was done.
 2 So again, that's the challenge. It
 3 says, "As determined by the Commission." So
 4 we have yet to propose -- I mean, again, I
 5 just mentioned how we would propose to do
 6 that and whether or not you need more
 7 language -- I don't know if it belongs in
 8 this tariff, the specific language, but I
 9 guess I ask the question back to --
 10 MS. WILSON-FRIAS: Have you run
 11 into this situation yet?
 12 MR. ROUGHAN: We've been doing it
 13 for the other size in the five-year window
 14 already. So I mean, John, it's been going
 15 as smooth as it can.
 16 MR. KENNEDY: We've identified the
 17 instances for some applications where cost
 18 sharing will be implemented, but we haven't
 19 gone through the whole process yet where the
 20 first customer is actually interconnected
 21 and the second customer is interconnected so
 22 we're working through it presently.
 23 MR. ROUGHAN: One of the challenges
 24 is to make sure -- especially when a few

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1 customers are coming on at the same time, we
 2 can try to do a cost share upfront. You
 3 have to actually protect all other customers
 4 by making sure you get the full amount of
 5 money from at least one of those three
 6 customers. So if there were three customers
 7 who were going to cost share, they all
 8 initially say -- and let's say the upgrade
 9 is \$100,000. They all are told the upgrade
 10 is \$100,000 with language saying, "If other
 11 people participate, there will be cost
 12 shares," only because we can't say upfront
 13 that, "Your cost is \$33,000 and so is yours
 14 and so is yours," because if one drops out,
 15 now you're not collecting the full \$100,000
 16 you need. So you need to have that covered
 17 in the interconnection service agreement
 18 that says you're going to get it and then
 19 you're going to give it back. So that's how
 20 we deal with it today. And that's how we
 21 propose we deal with it going forward. It's
 22 just a ten-year window versus the five-year
 23 window.
 24 MS. WILSON-FRIAS: Did you get to

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1 Section 5.4 before I interrupted you?
 2 MR. ROUGHAN: No. That's where we
 3 were just getting to. And again, this is --
 4 I just finished the last sentence of the
 5 first paragraph on Sheet 40 under 5.4. The
 6 second paragraph there is language lifted
 7 right from the legislation.
 8 MS. MOORE: For the most part.
 9 MR. ROUGHAN: For the most part.
 10 Same caveat, so using defined terms.
 11 MS. MOORE: The biggest difference
 12 is that the legislation is written in terms
 13 of that the Commission may order a customer
 14 to pay and this provision is written in the
 15 event that the Commission does order. So
 16 it's just a difference in tense I think.
 17 And then the last sentence of the statute
 18 which talks about any system modifications
 19 benefitting other customers shall be
 20 included in rates as determined by the
 21 Commission wasn't included in this tariff
 22 because we didn't feel it was necessary.
 23 It's already covered by statute.
 24 MR. ROUGHAN: All set with Sheet

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1 40. I think we can slip forward to -- the
 2 only change on 42, again, clarification
 3 under 6.3, safe operations and maintenance.
 4 This is a standard. Any customer with high
 5 voltage equipment, we require this of them.
 6 So we just want to make it clear in this
 7 tariff that if we've got specific switching
 8 that we need done and they are responsible
 9 for some of the work to do it, because
 10 there's a lot of customer equipment here,
 11 they've got to comply with our instruction
 12 if we've got -- if we ask them for
 13 something. It says that already but we just
 14 wanted to clearly state that, "Hey, if you
 15 need to open up one of our switches while
 16 we're doing some other work," it says it in
 17 a not as clear way up above, but we wanted
 18 to make it crystal clear what it meant.
 19 Slipping forward to Sheet 44,
 20 again, the NEPOOL terminology was the
 21 terminology way back when, but NEPOOL is
 22 pretty much gone -- well, they're not gone.
 23 In terms of the entity that manages it, it
 24 is the ISO New England, not NEPOOL. So

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1 that's the difference there. The last part
 2 of the -- and that is a metering section,
 3 Section 8, metering. This specifically
 4 talked to the fact that the customer -- if
 5 in the rare event a customer had their own
 6 metering equipment, then the company had
 7 specific requirements to make sure it was
 8 tested properly. That just isn't the case
 9 especially under the reverse net metering
 10 and net metering and renewable growth,
 11 they're all customer meters. So we just
 12 wanted to take out any reference to that
 13 because it doesn't comply, it's not
 14 applicable.
 15 Again, another deletion of NEPOOL.
 16 Another clarification at the bottom of Sheet
 17 45, all metering equipment shall meet
 18 certain standards. That's kind of a default
 19 condition, so, again, clarifying that as
 20 well. Another clarification, ISO New
 21 England versus NEPOOL, and also below here
 22 taking out the NEPOOL satellite language
 23 because it's not used anymore.
 24 Slipping forward to Sheet 52 is the

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1 new liability language that if a customer --
 2 from the legislation directly. No? Not
 3 quite? Close?
 4 MS. MOORE: This just refers to
 5 legislation, so it highlights that there is
 6 legislation regarding limitations on
 7 liability and liability with respect to not
 8 following the construction deadlines, but it
 9 doesn't recite the actual legislation.
 10 MR. ROUGHAN: Okay. And now we're
 11 into the actual various applications and,
 12 again, we're just -- where we need to send
 13 this stuff. Right? Sheet 54, Exhibit A
 14 which is a small project under ten kilowatt
 15 single phase or under 25 kilowatt three
 16 phase and that's all that clarification was.
 17 We did ask for just -- they have facility
 18 information but we wanted a description.
 19 And the more data we get -- again, this is
 20 all part and parcel of the legislation,
 21 making sure we get all the information
 22 upfront, so we added a little bit more stuff
 23 into the application to make sure we get
 24 more stuff.

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1 Sheet 58, took out the Solar Wise
 2 reference since it's gone, at least as we
 3 had it. Slipping forward to I think we're
 4 up to the minor little thing here on Sheet
 5 71, just the proper e-mail address where to
 6 send everything, all the information. And
 7 as I mentioned, in all of the agreements we
 8 did also insert the same language about
 9 affected systems. So we see it in the
 10 feasibility study, the impact study, the
 11 detailed study. So this is just making it
 12 clear in these study agreements that -- how
 13 we're going to collect the costs. In some
 14 cases the customer may have to pay them to
 15 the affected system, we may, and also in
 16 terms of -- for the study specifically how
 17 they'll be -- if an affected system has
 18 costs for a study.
 19 And on Sheet 76, the same thing but
 20 for the impact study itself. The language
 21 is verbatim. And Sheet 79, again, the same
 22 language -- -- 77. Sorry. 77. Oh, that's
 23 right. We just had the wrong reference here
 24 under Section 8, Sheet 77. It's actually

1 Section 16, not Section 11.
 2 Affected system language, Sheet 79,
 3 for the detailed study agreement. We just
 4 -- the NEPOOL 18.4 approval to actually
 5 reference the ISO New England reliability
 6 committee, so we just made that change. And
 7 I think -- the interconnection agreement
 8 itself, Sheet 83, language about the
 9 affected system as well. They'll pay the
 10 affected system operator costs directly.
 11 And I think -- the last change is actually
 12 to the -- on Sheet 90 we reference the
 13 attachment which is if the developer is not
 14 the retail customer, the developer is the
 15 interconnecting -- renewable energy
 16 interconnecting customer, they'll sign the
 17 interconnection agreement, but if they own
 18 the system and they are a service account
 19 holder in that area, in that part of it
 20 they're doing it independently with a
 21 separate meter or something, then there's a
 22 separate Exhibit I that has to be -- it's a
 23 retail delivery service customer so -- and
 24 the reason we need the customer to actually

1 conditions. So that's the tariff changes.
 2 Anything else, question?
 3 MR. BIANCO: I have a question.
 4 This is really easy I think. Are the
 5 exhibits, the application's Exhibits A
 6 through I think F starting on Sheet 54, are
 7 those -- do you make them available in some
 8 other way other than in this tariff, and are
 9 they live PDFs so that somebody can actually
 10 type it other than hand write it?
 11 MR. ROUGHAN: Yes. They're live
 12 PDFs on our website. We've just opened up
 13 our portal for applications for residential
 14 customers the last couple weeks so they can
 15 do everything online. And that's for just
 16 the simplified now but that is being
 17 extended to all projects, but that's going
 18 to take a few more months, right, John?
 19 MR. KENNEDY: Yes.
 20 MR. ROUGHAN: There are a lot more
 21 complications to an online system with the
 22 larger projects than the simplified ones.
 23 There's a lot of terms and detail in the
 24 tariff you've got to get right in the guts

1 agree to this term, it's for access for
 2 emergency conditions. If you've got a
 3 system built on someone's roof or within
 4 their facility that's owned by Joe's Solar
 5 Company and it's at Acme Manufacturing, we
 6 need the right to go into Acme Manufacturing
 7 to open a breaker at Joe's Solar if it's
 8 causing problems, and that's what this gives
 9 us, that's what Exhibit I gives us and it
 10 just clarified what that -- it used to
 11 simply say the retail customer. We said
 12 retail delivery service customer, so that's
 13 account holder of record at that location
 14 who in some cases is not the owner of the
 15 distributed generation system. And I think
 16 that is --
 17 MR. BIANCO: In some cases it's not
 18 the owner of the property as well. Is that
 19 an issue?
 20 MR. ROUGHAN: That's the other part
 21 that -- yes, it can be a separate property
 22 owner and, again, we would want to have the
 23 same sort of agreement with the property
 24 owner, again, for access for emergency

1 of this portal to make sure you're asking
 2 the right questions in the right areas.
 3 MR. HANDY: My understanding --
 4 that's a good question, Todd. My
 5 understanding from a conversation yesterday
 6 with a solar developer that works on
 7 residential accounts is that it's not as
 8 easy to use the computer system because you
 9 can't reproduce applications. These people
 10 have multiple applications that basically
 11 have the same contents and they're having to
 12 reenter for every time they submit online
 13 whereas they could reproduce the application
 14 much easier on paper. So if that's
 15 something that could be fixed, I think it
 16 would be very helpful.
 17 MR. ROUGHAN: So just to make sure
 18 we understand, you're saying so if
 19 everything on the application is the same
 20 except the customer name and account
 21 number --
 22 MR. HANDY: Something like that.
 23 MR. ROUGHAN: Something like that.
 24 They would want to essentially be able to

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1 copy and paste everything from what they
 2 already did and just --
 3 MR. HANDY: Rather than having to
 4 reenter it multiple -- these guys said they
 5 had 50 applications or something that they
 6 needed to reenter which on paper they would
 7 be able to do much easier.
 8 MR. KENNEDY: We'll provide that
 9 feedback. Thank you.
 10 MR. HANDY: I have another
 11 question. It has to do with -- and if
 12 you've already discussed this because I was
 13 out of the room, I'll withhold it, but on
 14 Section 5.3, system modification costs, this
 15 language about system modification and when
 16 a project is to be charged to the
 17 interconnecting customer or rate based was a
 18 pretty important part of the statutory
 19 negotiation and the language appears to be
 20 different than what was included in the
 21 statute. So I'm just wondering why that
 22 language was changed.
 23 So as I see it, the tariff says,
 24 "The interconnection customer shall only pay

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1 for that portion of the interconnection cost
 2 resulting solely from the system
 3 modifications required to allow for safe,
 4 reliable, parallel operation of the facility
 5 with the company EPS and provided, however,
 6 the company may only charge an
 7 interconnecting customer for system
 8 modifications specifically necessary for and
 9 directly related to the interconnection?
 10 The statute says, "The electric distribution
 11 company may only charge an interconnecting
 12 renewable energy customer for any system
 13 modifications to its electric power system
 14 specifically necessary for and directly
 15 related to the interconnection." Is there
 16 any reason to change the language of the
 17 statute when it's used in the tariff?
 18 And the other question I have is in
 19 the definitions of system improvement and
 20 system modification, I don't know that it's
 21 made entirely clear who's responsible for
 22 which, and it could be clearer because that
 23 definition is incorporated into the language
 24 used in the substance in the tariff in 5.3.

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1 So it's important to be consistent with the
 2 statute and also make sure that the
 3 references provide for consistency when the
 4 definition is used.
 5 MS. MOORE: Section 5.4 I think
 6 addresses your question regarding system
 7 improvements and system modifications. That
 8 makes clear that the interconnecting
 9 customer is not responsible for what's
 10 defined as system improvements.
 11 And with respect to your question
 12 on 5.3, the first piece of that sentence was
 13 actually lifted verbatim from Section 5.4.
 14 The second paragraph, you'll see there's a
 15 strike out there. We just didn't feel it
 16 belonged in the separation of cost piece of
 17 it because it simply established the system
 18 modification cost itself and we felt it was
 19 important to keep because it talked about
 20 what was necessary for safe, reliable
 21 operation of the system to the company. The
 22 second piece of that sentence which talks
 23 about what we can only charge the
 24 interconnected company for is lifted

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1 directly from the statute.
 2 MR. HANDY: The second piece of the
 3 -- of 5.4 is what you're saying?
 4 MS. MOORE: No. The second piece
 5 of the first sentence in 5.3 where it says,
 6 "Provided, however, the company may only
 7 charge," that's directly from the statute.
 8 MR. HANDY: Anyway, I have to look
 9 at it more carefully, but I'm concerned
 10 about consistency there.
 11 MR. ROUGHAN: Any other questions?
 12 MS. WEBSTER: Just for the record,
 13 during the discussion we noticed two
 14 corrections and we can follow-up on these in
 15 writing. On Sheet 77, Paragraph 8, the last
 16 sentence beginning with payments for work
 17 performed, it should end with Paragraph 7
 18 above. That's the first correction. The
 19 second one on Sheet 80 in Paragraph 9, it
 20 should end with Paragraph 8 above.
 21 MR. HANDY: So I can go into a
 22 little more detail on the inconsistency I
 23 was noting before. So in the last -- the
 24 second line is a little bit different from

1 the statute.
 2 MR. BIANCO: We're not with you.
 3 MR. HANDY: I'm sorry. It's 5.3.
 4 This is -- the second line indicates, "The
 5 company may only charge an interconnecting
 6 customer for system modifications which is a
 7 defined term specifically necessary for and
 8 indirectly related to the interconnection,"
 9 and statute says, "System modifications to
 10 its electric power system."
 11 MS. WEBSTER: Seth, where are you
 12 in the statute?
 13 MR. HANDY: 5.3. It's the first
 14 item. It's Item 1 in the statute I believe.
 15 MS. WILSON-FRIAS: So Page 2, Lines
 16 19 through 21.
 17 MR. HANDY: Thank you. So
 18 actually, this gets back to the transmission
 19 system improvements we were talking about
 20 before. Is that the company's EPS or is
 21 that a system modification that's beyond the
 22 company's EPS?
 23 MR. ROUGHAN: Well, ultimately,
 24 it's for any upgrades that are needed to the

1 respect, I think that what it says is, "The
 2 electric distribution company may only
 3 charge the interconnecting renewable energy
 4 customer for any system modifications to its
 5 electric power system." That's why I asked
 6 the question of who was charging for the
 7 other work. That's why I asked that
 8 specific question. If it's not the electric
 9 distribution company, i.e., Narragansett
 10 Electric, charging, that was the purpose of
 11 my question. That's why I wanted to clarify
 12 that specifically.
 13 MR. HANDY: I understand that. The
 14 bill comes from National Grid. The charge
 15 comes from National Grid. It incorporates a
 16 charge from someone else, evidently? The
 17 question is whether that's consistent with
 18 the statute.
 19 MR. ROUGHAN: Well, I mean, it
 20 doesn't have to. New England Power could
 21 charge people directly. It just complicates
 22 the process. But ultimately we were simply
 23 doing it because it is an affiliate and we
 24 can do the transfer internally through

1 Narragansett Electric's electric power
 2 system, and if those upgrades also require
 3 transmission upgrades in order to allow for
 4 the proper operation of the system, then
 5 they would be included as costs as well.
 6 MS. WILSON-FRIAS: Who's charging
 7 for those costs? Is it electric
 8 distribution company or is it the
 9 transmission owner?
 10 MR. ROUGHAN: If it's New England
 11 Power, our affiliate, it will be
 12 Narragansett Electric. If it's another
 13 affected system, it will be them directly.
 14 MS. WILSON-FRIAS: Is Narragansett
 15 Electric charging the company or is New
 16 England charging the company through
 17 Narragansett Electric?
 18 MR. ROUGHAN: New England Power is
 19 charging the customer through Narragansett
 20 Electric.
 21 MR. HANDY: Is that consistent with
 22 the statute which indicates that it can only
 23 be modifications to the company's system?
 24 MS. WILSON-FRIAS: With all due

1 accounting methodologies. So it's
 2 relatively straightforward for us to do that
 3 on behalf of the customer, but -- that's how
 4 we've always managed costs if there were
 5 transmission upgrades that had to be done as
 6 well. I mean, fundamentally if the
 7 transmission upgrades are not completed, the
 8 ISO New England reliability committee will
 9 not approve the interconnection and the
 10 customer will not be able to operate. So --
 11 and we have to recognize that with these 20
 12 to 40 megawatt projects, 19 of them now that
 13 comprise underlying 60 or 70 or 80 retail
 14 projects, these transmission upgrades are
 15 going to cost more than a dollar. I mean,
 16 it's significant. You're trying to run
 17 34,000 volts or 69,000 volts. There's a lot
 18 to that. It's not just costs, but timing,
 19 permitting, you know, dealing with the
 20 neighbors who don't want to see any new
 21 towers in the neighborhood or substations,
 22 as you know well. We've had challenges with
 23 substation siting in Rhode Island, well,
 24 throughout our footprint, not just Rhode

1 Island.
2 So there's lots involved when we're
3 looking at these aggregate projects that are
4 significantly different than the tariff ever
5 anticipated, and that's why we're trying to
6 make some of the changes while we can to try
7 to incorporate some of those to properly
8 represent what has to be done.

9 MS. WEBSTER: Even though it may
10 come through in one consolidated form to the
11 customer, New England is still charging for
12 those charges. So I still think the way
13 that it's done now is consistent with the
14 statute because we're not charging and it
15 makes it clear where the charges are coming
16 from in the documents that go to the
17 customer.

18 MR. HANDY: The definition of
19 system improvements seems to also
20 incorporate system modifications or at least
21 it's not clear that it doesn't the way it's
22 drafted. So when you reference system
23 improvement in 5.3, that makes it a bit
24 confusing. The last clause that may be used

1 it's a system improvement? Could you give
2 an example, maybe?

3 MR. ROUGHAN: Sure. A perfect
4 example is that same -- I talked about that
5 customer who's a mile away from three phase.
6 We have to upgrade, we have to bring two
7 more wires down the pole line. Typically
8 that single phase line is only one phase of
9 the three, so it's a lower voltage to
10 ground. 12 kV is actually the voltages
11 between the phases, between the wires, but
12 any one of those phases to ground is 7,500
13 volts or so, 7,200 volts. So there's
14 difference clearances. So if you've got to
15 extend three phase down an existing single
16 phase line, all -- many of the poles will
17 have to be upgraded to be taller to get the
18 proper -- and they may actually need to be
19 closer together because of the weight of the
20 additional conductors.

21 As we do that actual field design
22 work, they'll actually look at the state of
23 the existing pole plant that's out there,
24 and if the existing pole plant is sufficient

1 along with system modifications is within
2 the definition of system improvement.

3 MS. MOORE: I think, and Tim can
4 correct me if I'm wrong, that last clause
5 was so that interconnecting customers would
6 know that even if you needed a system
7 improvement to operate your facility, if it
8 fell within that first piece of it, that it
9 was an economically justified upgrade that
10 was a capital investment associated with
11 improving the capacity and reliability of
12 the EPS, even if you needed that for the
13 facility itself, it wouldn't be a system
14 modification, it would be a system
15 improvement. This way there was no concern.
16 Does that make sense?

17 MR. HANDY: Yes.

18 MS. MOORE: Is that correct, Tim?

19 MR. ROUGHAN: Yes.

20 MS. WILSON-FRIAS: So is what
21 you're saying that when you're studying
22 this, it could be a system -- something
23 could be a system modification or a system
24 improvement if the decision is made that

1 and except for not being tall enough, it
2 needs to be upgraded, then that change out
3 of that pole to be tall enough would then be
4 a system modification. If, however, some of
5 those poles along the way actually had been
6 in place for 50, 60, 70 years and we're
7 finally at end of life, not end of
8 depreciation but end of life, then those
9 should be replaced anyway and we would have
10 normally replaced those under standard
11 maintenance. So we wouldn't charge to
12 replace those poles specifically because
13 they're condemned and no longer useful -- or
14 used and useful. So if you have, call it 30
15 poles you had to do something to and you
16 found five condemned poles, five of those
17 condemned poles would be system improvement
18 and the other 25 would be system
19 modifications.

20 MR. BIANCO: But -- and then I just
21 was wondering is the total accounting based
22 on, like, in-kind replacement of those poles
23 because you've got larger poles? If they
24 were significantly larger, they could

1 require maybe a different type of pole, for
 2 example. If that were to happen, would that
 3 be against the cost of the -- would there
 4 be, like, a net of what you would have put
 5 out there if you were just replacing these
 6 poles for a single phase, let's say?
 7 MR. ROUGHAN: The bulk of the cost
 8 is the labor to install and wire versus the
 9 underlying cost of the pole itself. We
 10 don't get into that detail specifically.
 11 MR. BIANCO: Okay. But it's three
 12 phase you have now, you've got to put three
 13 wires on --
 14 MR. ROUGHAN: Versus a single
 15 conductor.
 16 MR. BIANCO: Yes. So that many
 17 more insulators to install things like that,
 18 I mean, make the labor go up or not really?
 19 MR. ROUGHAN: Again, we're talking
 20 about a pole that should be replaced anyway
 21 because it's condemned, end of useful life.
 22 Then installing the pole, no, we wouldn't
 23 bother with that. We could, but it just
 24 seems -- it's a lot of additional

1 want to talk about it because it's usually
 2 more money than they wanted to spend. We
 3 very rarely hear a customer saying, "Hey,
 4 thanks. It costs me less than I thought."
 5 So we review the costs after every impact
 6 study, get to agreement on everything,
 7 that's when we then draft the executable ISA
 8 once they've agreed.
 9 Well, let me clarify that. Our
 10 past practice was to do that. Going forward
 11 we won't be able to do that because we don't
 12 have the time and the legislation to do
 13 that. Once the impact study is issued,
 14 we're going to issue an ISA as quickly as we
 15 can.
 16 COMMISSIONER ANTHONY: So the
 17 interconnecting customer -- is what you're
 18 saying is the interconnecting customer does
 19 not have the opportunity to review your
 20 proposal and say, "Hey, I think this cost
 21 should actually be paid by the company
 22 because it's actually -- I think it's a
 23 system improvement not a system
 24 modification?" Do they have -- does the

1 granularity that, you know -- really not
 2 clear if it's worth it.
 3 COMMISSIONER ANTHONY: Tim, how
 4 many of these processes do you anticipate
 5 doing in a year? In terms of, like, you
 6 have a large system that requires system
 7 modifications and system improvements and
 8 you're going to be looking at all the work
 9 that gets done and allocating those costs
 10 between yourselves and the interconnecting
 11 customer, like, how many projects do you
 12 think you'll do this for in a year?
 13 MR. ROUGHAN: Dozens, right?
 14 MR. KENNEDY: As far as the
 15 analysis, yes.
 16 MR. ROUGHAN: Every impact study
 17 will go through that underlying analysis for
 18 the upgrades.
 19 COMMISSIONER ANTHONY: And the --
 20 and the interconnecting customer has an
 21 opportunity to review this cost allocation
 22 proposal?
 23 MR. ROUGHAN: We provide the impact
 24 study for the review and then usually they

1 interconnecting customer have that
 2 opportunity to dispute your proposal?
 3 MR. ROUGHAN: They do, because, A,
 4 they get the system impact study and within
 5 typically two weeks they get the executable
 6 ISA. And in both of those documents it will
 7 spell out the detail of what's going to be
 8 constructed for their project. So if they
 9 have challenges or issues with it, they all
 10 bring them up. I mean, no one is bashful
 11 about this. John spends a lot of time
 12 explaining project costs and what's in one
 13 bucket versus another bucket.
 14 MR. HANDY: Is the resolution of
 15 4483 on the requirement to conduct an audit
 16 post-interconnection and trueup to actual
 17 costs, trueup the prepaid fee to actual
 18 costs included in this tariff?
 19 MR. ROUGHAN: We've got the --
 20 MR. KENNEDY: That was part of the
 21 tariff --
 22 MR. ROUGHAN: We already did that
 23 for accounting, final accounting. I'm
 24 trying to find it.

1 MR. HANDY: Where is it at?
 2 MS. MOORE: Sheet 77 in the impact
 3 study. It depends what agreement you're
 4 talking about. It's in every agreement.
 5 MR. HANDY: I just wondered if it's
 6 in the tariff. It would be helpful to have
 7 it in the tariff as well.
 8 MR. KENNEDY: Isn't that part of
 9 2163?
 10 MR. ROUGHAN: It's already been
 11 there. To Seth's point, it's in the study
 12 agreements, well, studies and the
 13 interconnection service agreement. It's not
 14 in the tariff -- body of the tariff.
 15 MR. KENNEDY: I think it is.
 16 MR. ROUGHAN: Well, it's in the
 17 tariff. It's just not in the discussion of
 18 how the tariff works. It's in the
 19 agreements. So it is in the tariff. You're
 20 right.
 21 MR. HANDY: I think it would be
 22 helpful to have it in the tariff itself.
 23 MS. WEBSTER: But it wouldn't be
 24 applicable if you didn't have it in the

1 more questions, just to go through the
 2 schedule, the intervention deadline was
 3 November 17th. Other than OER I don't think
 4 we had any intervenors. The testimony or
 5 comments are due on December 28th of 2017.
 6 Any reply comments are due January 11, 2018,
 7 and a hearing will be conducted, if
 8 necessary, January 18th of 2018. Does
 9 anybody have anything else?
 10 COMMISSIONER ANTHONY: Is there a
 11 public comment opportunity as well?
 12 MS. WILSON-FRIAS: We had some
 13 public comment today, and if we have a
 14 hearing, we normally allow public comment
 15 beforehand, but anybody can send in written
 16 comments at any time.
 17 COMMISSIONER GOLD: When is the
 18 testimony due, Cindy?
 19 MS. WILSON-FRIAS: December 28th.
 20 Chairperson, did you want to adjourn?
 21 (ADJOURNED AT 12:36 P.M.)
 22
 23
 24

1 agreements which is why it's set forth in
 2 the specific agreements.
 3 MR. HANDY: I just think as a
 4 matter of clarification to the consumers it
 5 would be helpful to have it in the actual
 6 tariff as well. Is there any harm in
 7 putting it in the tariff, too?
 8 MS. WEBSTER: I think what we're
 9 going to have to do is we'll have to look at
 10 this and then we can follow-up based on what
 11 the Commission thinks should happen, because
 12 we do think that where the language is right
 13 now in the agreements, we think that's
 14 sufficient and we think that it is
 15 sufficient notice to customers, so we don't
 16 agree, but at this point I don't think we
 17 can say that it's not reasonable to change
 18 it. We just have to take that up further if
 19 that's okay with the Commission. I should
 20 also note that previous orders which
 21 warranted this language did not specify that
 22 where we currently have it was incorrect.
 23 MS. WILSON-FRIAS: So if the
 24 Commission or anybody else doesn't have any

1 CERTIFICATE
 2
 3 I hereby certify that the foregoing
 4 is a true and accurate transcript of the
 5 technical record session taken before the
 6 State of Rhode Island Public Utilities
 7 Commission, on November 28, 2017 at 9:30
 8 a.m.
 9
 10
 11 _____
 12 JO ANNE M. SUTCLIFFE, RPR/CSR
 13 NOTARY PUBLIC, STATE OF RHODE ISLAND
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ATTACHMENT D

DOCKET 4763 EVIDENTIARY HEARING TRANSCRIPT (JAN. 25, 2018)

In The Matter Of:
Rhode Island Public Utilities Commission

Standards for Connecting Distributed Generation D-4763
January 25, 2018



Min-U-Script® with Word Index

1 STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
2 PUBLIC UTILITIES COMMISSION
3
4 IN RE:
5 THE NARRAGANSETT ELECTRIC COMPANY D/B/A
6 NATIONAL GRID'S STANDARDS FOR CONNECTING
7 DISTRIBUTED GENERATION
8 DOCKET NUMBER 4763

Date: January 25, 2018
Time: 9:30 a.m.
Place: 89 Jefferson Blvd.
Warwick, Rhode Island

12 - BEFORE -
13 Margaret Curran, Chairperson
14 Marion Gold
15 Cynthia Wilson-Frias, Esq.
16 Alan Nault
17 Todd Bianco

17 APPEARANCES:
18 Rhode Island Division of Public Carriers
19 BY: JON G. HAGOPIAN, ESQ.
20 Counsel for Rhode Island Division of Public Carriers
21 National Grid
22 BY: JENNIFER BROOKS HUTCHINSON, ESQ.
23 -AND-
24 Bowditch & Dewey
25 BY: LIANA MOORE, ESQ.
Counsel for National Grid
Office of Energy Resources
BY: ANDREW MARCACCIO, ESQ.
Counsel for Office of Energy Resources

1 MS. CURRAN: Good morning.
2 Thank you to everyone for having the courage to
3 return to this hearing room today. Let's hope
4 we all get out alive.
5 We're here for a technical
6 session.
7 MS. WILSON-FRIAS: No. We're
8 here for a hearing.
9 MS. CURRAN: It's a hearing?
10 Why does it say that? I think it's just... I
11 think the notice might be weird.
12 MS. WILSON-FRIAS: We're hear
13 for a hearing.
14 MS. CURRAN: It's a hearing for
15 Docket 4763. The Standards for Connecting
16 Distributed Generation.
17 Are there any administrative
18 matters?
19 MS. WILSON-FRIAS: There are.
20 Yesterday, I sent out an exhibit list to all of
21 the parties. I've also provided one to the
22 commission and the stenographer. National Grid
23 has two exhibits, the Division has one, and the
24 Commission has five. Of note is the third
25 Commission exhibit, is the transcript dated

1 ALSO PRESENT:
2 Alfred Contente
3 Timothy Roughen
4 John Kennedy

1 November 28, 2017, from the technical records
2 session, except portions objected to by National
3 Grid. The portions objected to relate to
4 Mr. Handy's participation. At the time, he was
5 not representing a party, and his client was
6 later denied intervention. So National Grid has
7 objected to those portions of the transcript.
8 MR. HAGOPIAN: The Division
9 joins that objection. Standing motion.
10 MS. WILSON-FRIAS: Okay. So
11 the way I did the exhibit list was to list those
12 portions that were identified by Ms. Hutchinson.
13 And I've reviewed them, and they are inclusive
14 of Mr. Handy's participation.
15 Is there any objection to the
16 exhibits as listed on the exhibit list in the
17 way they're listed being admitted full?
18 MS. HUTCHINSON: No objection
19 for National Grid.
20 MR. HAGOPIAN: No objection.
21 MR MARCACCIO: No objection.
22 MS. CURRAN: Okay. They're all
23 admitted full.
24 We should have the parties
25 identify themselves for the record.

<p style="text-align: right;">Page 5</p> <p>1 MS. HUTCHINSON: Good morning. 2 Jennifer Brooks Hutchinson for National Grid. 3 And to my left is Liana Moore, also from 4 National Grid. 5 MR. HAGOPIAN: Jon Hagopian for 6 the Division. And to my left is staff, division 7 staff Al Contente. 8 MR. MARCACCIO: Andrew 9 Marcaccio on behalf of the Office of Energy 10 Resources. 11 MS. WILSON-FRIAS: Cynthia 12 Wilson-Frias, Commission counsel. 13 MR. NAULT: Alan Nault, 14 Commission rate analyst. 15 MR. BIANCO: Todd Bianco, 16 Commission staff. 17 MS. WILSON-FRIAS: And you'll 18 recall that we had the technical records session 19 on November 28, 2017, and National Grid at that 20 time took us through all of the changes in the 21 tariff. 22 At this point, today's hearing 23 is to address some of the outstanding issues 24 that were remaining issues for clarification 25 primarily, and then a couple of issues that the</p>	<p style="text-align: right;">Page 7</p> <p>1 Distributed Generation Interconnection Standards 2 at Rhode Island General Laws, Section 3 39-26.3-4.1, which took effect as of July 1, 4 2017. 5 These amendments are designed, 6 among other things, to limit the ways in which 7 the company can charge renewable energy 8 customers for system modifications to 9 interconnect the electric distribution system, 10 and placing certain time frames on the company 11 to complete the application process and system 12 modifications. 13 In addition, the company also 14 proposed certain other revisions to its tariff 15 which are more particularly set forth and 16 detailed in the company's October 31st filing 17 letter on Pages 2 and 3 of that filing letter. 18 We'd also like to point out and 19 highlight that in the Division's December 28th, 20 2017, memorandum, they did recommend that the 21 tariff advice be accepted as filed. 22 We do have two witnesses from 23 National Grid here with us today, Tim Roughen, 24 who's the director of regulatory strategy, and 25 John Kennedy, who's the manager in the customer</p>
<p style="text-align: right;">Page 6</p> <p>1 Commission had, had raised and were looking for 2 further discussion, figure out how to deal with 3 them in the future. And on Monday, I provided 4 the parties with a list of topics in order to 5 narrow the focus of today's hearing. 6 That's all I have for 7 administrative matters. 8 MS. HUTCHINSON: I can start 9 with -- 10 MS. CURRAN: Yes. 11 MS. HUTCHINSON: Great. Thank 12 you. 13 Okay. Good morning. Yes. So 14 as Commission counsel mentioned, we're here 15 today regarding the company's October 31st, 16 2017, tariff advice filing to amend National 17 Grid Electric tariff entitled Standards for 18 Connecting Distributed Generation, Rhode Island 19 PUC Number 2180, pursuant to the PUC's Rules of 20 Practice and Procedure 1.9 Part C. 21 In that October 31st filing, 22 the company submitted tariff pages marked to 23 identify revisions to its currently effective 24 tariff. The company's proposed revisions were 25 intended to comply with the amendments to the</p>	<p style="text-align: right;">Page 8</p> <p>1 energy integration group. I do have -- They're 2 here to testify and answer questions regarding 3 the tariff advice filing, and I just have a 4 few -- limited direct examination for those 5 witnesses. 6 If we could swear them in. 7 TIMOTHY ROUGHEN, SWORN 8 JOHN KENNEDY, SWORN 9 MS. HUTCHINSON: I'm going to 10 begin with Mr. Roughen. 11 BY MS. HUTCHINSON: 12 Q. Good morning, Mr. Roughen. Could you state your 13 full name for the record. 14 A. Yes. It's Tim Roughen. 15 Q. And -- 16 A. Director of regulatory strategy at National 17 Grid. 18 Q. And please state your job title and the scope of 19 your duties with National Grid. 20 A. Again, director of regulatory strategy, and 21 I've been involved for about 15 years in the 22 development and implementation of 23 interconnection standards for distributed 24 generation along with a number of other duties. 25 Q. Thank you. And did you participate in the</p>

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1 November 28th, 2017, technical session in this
 2 docket?
 3 A. Yes, I did.
 4 Q. Okay. And Mr. Roughen, do you have a copy in
 5 front of you of the company's October 31st,
 6 2017, tariff advice filing which has been
 7 admitted this morning as Exhibit National Grid
 8 1?
 9 A. Yes, I do.
 10 Q. And attached to the company's filing letter are
 11 four attachments which are identified as
 12 Attachment 1, Attachment 2, Attachment 3, and
 13 Attachment 4. Do you have those?
 14 A. Yes, I do.
 15 Q. And can you just please briefly describe what
 16 each of those attachments are?
 17 A. Sure. Attachment 1 is the redlined tariff
 18 itself, putting in place the specific changes as
 19 per the legislation recently enacted.
 20 Attachment 2 is a clean copy, if I'm not
 21 mistaken.
 22 Q. Nope. If you'd just turn to --
 23 A. Sorry.
 24 Q. If I could just direct your attention, -- that's
 25 okay -- if I could just direct your attention to

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1 Attachment 2, right behind the tariff.
 2 MR. HUTCHINSON: If it's okay
 3 for me to offer that, that's just a copy of the
 4 public notice to the Providence Journal, we
 5 include with the filing.
 6 A. Okay. Attachment 2 is a public notice.
 7 Attachment 3 is the, -- let me double-check.
 8 Sorry for that. -- is the actual table of
 9 changes in the tariff itself.
 10 Q. Okay.
 11 A. And Attachment 4 is a copy of the legislation
 12 as passed.
 13 Q. Great. Thank you. With respect -- I'm going to
 14 focus your attention on Attachment 1 of the
 15 filing, which is the advised tariff, as you
 16 noted. Were you involved in the preparation of
 17 this document?
 18 A. Yes, I was.
 19 Q. Okay. And can you just briefly explain what
 20 your role was in putting together the revised
 21 tariff?
 22 A. Sure. My role in putting together the
 23 revised tariff included taking the language from
 24 the legislation recently passed and
 25 incorporating in a way in the existing tariff

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1 such that it's -- the new terms are in the
 2 tariff, but also there are some changes and
 3 clarifications we made in the tariff to make it
 4 simpler and easier for our customers as well as
 5 our internal groups to manage the process.
 6 Q. Okay. Thank you. And with respect to
 7 Attachment 4 of the filing, which is the amended
 8 statute, as you noted, were you familiar with
 9 the provisions of the amended law at the time of
 10 the filing?
 11 A. Yes, I was.
 12 Q. Okay. And did you review that statute when
 13 preparing the revisions to the tariff?
 14 A. Yes, I did.
 15 Q. Okay. So in your view, do those proposed tariff
 16 revisions comply with the amended law?
 17 A. Yes, they do.
 18 Q. Okay. Did you also sponsor certain responses to
 19 record requests that were issued at the
 20 November 28, 2017, technical session?
 21 A. Yes, I did.
 22 Q. And are there any changes or corrections that
 23 you'd like to make at this time to those record
 24 requests?
 25 A. No, there are not.

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1 Q. Okay. Thank you.
 2 MS. HUTCHINSON: I'm now going
 3 to turn to Mr. Kennedy.
 4 BY MS. HUTCHINSON:
 5 Q. Good morning, Mr. Kennedy.
 6 A. Yes. Good morning.
 7 Q. Could you state your full name for the record.
 8 A. Yup. It's John Kennedy. I'm the manager of
 9 customer energy integration at National Grid.
 10 Q. Okay. Thank you. And Mr. Kennedy, did you also
 11 participate in the November 28th, 2017,
 12 technical session in this docket?
 13 A. Yes.
 14 Q. Okay. And can you just briefly explain your
 15 role in connection with the proposed tariff
 16 provisions and implementation of the tariff in
 17 your role within customer energy integration?
 18 A. Yes. Well, I, you know, provided support and
 19 advice during those preparations. But I think
 20 more importantly, I managed a team that provides
 21 and performs the practical implementation of the
 22 tariff and the associated statutes.
 23 Q. Thank you very much.
 24 MS. HUTCHINSON: Those are all
 25 the question I have those for these witnesses.

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1 So they are available for questions from the
 2 Commission and Division.
 3 MS. HAGOPIAN: I have no
 4 questions.
 5 MR. MARCACCIO: No questions.
 6 MS. WILSON-FRIAS: Good
 7 morning. So I sent out a list of topics on
 8 Monday to sort of guide us through some of the
 9 outstanding issues that seem to be remaining
 10 after the technical session. So I think I'm
 11 just going to go through those.
 12 So the first question is, in
 13 the tariff, there are proposed changes to the
 14 definition of effective system and also the
 15 charges and payments. So these are Sheets 3,
 16 which is the definition, and 18 is the charges.
 17 So the first question I have
 18 is, in looking at what an effective system is,
 19 it includes neighboring utilities and
 20 affiliates, but it also includes ISO New
 21 England. And the definition reads specifically:
 22 Any neighboring transmission or distribution
 23 EPS, which I believe is electric power system,
 24 not under the control of the company, and then
 25 gives the examples.

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1 when there's an effective system involved. Sort
 2 of maybe give an example, and then explain the
 3 mechanics of how those charges work.
 4 MR. ROUGHEN: So in terms of an
 5 effective system, that's actually a neighboring
 6 utility specifically, the way the charges would
 7 work is, our team would work with their team to
 8 determine different change or upgrades that need
 9 to be accomplished. Again, with a neighboring
 10 utility specifically, then that neighboring
 11 utility would enter an agreement directly with
 12 the interconnecting customer for whatever the
 13 cost would be and schedules and the rest.
 14 Because of the nature of a
 15 number of very large projects proposed here in
 16 Rhode Island, the reason the ISO New England is,
 17 as I explained earlier, the effective system,
 18 but they also are now going to be involved
 19 directly in the impact studies for projects that
 20 are over -- for projects that are over -- the
 21 projects that are in aggregate are over 5
 22 megawatts from the beginning.
 23 Until relatively recently, only
 24 National Grid did those studies, and then
 25 presented them to the ISO New England at the

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1 I'm wondering how ISO New
 2 England falls within that electric power system
 3 ownership or control definition. It just looks
 4 different to me from the other examples. So
 5 could you just explain that.
 6 MR. ROUGHEN: Sure. So
 7 effective system is a neighboring utility that's
 8 not under the control of National Grid. It's
 9 fairly clear. The issue with the ISO New
 10 England is they actually manage and operate
 11 those assets. For example, our transmission
 12 affiliate New England Power owns and operates
 13 transmission, but it's all under the direct
 14 supervision and operation and control of the ISO
 15 New England control center.
 16 So the company affiliate New
 17 England Power can't unilaterally do anything
 18 with their system without the ISO New England's
 19 approval and consent, because, again, they're
 20 going to operate the system on behalf of all
 21 customers in New England.
 22 MS. WILSON-FRIAS: Thank you.
 23 And then could you just explain -- So looking at
 24 Sheet 18, it talks about the charges. Could you
 25 just explain the mechanics of how that works

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1 reliability committee for their approval. At
 2 some point, it was announced over the summer of
 3 2017, the ISO wanted to change that process due
 4 to the large amounts of distributed generation
 5 being proposed throughout New England and
 6 obviously in Rhode Island.
 7 So they made the change that
 8 they let actually be part of the studies that we
 9 conduct for these larger projects. And they do
 10 have specific charges for that review that they
 11 will have so that -- again, ISO is a non-profit
 12 organization, so if they have work to do, they
 13 do need to collect it from whomever's causing
 14 that work.
 15 However, because of our
 16 existing transmission operating agreement that
 17 our parent company has with the ISO New England,
 18 the ISO can't be charged directly by an
 19 interconnecting customer. That has to flow
 20 through the host utility that has the ISO as
 21 part of a study. So in that case, the company
 22 will contract with the ISO and pass along the
 23 cost to the customer for the studies, but we'll
 24 do that direct billing between ourselves and the
 25 ISO New England.

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1 MS. WILSON-FRIAS: Okay. So I
 2 just want to make sure I understand. So who's
 3 the company? Is the company Narragansett or is
 4 the company --
 5 MR. ROUGHEN: It's Narragansett
 6 working with their transmission affiliate New
 7 England Power. These projects do require
 8 transmission reviews, not simply distribution
 9 level reviews, and that's why we have to bring
 10 in our New England Power colleagues, and they
 11 all -- they're the ones who bring in the ISO New
 12 England for their study.
 13 The ISO won't directly have
 14 upgrade costs per se. Any upgrade costs would
 15 be those costs that a neighboring effective
 16 system would have. But again, the ISO has study
 17 costs, and those costs need to be recovered.
 18 MS. WILSON-FRIAS: Okay. So
 19 let me just see if I understand. So ISO will be
 20 involved in the study. ISO will charge New
 21 England Power, New England Power will charge
 22 Narragansett, and Narragansett will charge the
 23 customer?
 24 MR. ROUGHEN: Yes.
 25 MS. WILSON-FRIAS: Okay. And

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1 if there are actual transmission upgrade costs,
 2 New England Power will incur those costs and
 3 charge Narragansett, and Narragansett will
 4 charge the customer?
 5 MR. ROUGHEN: Yes, they will.
 6 MS. WILSON-FRIAS: So is
 7 Narragansett charging for those transmission
 8 upgrades or is NEP charging for those
 9 transmission upgrades?
 10 MR. ROUGHEN: Technically, NEP
 11 is charging for the transmission upgrades
 12 because it's an affiliate of Narragansett
 13 Electric Company. Narragansett will charge on
 14 their behalf. Versus, separate effective, like
 15 in Eversource, where they would charge directly
 16 to the customer.
 17 MS. WILSON-FRIAS: Okay. But
 18 at the end of the day, it's a New England Power
 19 charge to the customer, not a Narragansett
 20 charge to the customer?
 21 MR. ROUGHEN: If there's -- For
 22 transmission upgrades only, yes.
 23 MS. WILSON-FRIAS: And the ISO
 24 charge is an ISO charge to the customer, not a
 25 Narragansett charge to the customer?

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1 MR. ROUGHEN: Technically, yes.
 2 MS. WILSON-FRIAS: Did you guys
 3 have questions on this issue before I move on?
 4 The Commission?
 5 MS. GOLD: Only, are you going
 6 to ask about how often this happens? Is that
 7 the next question?
 8 MS. WILSON-FRIAS: Yes, it is.
 9 MS. GOLD: Okay.
 10 MS. WILSON-FRIAS: So then the
 11 next question is, Commissioner Gold just asked
 12 is, how often, say over the past couple of
 13 years, has National Grid included the cost for
 14 effective system in invoices to the
 15 interconnecting customers?
 16 MR. KENNEDY: I can respond to
 17 that. So really it's only been, as Tim
 18 mentioned, since late summer, August time frame,
 19 when the ISO changed their procedure that we've
 20 incurred these costs.
 21 So to my knowledge, there's
 22 three applications or aggregated -- three groups
 23 of aggregated applications that we're performing
 24 a transmission, what we refer to as a
 25 transmission planning study where ISO New

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1 England has requested to be an effective party.
 2 I would offer that we
 3 anticipate it to happen more frequently based on
 4 the size of the interconnection applications
 5 we're receiving and the locations where there
 6 would be aggregated and would require a
 7 transmission planning study.
 8 MS. WILSON-FRIAS: And that's
 9 with regard to ISO. But how about New England
 10 Power cost; have you had to pass any of those
 11 along over the last couple of years?
 12 MR. KENNEDY: We have. Because
 13 we've required what we -- it's a protection
 14 scheme on the hindsight of our substation
 15 transformers. We refer to it as 3v0. It's
 16 ground fault protection. And that has been
 17 required in numerous, you know, scenarios where
 18 either an individual interconnection
 19 application. It was determined that that was
 20 required or an aggregate. We've had to install
 21 that.
 22 MS. WILSON-FRIAS: So those
 23 are -- So 3v0, is this a distribution protection
 24 or is that a transmission protection?
 25 MR. KENNEDY: To my knowledge,

Page 21

1 in most cases, it would be transmission. I
 2 would have to check, but I am aware that some of
 3 our substations are owned by National Grid
 4 company in Rhode Island. They're not all owned
 5 by New England Power. So it depends on the
 6 location.
 7 MS. WILSON-FRIAS: Can we just
 8 have a record request on -- to clarify that a
 9 little bit more? And the record request would
 10 be, first, how often over the past two years has
 11 National Grid included the cost for 3v0 ground
 12 fault protection and whether all were
 13 transmission costs? And if not, how many were
 14 distribution related?
 15 MR. ROUGHEN: As a
 16 clarification, when there's -- this protection
 17 is required, there's equipment that's installed
 18 on New England Power Company system and
 19 equipment installed on Narragansett Electric
 20 system. So there's a split work -- the work is
 21 split between the two entities.
 22 At some other rare occasions
 23 where we've got low voltage feeding into a
 24 substation, like 34,000 volts feeding into a 12
 25 kV substation, in that case, both the high and

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1 low substation may still be Narragansett
 2 equipment. But in most cases, where you've got
 3 the 115,000 volts, or the 12 kV system, the
 4 115,000 side is New England Power cost, and the
 5 12,000 volt cost in the distribution cost. But
 6 again, we can clarify that in record request.
 7 MS. CURRAN: How do you divide
 8 up those costs? Some above the -- So it's a
 9 joint --
 10 MR. ROUGHEN: As an example,
 11 what you need to do to -- what you're looking to
 12 do is to detect if one of the phases, one of the
 13 three wires on the 115,000 volt side has failed
 14 for some reason, either it's fallen down because
 15 of an ice storm or whatnot. So when that
 16 occurs, and there's distributed generation
 17 running on the low side of that transformer at
 18 that location, that distributed generation
 19 system can actually backfeed power into that
 20 fault which can cause overvoltage on the other
 21 two wires.
 22 So the work is to install
 23 voltage sensing equipment on the 115,000 volt
 24 side at the substation. So there's a
 25 foundation, there's a, there's a structure. At

Page 23

1 the top of the structure where they intercept
 2 each wire, there's voltage sensing equipment.
 3 That equipment then is wired back into the
 4 control house of the substation and feeds into
 5 the 12,000 volt protective device or breaker at
 6 the substation.
 7 So the distribution side is the
 8 work to enable that 12,000 volt breaker to do
 9 what it's supposed to do. And the transmission
 10 side is the construction of the -- the
 11 foundation and structures and the voltage sense
 12 equipment that connects to the 115,000 volts.
 13 So that's the difference between -- and it's
 14 approximately three-quarters of the cost is
 15 transmission related, and about a quarter of the
 16 cost is distribution related, in those
 17 scenarios.
 18 MR. NAULT: Mr. Kennedy, when I
 19 first heard you begin your response to the
 20 question about whether the 3v0 is distribution
 21 protection or a transmission protection, I
 22 thought I heard you say, it could be both
 23 because it depends on location? Did I mishear
 24 what you said?
 25 MR. KENNEDY: No.

Page 24

1 MR. NAULT: Or ownership of
 2 the --
 3 MR. KENNEDY: It's based on
 4 ownership.
 5 MR. NAULT: Of the substation.
 6 MR. KENNEDY: Correct. And
 7 Mr. Roughen explained that we do have 34 kV and
 8 23 kV subtransmission circuits in the state that
 9 do supply substations. So in that case, both
 10 subtransmission line, the substation,
 11 distribution would be owned by NECO.
 12 MR. NAULT: NECO? Narragansett
 13 Electric?
 14 MR. KENNEDY: Yup. The
 15 Narragansett Electric Company.
 16 MR. NAULT: Okay. Thank you.
 17 MR. KENNEDY: Which I do like
 18 saying now and then.
 19 MS. CURRAN: So is a
 20 subtransmission line considered transmission or
 21 distribution or a --
 22 MR. ROUGHEN: Let me try to get
 23 that one. It's an old term we've used many
 24 years where, you know, many, many, many years
 25 ago, you know, we didn't have a lot of

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1 transmission or 115,000 volt or 69,000 volt and
 2 higher. Typically, that's the voltage level --
 3 69,000 volts and up is a considered transmission
 4 voltages. Below that is considered
 5 distribution.
 6 But many years ago where we had
 7 a lot of -- we didn't have the transmission
 8 level voltages. We had these 34,000 volts. We
 9 referred to them as subtransmissions, but a
 10 point in fact, they are considered distribution
 11 facilities.
 12 MR. BIANCO: I have one. When
 13 those charges are incurred in those cases, how
 14 do you let the customer or the entity that's
 15 incurring those charges, how do you let them
 16 know where the original charge is coming from?
 17 Does it appear to them that it's coming from
 18 Narragansett Electric Company or can they see
 19 that it's coming from ISO or NEP?
 20 MR. KENNEDY: So recently, with
 21 the request we've received from ISO on becoming
 22 an effective party and participate in the
 23 studies, we let the customer know that this
 24 charge is coming from ISO New England. And for
 25 the cases where we have -- that there's New

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1 to request a delay? Is that something you would
 2 work with the customer on? So I'm just going to
 3 leave it as an open sort of broad question. If
 4 you could just maybe explain that a little bit
 5 more.
 6 MR. ROUGHEN: Why don't I
 7 start in terms of how we've been doing it, and
 8 then John can elaborate in terms of specifics.
 9 But ultimately, we strive to
 10 get all the information we need when the
 11 customer applies for interconnection initially.
 12 There are occasions that some information
 13 changes over time. In other words, they
 14 proposed, you know, a certain amount of DG
 15 and/or a certain type of equipment and then they
 16 change what they're looking to purchase and
 17 install.
 18 And so when they suggest a
 19 change, then we need new information. Right?
 20 We need the new one line diagram. We need the
 21 new equipment specifications. And so we simply
 22 say to the customer, well, that we'll consider
 23 the change, but you need to give us this
 24 additional information. So at that point, our
 25 processing clock stops while they provide all

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1 England Power charges and the Narragansett
 2 Electric Company charges, we'll also inform the
 3 customer of that break-out.
 4 MR. BIANCO: Thanks.
 5 MS. WILSON-FRIAS: We might
 6 have already covered this but -- I mean, I think
 7 you actually already did, so you can just tell
 8 me you did if you did. But how often over the
 9 past couple of years has a transmission upgrade
 10 been needed to interconnect renewable
 11 distributed generation projects?
 12 MR. ROUGHEN: Again, that's
 13 what I think record request one is going to
 14 answer.
 15 MS. WILSON-FRIAS: Great. So
 16 then moving on to another topic. And this is
 17 looking at Sheet 29 and Note 7 of the proposed
 18 tariff. And this is the deadlines and the --
 19 when sort of the clock can stop. And at the
 20 open meeting a couple of weeks ago, the
 21 Commission was interested in further exploring
 22 what we had started at the tech session with
 23 regard to what types of things make the clock
 24 stop, not just for the company, but for a
 25 customer. And is it possible for the customer

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1 that information.
 2 I will say, though -- I mean,
 3 that's our practice. I will say, though, with
 4 the new legislation, the company will have no
 5 choice but to be a bit more specific about that.
 6 And in the past where we allowed changes while
 7 we were in the study process, depending on the
 8 scope of that change, we may not be able -- we
 9 won't be able to allow that anymore, and we'll
 10 have to cancel that application, the customer
 11 will then have to re-apply with a new
 12 specifications and equipment at that point in
 13 time. And obviously, that's simply to make sure
 14 that the company's rights are protected in terms
 15 of legislation that's in place that the tariff
 16 now reflects.
 17 There are occasions where,
 18 again, once you've got the completed
 19 application, the customer, we provided them an
 20 estimate for the impact study, and they have 15
 21 days to send that back. So in that 15 days,
 22 there's -- the clock is stopped, because we're
 23 waiting for them to pay. There is a lot of --
 24 There's a significant number of cases where that
 25 15 days lapses and they don't pay us

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1 immediately. We've typically allowed that
 2 lapse. But again, the clock is stopped the
 3 whole time.
 4 Going forward, we likely cannot
 5 allow that lapse anymore. And if they don't pay
 6 within a certain amount of time, we'll have no
 7 choice but to cancel the application and have
 8 them re-apply. Again, to protect the company's
 9 rights with the new legislation that's in place.
 10 The company, the company rarely
 11 has the need to stop the clock. The clock is
 12 always, as far as I can -- I can't think of a
 13 time, but perhaps John can, where it's not a
 14 customer delay that's stopping the clock.
 15 Because, again, these projects are very -- can
 16 be complicated and difficult to bill for lots of
 17 reasons. And they run into certain issues
 18 around permitting or around lots of different
 19 issues or land owner agreements and that sort of
 20 thing.
 21 So there's been numerous
 22 occasions where, even if a customer is working
 23 through the study process, they aren't returning
 24 something. And typically, it is the payment for
 25 the studies. They haven't got their financing

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1 in place to pay for that. And so therefore, the
 2 clock stops until they pay and we can start the
 3 second part of the process.
 4 Anything more, John, you can
 5 add or...
 6 MR. KENNEDY: I think Tim
 7 covered it pretty well. But it's frequent we
 8 experience that customers apply, their
 9 application is not, is not complete, so we put
 10 that application on hold, we notify the customer
 11 what's required, and then we wait.
 12 Typically, with -- I would say
 13 we're very customer friendly during this, this
 14 process. And as Tim mentioned, I think going
 15 forward, you know, that we may have to become a
 16 little more stringent on -- and set customer
 17 expectations that don't apply until you have all
 18 your, you know, ducks in a row. And that lends
 19 itself right through the complete
 20 interconnection process, that they're really
 21 going to have to be on top of their game.
 22 And you know, we will make
 23 mention of this in, you know, in our customer
 24 outreach sessions, that we are going to change
 25 our methods, so to speak. But it also lends

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1 itself to, you know, again, site specific
 2 applications, where if we have an application
 3 come in and there's customers in queue on the
 4 same circuit, you know, we expect the previous
 5 customers that applied to be progressing
 6 according so the applicants behind them in a
 7 circuit queue are not affected by any of their
 8 delays.
 9 You know, we strive to make all
 10 of our milestones. You know, we have had
 11 instances where, you know, maybe due to resource
 12 constraints, you know, maybe we're not a hundred
 13 percent perfect in everything we do, but we do
 14 strive to, you know, be so as much as we can and
 15 serve the customer as best we can.
 16 MS. WILSON-FRIAS: Okay. So I
 17 have a question. Can we turn to Sheet 26, which
 18 is the time frames chart, the table? So looking
 19 at that. And it's the third row. Review
 20 Application for Completeness. And under the
 21 statute, the company has 10 days.
 22 If after those 10 days, if you
 23 determine that the application is not complete,
 24 do you just put it on hold until the applicant
 25 gets all of the information and then the time --

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1 the clock starts running from the time of the
 2 completed application?
 3 MR. ROUGHEN: Yes. Yes.
 4 That's what happens.
 5 MS. WILSON-FRIAS: Okay. Is
 6 there a limit on that? Like, could you put in
 7 an application and then need to -- you know,
 8 there's one piece that's missing and, you know,
 9 six months later they could give it to you? Or
 10 is there a point where you say that it's
 11 unreasonable to consider holding it open?
 12 MR. ROUGHEN: Well, they're not
 13 held open. Right? Until it's completed, a
 14 completed application, and we've sent them a
 15 notice that it is completed, we're not doing
 16 anything with the project. It's sitting there
 17 waiting for that to finish. And eventually,
 18 whenever we find a quiet time again, we could
 19 clear those out. But it's rarely that we go
 20 back to those.
 21 Once we've notified the
 22 customer that you're missing X, Y, and Z, and
 23 once we get it, then we can process it and
 24 determine if it's complete still. Because many
 25 times we ask for X, Y, and Z, and they give us

1 A, B, and C. So we need to ask again, that
2 wasn't what we wanted or it's not complete
3 enough. So that's the challenge that -- so
4 until, until we deem the application complete,
5 the clock hasn't started. So there's no harm,
6 no foul, in terms of our processing. And then
7 the customer has whatever time they need to
8 finish it. It's only once we've deemed it, the
9 application complete, that's when the timelines
10 for obviously both ourself and the customer are
11 put into place.

12 MS. WILSON-FRIAS: Okay. So
13 then let me ask you this. And it's back to
14 Mr. Kennedy's comment earlier, that other
15 projects need to be able to progress.

16 MR. KENNEDY: Yup.

17 MS. WILSON-FRIAS: So, first,
18 this doesn't hold up other projects that might
19 be behind this project.

20 MR. KENNEDY: Right.

21 MS. WILSON-FRIAS: Okay. And
22 the then second question is, what happens if
23 this is on hold so long that when you get the
24 information there have been other applications
25 that have been processed? Can those affect this

1 of the tariff it does mention by mutual
2 agreement. So in the past, we have mutually
3 agreed upon dates with the customers.
4 MS. WILSON-FRIAS: My next
5 question is, other than the system modifications
6 stopping of the clock, if there, if there's any
7 other -- I know you just testified that there
8 may not be as much flexibility in allowing for a
9 stopping of a clock. But if there were delays
10 for other reasons -- sorry -- at other points in
11 the process, how would you notify the customers?

12 MR. KENNEDY: So I'm not
13 sure -- Can you be more specific as far as what
14 phase in the process? Is it post ISA or...

15 MS. WILSON-FRIAS: Let's go
16 back to that 15 days to make the payment. What
17 if a customer said, you know what, I need
18 another 15 days? Could the customer notify you
19 that they needed another 15 days or are you
20 going to now be canceling those applications?

21 MR. KENNEDY: Well, typically,
22 we would allow that. But we would expect that
23 we would get another 15 days on the clock. You
24 know, if we could negotiate that, I'd have to
25 say we'd probably be looking to cancel, cancel

1 one, the one on hold?

2 MR. KENNEDY: No. The queue
3 positioning on a circuit that I mentioned, an
4 applicant wouldn't enter a certain queue until
5 the application was deemed complete.

6 MR. ROUGHEN: So other projects
7 can be processed without this project affecting
8 them in any way because we haven't even begun
9 that other analysis for the project that did not
10 have the completed application.

11 MS. WILSON-FRIAS: And then,
12 back to Note 7 on Sheets 29 and 30. This deals
13 with the deadlines for completing system
14 modifications. And it has the days. But then
15 Number 2 is, that the renewal interconnecting
16 customer can agree on an extension of time
17 between execution of the interconnection
18 services agreement and interconnection as set
19 forth in writing.

20 Have you had experience with
21 that actually happening or is this more of a
22 placeholder?

23 MR. KENNEDY: We haven't had it
24 happen, happen yet, you know. But you know, we
25 do -- you know, the tariff, in different parts

1 the project. Because, you know, we'd expect --
2 common sense is that people work together, and
3 we do mutually agree on dates.

4 MS. WILSON-FRIAS: So I guess
5 where I'm getting hung up is that -- Let's go
6 back to Note 6. Note 6 is the maximum number of
7 days between the date of the completed
8 application and the company's delivery of an
9 executable interconnection services agreement. And
10 then the next deadline is from the inter -- the
11 executed interconnection services agreement and
12 the actual systems modifications. So where in
13 there is the company in danger of missing
14 deadlines due to a customer delay?

15 MR. ROUGHEN: Well, the company
16 has interpreted the underlying legislation in
17 the tariff that says, even under Note 6, yes, it
18 says 175 calendar day. But that's the company's
19 processing time, less customer holds, is how the
20 customer has interpreted that.

21 The Note 7 that talks about the
22 days between the executed service agreement and,
23 importantly, payment, right, payment will always
24 stop the clock, that's where there is no leeway
25 there. However, there are still, unfortunately,

1 customer-related issues that could cause us some
2 challenges. Ultimately, in many cases, we need
3 easements for equipment, are they going to be
4 installed on private property. Those easements
5 require specific legal information for us to
6 draft and then send out and then get executed.

7 Many cases, it takes quite some
8 time to get that legal information. And many
9 cases, they don't really -- apparently, the
10 developer either can't or won't get the
11 information along with the application. So --
12 And but without an easement, we won't set -- we
13 won't install our equipment.

14 So there's still the
15 possibility, even in Note 7, that the, the
16 deadlines, again, through no fault of the
17 company's, could be missed. We see -- We
18 understand clearly what the legislation says.
19 But again, we're fairly confident that we can
20 clearly show we sent an easement, request for
21 easement information on such and such a day, we
22 got no response for two or three months, I think
23 the customer would have a difficult time proving
24 it was our fault if you wanted to implement this
25 component of the, of the legislation that talks

1 behind that customer in a queue, so we're
2 serving the customer and, okay, nothing is
3 pushing us, so we're not going to push you.
4 But the tariff does provide for
5 the greater of either 15 days or half the time
6 for that particular step in the process, that
7 the customer has to respond or we can cancel
8 that project. Right?

9 MS. WILSON-FRIAS: But does
10 that -- Is that affected by the statute or is
11 that affected by the fact that there's more
12 distributed generation coming out of the system
13 and you don't want to harm a subsequent
14 application who's ready to go by an earlier
15 applicant who's not ready to go? I mean, I'm
16 trying to make that distinction here.

17 MR. KENNEDY: It is more of the
18 latter. But because we're going to be pressured
19 to keep things moving in all cases, that it
20 could, it could affect the prior statement you
21 made, you know, for those -- for that instance
22 where a customer just isn't --

23 You know, it takes resources to
24 monitor and track all of these applicants that
25 aren't moving along, and we'd rather see

1 about taking us to, you know, taking us to
2 court.

3 MS. WILSON-FRIAS: Okay. So
4 assuming that would be a third-party delay. I
5 guess I'm trying to figure out, Mr. Kennedy made
6 the comment earlier that the company would no
7 longer be able to be so flexible with customers
8 as far as timing. And I'm trying to figure out
9 where you would have a situation where a
10 customer delay would actually impact the
11 company's timelines within this process.

12 MR. KENNEDY: So one example --
13 and this is, you know, presently going on with
14 certain applications. You know, customers
15 submit applications, they pay for a study, study
16 gets delivered, and then that applicant -- that
17 application sits. And because, you know, over
18 the last few years, we've had the cute
19 positioning, if no one's behind that customer
20 next queue and in a queue, we don't mind that.

21 But as time goes on, you know,
22 we may need to modify, revise a study, you know,
23 if it's greater -- and this has happened, where
24 an applicant has a study and it sits for six
25 months, it sits for nine months, and no one's

1 everything move. And then it inadvertently, it
2 creates other issues that become, you know,
3 difficult to manage, I guess. You know, a
4 customer that has let an impact study sit for
5 nine months, 10 months, or even a year, now it
6 goes back to the fact, all right, do we have to
7 revise that impact study, do we need to analyze
8 the impact of that generator again. Typically,
9 the answer would be, yes, because so much time
10 has gone by. And now it's, well, realistically,
11 we already did our work, we managed the
12 application, we performed the study, we charged
13 the customer, you know, by statute we're
14 charging a fixed fee on the studies, typically,
15 it's depending on the size of the generator,
16 it's more expensive than what the statute
17 provides. We reconcile these costs. You know,
18 customers are fine when our estimated cost was
19 in excess of the actual cost, so we send them a
20 check.

21 But when it's the reverse, it
22 becomes a little more difficult, you know, when
23 we're sending a bill and we need to collect on
24 something that has already been -- that services
25 has already been provided, it becomes more

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1 difficult to check on that. So it's resources.
 2 So I think, you know, my comment that we not be
 3 able to be customer friendly, is protecting
 4 those resources so that we can move the valid
 5 projects through the process and meet the
 6 timelines and the deadlines that we've incurred
 7 through the legislation.
 8 MS. GOLD: So in your opinion,
 9 Mr. Kennedy, will these -- I mean, this is an
 10 attempt to add some clarity to the process.
 11 Will this allow projects to move along more
 12 quickly overall even if some projects fall by
 13 the wayside or...
 14 MR. KENNEDY: I think the
 15 customer -- the developer, the interconnecting
 16 customers that are prepared to apply and move
 17 and have, you know, I'm using the term ducks in
 18 a row, --
 19 MS. GOLD: Yeah.
 20 MR. KENNEDY: -- that they've
 21 truly done their due diligence. Yes. You know,
 22 the example I wanted to share with everyone was
 23 that, you know, just -- we've had applicants
 24 move through the process, we've executed an
 25 agreement, they've actually made first payment,

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1 deadline by statute to the customer.
 2 MS. HUTCHINSON: Chairperson, I
 3 don't mean to interrupt the flow of the
 4 questions, but I did just want to raise that I
 5 think the line of questioning, it's kind of
 6 getting at a possible statutory interpretation
 7 question. Our witnesses are testifying to, you
 8 know, the kind of practical implication of
 9 implementing the new statute provisions and sort
 10 of what -- you know, from the practice side of
 11 things. But I think it opens sort of this
 12 question of, during that initial phase from
 13 application to ISA, the 175, 200 max time frame,
 14 the statute doesn't prohibit -- prevent the
 15 company from tolling that time frame due to
 16 customer delays. The statute specifically
 17 references nonpayment as one of those instances
 18 in which that time frame would be tolled.
 19 The second part of this statute
 20 with respect to the deadlines may not be
 21 extended due to customer delays is really
 22 talking about the system modification deadlines
 23 which is post ISA. And even then, the
 24 information has to be requested, you know,
 25 upfront.

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1 but yet, for whatever reason, they're -- they
 2 haven't prepared their site, they haven't
 3 started their construction. You know, we're
 4 ready to go, we can't get our designers out to
 5 stake a pole line extension because they haven't
 6 prepared their site properly. And it just
 7 causes delays. And again, it chews up
 8 resources.
 9 We're sending people out, you
 10 know, needlessly, actually, to a site to perform
 11 work, multiple times, pushing the customer, but
 12 yet, you know, at that point in the process,
 13 they've made first payment, so we're very
 14 reluctant to, you know, cancel a project. You
 15 know, we do provide some pressure, but we don't
 16 really have, you know, I guess the means to
 17 really push that customer too hard because
 18 they're not ready on their side of, you know,
 19 the project to move forward.
 20 But yet, we've already extended
 21 and planned for resources to be available so
 22 that we can move and meet that 270-day calendar
 23 day, you know, deadline. So that would be an
 24 instance where, you know, we would want to
 25 extend by mutual agreement the, you know, the

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1 So I think there's a little bit
 2 of a sort of legal interpretation I think with
 3 the statute that if, if a different
 4 interpretation was made, it leaves the company
 5 in a spot of, you know, what do we do in our
 6 practical implication day-to-day process, you
 7 know, in terms of handling these applications.
 8 But I don't think that the
 9 statute would preclude the company from tolling
 10 those time frames pre-ISA due to a customer
 11 delay and whether it's nonpayment or, you know,
 12 providing information.
 13 So I just wanted to try to
 14 clarify that to some extent.
 15 MS. CURRAN: Is that just
 16 informational on your part or are you objecting
 17 to something?
 18 MS. HUTCHINSON: It's just
 19 information. I just wanted to try to clarify.
 20 Because I don't think our witnesses can, from
 21 the statutory interpretation side of it --
 22 MS. CURRAN: But we do want to
 23 know how they are doing the interconnection
 24 work.
 25 MS. HUTCHINSON: Yes.

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1 MS. CURRAN: And if that
2 involves an interpretation of statute, then I
3 think that we want to know about that. Because
4 they are effectively using the statute as part
5 of the tariff for the entire process.
6 MS. HUTCHINSON: Yes.
7 MS. CURRAN: And they've
8 changed things because they understand that the
9 legislation changed how they had operated in the
10 past; so...
11 MS. HUTCHINSON: Yes. And I
12 think we've interpreted the statute and
13 incorporated that into the tariff, you know, to
14 comply with that. But I think in -- you know, I
15 just wanted to kind of clarify. I think it
16 opens this question of a legal interpretation
17 of, you know, what happens to that clock at the
18 beginning, you know, from that application to
19 ISA. The statute wouldn't prohibit the company
20 from holding that time frame.
21 MS. CURRAN: But we want to
22 know what does happen, the way that they then
23 operate. We're not asking them, do you think
24 you're correct. That's the legal
25 interpretation. And I don't think anyone's

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1 the end of 2017. So we're very proud of how
2 we've been doing it right along here. And the
3 statute, in my opinion, really won't change how
4 quickly and how effectively, you know, we're
5 serving customers. It's just the allowing
6 customers to hang around for a while probably
7 won't be able to happen anymore. That's the
8 difference.
9 MS. GOLD: I just got a
10 question for counsel. At what point will we
11 have an opportunity to re-visit the intention of
12 the legislation and then how it has worked in
13 practice? So you said it's been in effect for
14 five months. So would it be -- When would we
15 have that opportunity? There must be a docket
16 where he could address it.
17 MS. WILSON-FRIAS: You've got a
18 few options. If a -- clearly, if an
19 interconnecting customer were to make a
20 complaint under the tariff, that would be an
21 obvious opportunity to look at it. Another
22 opportunity would be, you could do -- you could
23 put in some reporting requirements. I know that
24 the company is meeting with OER and the Division
25 quarterly and providing updates as to how the

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1 asking that.
2 MS. HUTCHINSON: Okay.
3 MS. WILSON-FRIAS: I mean, the
4 statute's been in effect for five months. So
5 you've been -- The company has needed to meet
6 these deadlines for five months at least. And
7 so I think what I'm trying to get at is, what's
8 going on and how are you doing it and what may
9 have changed and trying to figure out what some
10 of these situations would look like.
11 MR. ROUGHEN: Well, I think to
12 put it in a nutshell, it's going to be more of a
13 severe sort of review of allowing extensions.
14 It's just -- as I mentioned earlier in my
15 testimony. Ultimately, we would routinely allow
16 a customer to kind of hang around if there
17 wasn't anyone there. But with the saturation
18 and with all the new applications, that's just
19 not going to be possible, because we want to be
20 able to make the timelines. We obviously are
21 obligated to. And I think we've got a strong
22 history of making the schedules. And we're --
23 You know, this calendar year
24 just ended, and we met every customer who wanted
25 to be online by the end of 2017 was online by

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1 interconnection process is going.
2 MS. GOLD: Good.
3 MS. WILSON-FRIAS: Mr. Bianco
4 and I are copied on those calendar invites and
5 some of the information that comes in. So we
6 can certainly share that with you.
7 MS. GOLD: Yeah. That would be
8 helpful. I think the intent is to speed the
9 process along. And it needs to work for the
10 corporation, for the company, and it needs to
11 work for the developers. And that was a
12 question that came up in our November 28th
13 technical session. So I think that would be
14 useful.
15 MR. HAGOPIAN: John, are you
16 going to have sort of a screen or some sort of
17 category where you will have these projects that
18 are starting into the -- getting into the lays
19 for like easements and things like this? How
20 are we going to monitor that once this starts to
21 occur once you get a big flow of applications?
22 Because I see that as a problem.
23 MR. KENNEDY: Yeah, it is.
24 Post -- We refer to the process pre-ISA,
25 post-ISA. So for the customer requirements

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1 post-ISA, typically, it is obtaining all permits
 2 and easements, you know, and it's having the
 3 site prepared accordingly by a certain time
 4 frame so that we can proceed with our design.
 5 So you know, practically, I see us including
 6 that in the interconnection service agreement
 7 with some hard dates to manage it.
 8 As far as tracking it,
 9 everything's specific to a certain application,
 10 a certain customer project. You know, so we do
 11 have personnel that manage that that lays with
 12 the customer and track of what stage they are
 13 at. But it is -- I'm not sure if I'm answering
 14 your direct question but...
 15 MR. HAGOPIAN: You're doing
 16 fine.
 17 MR. KENNEDY: So that probably
 18 would do it.
 19 MR. HAGOPIAN: Because I can
 20 see a situation where you've got people in
 21 queue, you've got people moving, you're doing
 22 your studies and whatnot, and you have this
 23 separate group of people who as, there's been
 24 delays and whatnot, and it's going to be, it's
 25 going to be a bear to...

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1 MR. KENNEDY: Yup. But it
 2 correlates with how we manage our typical
 3 electrical load customer. You know, we have the
 4 same group of people that post-ISA. We have our
 5 work management system. These projects attract
 6 within that system. The requirements attract
 7 within the system. So it would sort of work the
 8 same way. And yes, you're correct. Certain --
 9 Everyone's different. Certain customers are
 10 going to progress. They're going to be on top
 11 of all of their requirements and obligations,
 12 you know, with the company and outside of the
 13 company's responsibilities and, you know, their
 14 projects are going to get managed in such a way
 15 that they're hitting all their targets. And
 16 then you have other groups that will not be as
 17 diligent, you know, with incurred delays and
 18 will ultimately interconnecting, whether it's a
 19 load customer or a interconnecting customer.
 20 MR. HAGOPIAN: That's where
 21 you're going to need to have these timelines to
 22 determine whether or not these projects can
 23 actually make them meet their milestones.
 24 MR. KENNEDY: Correct. And
 25 that's what we envision, you know, that we'd

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1 have to be very specific within our
 2 interconnection service agreements to, you know,
 3 provide that information upfront and what those
 4 obligations are by the customer. Where in the
 5 past, you know, we weren't saying, hey, you need
 6 all your permits by a certain date for this to
 7 progress accordingly.
 8 MR. BIANCO: Is there something
 9 a little more -- What do you mean when you say,
 10 no one's, no one's behind that customer in the
 11 queue? Is there a single queue or is it by
 12 interconnection type?
 13 MR. KENNEDY: No. We post on
 14 our website the interconnecting queue for the
 15 state of Rhode Island. And it's just -- you
 16 know, if we have, -- this is a total guesstimate
 17 swag -- if we have, you know, 200 distribution
 18 circuits in Rhode Island, there could
 19 technically be 200 queues, interconnecting
 20 queues.
 21 MR. BIANCO: So nobody would be
 22 in line on that particular interconnecting
 23 queue? Is that you're what you're saying?
 24 MR. KENNEDY: If there was no
 25 interconnecting application that was deemed

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1 complete, there would be no one in that queue
 2 for a certain circuit.
 3 MR. BIANCO: And then just the
 4 language you're using. You're sort of
 5 describing something that's going to happen in
 6 the future when you'll no longer be able to
 7 allow, -- I am going to paraphrase -- you know,
 8 someone to hang around in the queue. Is that
 9 something that's already been implemented or are
 10 you talking in the future, sort of? Do you
 11 intend to be describing something that's going
 12 to happen in the future or has it been
 13 implemented --
 14 MR. KENNEDY: No. It happens
 15 now. You know, customers, customers may abandon
 16 a project and not notify us, and then all of a
 17 sudden we haven't heard from someone in three
 18 months. So we do have a cancellation process
 19 that we follow and make notification to the
 20 customer, hey, are you still active, do you want
 21 to pick this up again, or no. And if we receive
 22 no response, we send out a cancellation notice.
 23 And then within -- I mentioned work management
 24 system. We formally cancel that application so
 25 that we're no longer tracking that.

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1 MR. BIANCO: Has that
2 cancellation project already changed or is it
3 due to change? Just the way you're describing
4 it, it sounds like it's something that's going
5 to change going forward. But has it already
6 changed in the last few months?
7 MR. KENNEDY: Technically, it
8 has not changed, the cancellation process, not
9 project. Right? It hasn't changed. It's just
10 that we may be following it a little more
11 rigidly to make sure that projects are moving
12 along accordingly.
13 MR. HAGOPIAN: So what happens
14 if you send a notice to a customer to check on
15 the status of a project and they do not answer?
16 MR. KENNEDY: We would, we
17 would end up canceling that project. So if you
18 submitted an application, we've deemed it
19 complete, we've screened the project, provided,
20 provided a screening report, and indicated that
21 the next step is an impact study, we've provided
22 an impact study agreement to you, and now we
23 haven't heard from you in 30 days, 40 days, you
24 know, we reach out via e-mail, you know, do you
25 wish to progress, and we don't hear back from

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1 you within -- and we'll say we need to hear back
2 from you within 10 business days, and if we
3 don't, then we would cancel the project. And we
4 would provide that, and we would provide that
5 notification that this project is now canceled.
6 MR. HAGOPIAN: Okay. So
7 yesterday in the hearing that we were in, I
8 heard, I thought -- and I may be hearing --
9 MS. CURRAN: It was
10 diametrically opposed.
11 MR. HAGOPIAN: It was just the
12 opposite, as the chairperson said. I heard
13 testimony, I believe, and without checking the
14 record that is subject to check, but I believe I
15 heard a witness from National Grid indicate
16 that, if they check on a project, and I don't
17 remember if it was simplified or a larger
18 project, whether or not the scenario was,
19 company checks on the status of a project, they
20 get no answer from the customer, and so they
21 consider it continuing, the project continuing.
22 MS. CURRAN: Indeed, they said
23 essentially they thought it would be
24 inappropriate to just cancel it.
25 MR. BIANCO: And I'll just

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1 remind, that was in relation to the certificates
2 of responsibility. I think that's the problem
3 on that.
4 MR. HAGOPIAN: So it's just
5 certificates of eligibility?
6 MR. KENNEDY: Yes. Referred to
7 that only.
8 MR. HAGOPIAN: Okay.
9 MR. ROUGHEN: That was the
10 first one specifically.
11 MR. HAGOPIAN: Okay. Thank
12 you.
13 MS. WILSON-FRIAS: And I think
14 just to clarify for those of us that weren't
15 here yesterday, --
16 MR. HAGOPIAN: Sorry.
17 MS. WILSON-FRIAS: -- if you
18 could take a record request and a post hearing
19 data request from Docket 774, which was the
20 renewable energy growth docket. Because since
21 there's an overlap, I'm going to make that one a
22 post hearing data request.
23 So if the company could provide
24 clarification for when outreach to a customer
25 will result in cancellation and when outreach to

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1 a customer will result in continuation under the
2 tariff and under the renewable energy growth
3 program.
4 MR. ROUGHEN: Just to clarify,
5 you want to know when in the interconnection
6 process what their cancellation procedures are
7 along with and the regrowth process when we can
8 revoke a conditional certificate of eligibility?
9 I think the witness yesterday --
10 MS. CURRAN: Or what the
11 company does when they make an inquiry as to
12 whether the applicant who's gotten the whatever
13 does not then respond.
14 MR. ROUGHEN: So in either
15 case, essentially.
16 MR. HAGOPIAN: Yes. Because
17 these interconnection standards affect more than
18 one statute, statutory title. One more section.
19 MR. ROUGHEN: And I will just
20 offer, I will offer up the fact that the
21 discussion about conditional certificate of
22 eligibility yesterday was for the small scale
23 solar. Mainly, all simplified projects. Those
24 really aren't going to affect an interconnection
25 project on a particular feeder in any

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1 significant way.
 2 What Mr. Kennedy is referring
 3 to is, you've got a 2 megawatt proposal on a 12
 4 kV circuit that can only handle 8 megawatts of
 5 DG, and there's already 4, 5, or 6 megawatts,
 6 Onyx, and then another 1 megawatt wants to
 7 connect, and the 2 megawatt project is holding
 8 up the works. We want to make sure they get the
 9 full benefit of the tariff allowances. But once
 10 those are exhausted, we do need to cancel that
 11 project so that the 1 megawatt that's coming up
 12 behind it can move through smoothly. When
 13 you're talking about a 5 or 10 kilowatt small
 14 scale solar project, those really aren't going
 15 to have that, that impact on the study process.
 16 So there will be a little -- a difference in
 17 that; so...
 18 MS. CURRAN: I think we
 19 understand that.
 20 MR. ROUGHEN: Okay.
 21 MS. CURRAN: It's just such a
 22 contrast.
 23 MS. WILSON-FRIAS: And I
 24 purposely stated the record request more vaguely
 25 than you did in order to try to capture nuances.

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1 MR. ROUGHEN: Great. Thank
 2 you.
 3 MR. BIANCO: Last question for
 4 me. Not on that. What we were talking about
 5 earlier, about cancellation process. Also,
 6 you're describing a more strict implementation
 7 or execution in the cancellation process. If
 8 that's, if that's what you're trying to
 9 indicate, could you just describe, is that
 10 also -- should the Commission take that to mean
 11 that that's a more uniform implementation, the
 12 cancel process as well?
 13 MR. ROUGHEN: Yes. Because,
 14 realistically, the way we process the
 15 cancellation process in the past, again, as John
 16 described it very well was, if a 2 megawatt
 17 process was on a circuit, and no one had applied
 18 behind him, there was no really no harm, no
 19 foul, to let them stay there, because they
 20 weren't affecting anyone else's process. Right?
 21 And up until the last year or two, we did that
 22 routinely. Because there wasn't that much
 23 saturation on the system in Rhode Island,
 24 frankly.
 25 But along with the legislation

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1 coming along, the saturation and requests have
 2 grown dramatically in Rhode Island. So that's
 3 the real reason why we have to be more
 4 consistent to your point in terms of the
 5 cancellation process. It's mainly due to the
 6 saturation issues. And the legislation is just
 7 kind of part, is part of that process as well.
 8 MS. WILSON-FRIAS: Okay. So
 9 moving to Section 3.2 of the tariff, which is on
 10 Sheet 14. And we had this discussion during the
 11 technical session. And this goes to the
 12 pre-application reports. And here I'm kind of
 13 looking to the future. And if the Commission
 14 were called on to interpret and enforce the
 15 tariff provision, I have a concern that as
 16 written it would be very difficult to enforce.
 17 And I'm specifically under 3.2. I'm looking at
 18 the second paragraph which starts with,
 19 following the submission.
 20 And I will, I'll read the first
 21 sentence. Following the submission for either a
 22 mandatory or optional pre-application report,
 23 the company shall provide the report within 10
 24 business days -- and here's the new language --
 25 assuming a reasonable number of applicants under

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1 review.
 2 First question, should that be
 3 applications?
 4 MR. ROUGHEN: Again, they're
 5 not applications per se. They're
 6 pre-application reports are designed to help
 7 customers understand what the lay of the land is
 8 where they're proposing to put in. So it is --
 9 It's actually the number of requests for
 10 pre-application reports. And that's why we use
 11 the term "applicants." I mean, there is a
 12 pre-application report -- is it an application?
 13 What did we call it?
 14 MR. HAGOPIAN: It's a request.
 15 MR. ROUGHEN: It's a request,
 16 pre-application request. And that's why we use
 17 the term "applicant." But you're right. It
 18 could be...
 19 MR. WILSON-FRIAS: Would it be
 20 clearer, -- and this is probably a question more
 21 for the attorneys -- would it be clearer to
 22 actually say, assuming a reasonable number of
 23 requests for pre-application reports? And then
 24 we're going to get into reasonable but...
 25 MS. HUTCHINSON: Assuming a

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1 reasonable number of requests for applications
 2 reports?
 3 MS. WILSON-FRIAS: For
 4 applications reports.
 5 MS. HUTCHINSON: Yeah.
 6 MR. WILSON-FRIAS: And then I
 7 asked at the technical session what a reasonable
 8 number was, and there was a little bit of back
 9 and forth there. But I'm concerned about not
 10 having -- I'm concerned with, if the Commission
 11 were ever called upon in the future to determine
 12 whether or not the company was in compliance,
 13 what "reasonable" means, and if that can be
 14 further refined.
 15 MR. ROUGHEN: Well, again, I
 16 think that's why the last sentence of the same
 17 paragraph is proposing the reasonable number.
 18 No person or entity or affiliate may request
 19 more than 10 pre-application reports in any
 20 one-week period.
 21 MS. WILSON-FRIAS: You could
 22 have one person, you could have one person
 23 asking for 10 or you could have 20 people asking
 24 for 10. And so you'd either have 10 to review
 25 or 200. I'm just struggling with --

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1 see if the company could refine that language a
 2 little to make it a bit clearer.
 3 MR. ROUGHEN: And as
 4 testified -- as discussed at the technical
 5 session in November, we did and are moving
 6 forward with the system day reportal, the heat
 7 map, and at some point that will also have what
 8 we're working on a DG hosting capacity map which
 9 will essentially replace the pre-application
 10 report. The reason the pre-application reports
 11 were there is because we haven't had a hosting
 12 capacity map available for our customers. Once
 13 that's in place, this section of the tariff
 14 really will become somewhat moot.
 15 MS. WILSON-FRIAS: Do we have
 16 an ETA on the development of all, an
 17 implementation of all of those things?
 18 MR. ROUGHEN: Yes. We've -- on
 19 certain components that we approved 2018 plan.
 20 Yes. The initial development of the data portal
 21 as outlined in this system relatively plan
 22 approved, the 2018 plan, and then we proposed
 23 additional work beyond that scope in the bar
 24 sector transformation file. And so we would
 25 expect, I think our thoughts are somewhere late

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1 MR. ROUGHEN: Nope. Good
 2 question.
 3 MS. WILSON-FRIAS: I'm trying
 4 to not have things be open to interpretation
 5 down the road given our prior experiences.
 6 MR. ROUGHEN: Yeah. I think
 7 what we're trying to prevent are the entities
 8 using Google Maps sending us 500 at a time.
 9 Right? Which is what we get, unfortunately. I
 10 think the reasonable number -- I mean, as an
 11 example, we processed somewhere in the about 750
 12 pre-application reports in Rhode Island last
 13 year, in calendar year 2017. So we probably
 14 need to think about a reasonable number. Take
 15 that as record request.
 16 MS. WILSON-FRIAS: Yeah. Why
 17 don't you think that back. Yeah. I think you
 18 had previously stated at the technical session,
 19 subject to checks, that you could process, you
 20 could reasonable process 50 to a hundred per
 21 week. Is that still a fair statement?
 22 MR. KENNEDY: I would lean more
 23 toward 50 per week. Yeah.
 24 MS. WILSON-FRIAS: So why don't
 25 you take that back as a record request just to

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1 '18, early '19.
 2 MS. GOLD: Not too long.
 3 MS. WILSON-FRIAS: So now we're
 4 in -- I'd like to move on to the two new -- a
 5 couple of the new sections of the law. And just
 6 I'm looking for an explanation of mechanics
 7 process. And we're on Sheet 39 and Sheet 40,
 8 because this deals with Sections 5.3 and 5.4 of
 9 the tariff.
 10 MR. ROUGHEN: Here we go.
 11 MS. WILSON-FRIAS: So the
 12 tariff appears to reflect -- So anyway -- I'm
 13 sorry. I'm on the third paragraph of 5.3 that
 14 starts with effective for renewal
 15 interconnecting customer applications filed on
 16 or after July 1st, 2017, and goes on, on Sheet
 17 39, and goes on to Sheet 40. This appears to
 18 look like the statutory provision that's in
 19 39-26.3-4.1C.
 20 My question is, how will this
 21 work? This is the provision that allows an
 22 earlier renewable interconnecting customer,
 23 nonresidential, to recover some pro rata share
 24 cost from subsequent nonresidential
 25 interconnecting customer.

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1 MR. ROUGHEN: Yes. And it's in
 2 the third paragraph is simply a
 3 re-write/extension of Paragraph 2. Right?
 4 Original Paragraph 2 is a five-year window, and
 5 Paragraph 3 simply extends to 10 years. So as
 6 discussed in the technical session, the company
 7 would prorate any contribution based on the
 8 capacity or the project.
 9 So if -- And again, it
 10 becomes -- If it's a, if it's a single customer
 11 that paid initial the upgrade, and then there's
 12 a second customer coming in, and they connected
 13 at the same point on the circuit, you'll
 14 actually split the cost between the two as
 15 essentially 50/50.
 16 The challenge comes in when you
 17 get customers three, four, five, six, et cetera,
 18 et cetera, and that's where the proration has to
 19 occur on a size basis, on a megawatt scale basis
 20 in terms of all the different projects.
 21 MS. WILSON-FRIAS:
 22 Mechanically, does it work the same way as the
 23 current line extension policy?
 24 MR. ROUGHEN: Essentially, yes.
 25 MR. HAGOPIAN: Is that going to

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1 the extensions off of that could be split in
 2 different ways.
 3 Again, as Cindy mentioned, the
 4 line extension policy, that's how we coordinate
 5 that cost share in that case.
 6 MR. BIANCO: May I ask about
 7 that then? Just brief, briefly only, really.
 8 Do you ever have system modification that would
 9 be, say, like three phase but later have an
 10 interconnecting customer that really only
 11 requires one phase and can interconnect to that?
 12 Do you ever connect one of your single phases
 13 for a customers, I guess? And if so, how would
 14 you, how would you then divvy up the cost
 15 responsibility?
 16 MR. ROUGHEN: Again, typically,
 17 single phase customers are quite small, and
 18 their contribution to the need and/or additional
 19 revenue is very small compared to what you did
 20 for the larger projects, and we would likely not
 21 try to figure that one out.
 22 I mean, as discussed in the
 23 tech session, right, it gets very complicated
 24 the more customers you got to split this up over
 25 time. And we talked at the tech sessions,

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1 be on a megawatt basis, did you say, or
 2 capacity?
 3 MR. ROUGHEN: Again, to be fair
 4 to all parties, one has to be careful about it.
 5 Just because you've got a 2 megawatt project on
 6 one side of the street and a 1 megawatt project
 7 on the other side of the street, if those were
 8 the only two, and the work was needed to get to
 9 those two projects, you would split those costs
 10 in half because they each needed as much.
 11 It's when you get multiple
 12 projects, and you have to figure out a better
 13 split of those, that's -- and there are
 14 different places on the circuit. It's easier
 15 when they're exactly at the same point because
 16 you have to bill all the same common upgrades
 17 until that common point. So then you can just
 18 split that, you know, if there's five people
 19 connecting at that same point, you split it five
 20 ways over time.
 21 The problem you get into is, as
 22 you connect in different places on the circuit,
 23 now different, different customers are
 24 responsible for different parts of the upgrade.
 25 So the common part is then split and then you --

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1 there's different options you can do instead of
 2 doing that. But if there's a significant amount
 3 of analysis and resources, once you get into
 4 projects where you got to split costs three,
 5 four, five, 10, 20 customers -- remember,
 6 there's now a 10-year window.
 7 So the reason we had argued for
 8 the five initially was at least it ended after
 9 five years. Now we've got to do it for 10. And
 10 that -- The more people you've got to divvy up
 11 an upgrade from, that's -- It's just dealing
 12 with all the different parties and making sure
 13 they all line up at the same time is
 14 complicated.
 15 Doesn't sound like I answered
 16 your question.
 17 MR. BIANCO: It's definitely
 18 complicated. But I just was wondering, you
 19 know, if there's a three phase service and -- I
 20 mean, could a, say, 20 kilowatt system come in
 21 and interconnect, and just like your A phase,
 22 let's say, and then, you know, that's really
 23 only one-third of that system upgrade, or am I
 24 going to pay, there's a 2 megawatt facility that
 25 caused the upgrade, I'm 250, so I'm paying about

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1 a tenth when really all I needed was a single
 2 phase interconnection?
 3 MR. ROUGHEN: Yeah. As I said,
 4 single phase connections would be limited to
 5 approximately 50 -- 40 or 50 kilowatts anyway.
 6 It's such a small percentage of the total. It
 7 may not be worth the trouble to figure that out
 8 for such a small project.
 9 MR. BIANCO: All right. Thank
 10 you.
 11 MS. GOLD: Interesting.
 12 MS. WILSON-FRIAS: So moving to
 13 Section 5.4. And this is an acceleration of a
 14 system modification. And I find it very
 15 difficult to ask these questions without getting
 16 into statutory interpretation. So I'm going to
 17 try to avoid it, but will likely fail.
 18 So a system modification by
 19 definition in the tariff is something that is
 20 required for -- to interconnect the customer,
 21 the distributed generation interconnecting
 22 customer.
 23 MR. ROUGHEN: Yes.
 24 MS. WILSON-FRIAS: Okay. It
 25 differs from a system improvement.

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1 MR. ROUGHEN: Yes, it does.
 2 MS. WILSON-FRIAS: Okay. And a
 3 system improvement is something, you're in there
 4 anyway, and you do it and it's just a good time
 5 to do it and you don't charge the
 6 interconnecting customer.
 7 MR. ROUGHEN: Yes.
 8 MS. WILSON-FRIAS: Okay. So
 9 how is a system modification accelerated?
 10 MR. ROUGHEN: I think the way
 11 that this -- the simplest way to work this
 12 through is, obviously, the company goes
 13 through, it's electric infrastructure safety and
 14 reliability filing, annually. In that filing,
 15 we detail all the projects that we're working
 16 on, both the new ones that are beginning and the
 17 continuation of projects that began a year or
 18 two, three, or four years ago. Because as we
 19 discussed in the ISR filing, many projects can
 20 take multiple years to actually get into
 21 service.
 22 So the way I think -- the
 23 simplest way to work with this clause is that,
 24 if there is an upgrade that's been approved and
 25 a current ISR, and is scheduled for, you know --

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1 is part of a larger project and that component
 2 is scheduled two years out, and then today the
 3 study says, oh, we have to do some work that is
 4 similar or identical to whatever was proposed in
 5 the ISR and, again, in the ISR and approved,
 6 then that could be one where we could say, well,
 7 we're accelerating it. Beyond that --
 8 MS. WILSON-FRIAS: Could I stop
 9 you for a minute?
 10 MR. ROUGHEN: Yup. Sorry.
 11 MS. WILSON-FRIAS: But under
 12 your current practice, if you had that situation
 13 where you had something that had already been
 14 in, say, the five-year look that is in the ISR,
 15 and you're now, because of a customer request,
 16 it's something that's being done two years
 17 earlier, would that be a system modification or
 18 a system improvement? Would the company go
 19 forward and do it anyway, the two years earlier?
 20 I mean, curious as to that.
 21 MR. ROUGHEN: Nope. Excellent,
 22 excellent question. So obviously, the reason
 23 it's scheduled at the time it's scheduled is
 24 because of budgetary constraints, budgetary and
 25 resource constraints. And we have occasions

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1 now, for example, where customers want to
 2 interconnect. We have it in the schedule that
 3 we're doing some work at a substation and it's
 4 going to affect how they interconnect. If they
 5 are willing to wait for the schedule, then we
 6 will just do that as part of the whole work. If
 7 they insist that, no, they don't want to wait,
 8 and they want this done today, even though it's
 9 on what we're going to do in two years, we would
 10 then charge them for the work at that point,
 11 because they're insisting we do the work.
 12 Versus agreeing to wait until the system
 13 upgrades were being constructed anyway.
 14 MS. WILSON-FRIAS: So it's the
 15 acceleration of the timing that turns something
 16 that would be improvement into a modification?
 17 MR. ROUGHEN: Again, we're --
 18 this is brand-new to us as well. So but, again,
 19 just to, you know, big picture, trying to think
 20 through how we would work this through through
 21 the mechanics of it. I think that's one
 22 thought.
 23 MS. WILSON-FRIAS: And would
 24 there be any notification, other than to working
 25 this out with the interconnecting customer,

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1 would there be any notification within the IS --
 2 or the quarterly report for the ISR docket or
 3 within -- would there be somewhere where at
 4 least the commission would be aware that this
 5 provision had been implicated in case there's a
 6 request for review down the road? I'm just
 7 trying to work through the mechanics here.
 8 MR. ROUGHEN: I would, I would
 9 suggest that the interconnecting customer would
 10 have the responsibility to notify the commission
 11 that the situation has occurred.
 12 MS. WILSON-FRIAS: The
 13 interconnecting customer, not the company?
 14 MR. ROUGHEN: Yes, a customer.
 15 Well, they're the ones who drove the need.
 16 MS. GOLD: And are paying for
 17 it.
 18 MR. ROUGHEN: And they would
 19 have been privy to the fact that we're going to
 20 do something in X years, you want it tomorrow,
 21 fine, we'll arrange for that but...
 22 MR. BIANCO: I just want to --
 23 Cindy's probably catching onto this better than
 24 I am. Is it that -- Would that mean that -- In
 25 the words here, in the event that the Commission

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1 determines, does that event -- are you saying
 2 that event would happen because an
 3 interconnecting customer has brought forth to
 4 the Commission that this has occurred? Is that
 5 what you're saying? Is that the event?
 6 MR. ROUGHEN: That's what I
 7 said.
 8 MR. BIANCO: Okay.
 9 MR. ROUGHEN: Yes.
 10 MS. WILSON-FRIAS: And is the
 11 interconnecting customer going to know that that
 12 event has occurred? So is the company going to
 13 always say, you're doing this work in two, --
 14 under your hypothetical -- in two years, you can
 15 either wait or advise the commission that
 16 your -- this provision -- this event has
 17 happened?
 18 MR. ROUGHEN: Yeah. One of the
 19 reasons we've combined our separate
 20 interconnection engineering team to our
 21 distribution planning team two years ago was to
 22 make sure that the interconnection folks working
 23 on interconnection projects are also the same
 24 folks who were doing these long-term planning
 25 and are aware of all these upgrades. Because we

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1 ran into a couple situations in different areas
 2 of our system where interconnection -- the
 3 impact study said something but didn't reflect
 4 the fact we were going to do something in the
 5 area in the future. So in order to address that
 6 a couple of years ago, we combined those groups,
 7 and now those are made clear to the customer.
 8 MS. WILSON-FRIAS: And so where
 9 in the tariff does it tell the customer that
 10 they need to make the Commission aware of this
 11 event?
 12 MR. ROUGHEN: It's obviously
 13 not there today.
 14 MS. WILSON-FRIAS: If we could
 15 take that as a record request to provide the
 16 commission with language, if that is the
 17 company's proposal, that -- where would it -- to
 18 put language into the tariff, or if the company
 19 has an alternative proposal or if the Division
 20 has an alternative proposal to make to the
 21 Commission on how the mechanics of Section 5.5
 22 should work.
 23 MR. HAGOPIAN: Well, I'd like
 24 to ask Tim a question. Tim, just noodling
 25 through this, how does it what happens if you

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1 have something approved in your ISR that you are
 2 going to drop out of the ISR and not do the
 3 system upgrade at the time scheduled originally
 4 in the ISR? What sort of -- Is there any
 5 notification to anybody in the regulatory scheme
 6 that you're not going to do this? Or what
 7 happens in that scenario?
 8 MR. ROUGHEN: Well, obviously,
 9 as we know, the projects are walked in and
 10 walked out of the ISR from time to time.
 11 MR. HAGOPIAN: Yes.
 12 MR. ROUGHEN: And that's what
 13 you're referring to.
 14 MR. HAGOPIAN: Yes.
 15 MR. ROUGHEN: A project that we
 16 thought we were going to do in two years has now
 17 walked out. Usually because of budgetary
 18 constraints. Right? But that project will make
 19 it back into a future ISR. Right?
 20 MR. HAGOPIAN: Yes. But in
 21 this case, -- I don't mean to cut you off -- if
 22 we play through this scenario where the project
 23 gets accelerated, it's going to naturally have
 24 to be dropped out of the ISR or modified on a
 25 modified schedule.

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1 MR. ROUGHEN: True. Yup.
 2 Okay. Now I get you.
 3 MR. HAGOPIAN: So how are we
 4 going to account for this to regulators? Or how
 5 is there notification to anybody?
 6 MR. ROUGHEN: Well,
 7 fortunately, through our engineering team that
 8 coordinates all this work, they'll, obviously
 9 they'll be privy to the acceleration for the
 10 interconnection request, and then they'll be
 11 able to, you know, modify the ISR as
 12 appropriate.
 13 Because you're right. As you
 14 accelerate an investment, what's going to be
 15 done two years, now it's not going to have to be
 16 paid in two years through the ISR. So they
 17 would coordinate amongst themselves. And again,
 18 it's the same today, it's the same team of
 19 engineers working on all those together. So
 20 they'll know if they flip this box what will
 21 happen over here.
 22 MR. HAGOPIAN: So if there's a
 23 walk out of the ISR, like in this case, because
 24 of the acceleration triggered by Section 5.4,
 25 would there be any notification to the

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1 Commission, or the Division for that matter, of
 2 the walkout?
 3 MR. ROUGHEN: I think we'll
 4 have to have some notification. Because, again,
 5 at some point you're going to have to walk back
 6 in the depreciated value paid to the customer.
 7 Right? Today you're collecting \$5. Three years
 8 from now you're going to give them back \$4.50.
 9 Right? That's going to end up in the ISR. It's
 10 a capital event. Right?
 11 MR. HAGOPIAN: Yes. That's
 12 true. From the accounting side of it, from the
 13 notification side of it, then there is some
 14 notification that will be made with this type of
 15 walkout to the regulators or is there not?
 16 MR. ROUGHEN: And I would
 17 envision that would occur in a subsequent ISR
 18 filing.
 19 MR. HAGOPIAN: Okay. So it's
 20 of no use to us, then, for purposes of what
 21 we're trying to accomplish here with the notice.
 22 MS. WILSON-FRIAS: I'm
 23 wondering if it would naturally show up in the
 24 quarterly reports in the current year ISR.
 25 MR. ROUGHEN: Yes. I think it

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1 could. But again, let's converse internally and
 2 give you a thorough response to that record
 3 request.
 4 MS. GOLD: That makes sense.
 5 MS. WILSON-FRIAS: Okay. So
 6 the record request is going to be, how the
 7 Commission will be notified that Section 5.4 has
 8 been implicated, and that it will need to make a
 9 determination that is specific system
 10 modification has been accelerated. Looking for
 11 some of that language within the tariff.
 12 MS. HUTCHINSON: That's fine,
 13 Cindy. We can take that.
 14 MR. ROUGHEN: I mean, I will
 15 offer up that the bulk of system modification
 16 being constructed today are generated leads that
 17 only serve the large projects and aren't serving
 18 the system in general because the share size of
 19 these projects. So not that this won't occur at
 20 some point, but I would think it would be a
 21 relatively rare event.
 22 MR. BIANCO: Yeah. But in
 23 particularly, the company has some proposals to
 24 prep substations, for example, for 3v0
 25 detection, --

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1 MR. ROUGHEN: Yes. Yeah.
 2 MR. BIANCO: -- which may be
 3 accelerated, at which is an expensive
 4 technology, it may be accelerated, for example,
 5 if somebody were to choose to interconnect at
 6 that location.
 7 MR. ROUGHEN: Yes. We've got,
 8 we've got a proposed schedule of -- and again,
 9 it's based purely on the volume of distributed
 10 generation by sub. The one with the most is
 11 going first. The one with the second most is
 12 going second. So that's our, that's our
 13 schedule outline.
 14 MS. WILSON-FRIAS: And the
 15 other thing to take a record request back on is,
 16 particularly where if the proposed list is based
 17 on the ISR, and the statute appears to be silent
 18 on this, how long is the look-back period for
 19 the customer? Or for how long is the
 20 look-forward period for acceleration, I guess.
 21 You know, I mean, we could get into the absurd
 22 with the customer coming in and saying, but in
 23 20 years you were going to do this upgrade.
 24 Depending on the cost, it might be worth that
 25 customer's while to make the argument. So if we

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1 could also see if any proposed language on that.
 2 And then we'll give the Division -- well,
 3 they've already had the opportunity to respond
 4 to these particular new proposals.
 5 This other area of inquiry that
 6 came up is, not -- it's relevant to the
 7 interconnection process, but it wasn't addressed
 8 in the new statutory changes, is, there was some
 9 discussion of the upgrade costs where you have,
 10 for example, multiple residential customers in a
 11 neighborhood. Also have it for nonresidential
 12 customers, but with nonresidential customers,
 13 there's that provision we just discussed.
 14 The issue that came up was, if
 15 you have a neighborhood, for example, where five
 16 people on a street decide they want to put
 17 rooftop solar, and customers one through four
 18 can interconnect for a very low cost, and
 19 customer number five requires, I think the
 20 example might have been a new transformer, and
 21 customer number five now finds out, that unlike
 22 his or her friends and neighbors, the
 23 interconnection cost is significantly more
 24 expensive. And so that's the background for the
 25 issue.

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1 transformer coming into the neighborhood? What
 2 would you do with that upgrade?
 3 MR. ROUGHEN: Again, if the
 4 requirement to serve that customer includes a
 5 transformer in addition to the two poles and the
 6 service drop, it would include the transformer.
 7 Because, again, the delivery voltage is the low
 8 voltage. So we have to give them low voltage.
 9 We can't give them a service drop with high
 10 voltage. They've got to get the low voltage.
 11 MS. WILSON-FRIAS: I think to
 12 clarify. You've had different size of the --
 13 The cans out there are transformers; right?
 14 MR. ROUGHEN: Yup, yup. The
 15 gray things.
 16 MS. WILSON-FRIAS: Yeah. The
 17 gray can things. So there's different sizes of
 18 those; right?
 19 MR. ROUGHEN: Right.
 20 MS. WILSON-FRIAS: So a
 21 neighborhood might have a certain size. My
 22 question is, if -- and I don't even know if this
 23 hypothetical is reasonable. But if there was a
 24 hypothetical where that next house that comes on
 25 requires a bigger can to be put up on the pole,

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1 The question, the two questions
 2 I have is, how does it work if, in a residential
 3 development if there's a, say, a new house built
 4 in a development and triggering an upgrade? So
 5 that would be a traditional additional load.
 6 And my second question is, have you given it any
 7 more thought since the technical session of how
 8 this issue might be addressed? Or how or where
 9 you think the Commission might be able to
 10 further explore this issue in the future. So
 11 those are the three questions.
 12 MR. ROUGHEN: So to start with
 13 on your first question. So the current
 14 residential nonessential policy allows for two
 15 poles and a service drop at no cost to the
 16 customer. And again, anticipating that that
 17 customer will have revenue for many, many years
 18 going forward. So that's how we treat a
 19 customer without -- who isn't putting solar on
 20 the roof. And so that's that process. Is that
 21 enough for question one or...
 22 MS. WILSON-FRIAS: Well, so
 23 what happens if, for example, you have a housing
 24 development and now you have a new customer
 25 interconnecting and it requires a new

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1 is the can charged to the customer or is the can
 2 charged to all other customers?
 3 MR. ROUGHEN: In that
 4 particular case, that upgrade of the transformer
 5 is charged to all customers. Again, with
 6 anticipation of the additional revenue from a
 7 new customer.
 8 MS. WILSON-FRIAS: So does that
 9 go into the contribution in either construction
 10 calculation?
 11 MR. ROUGHEN: No. The
 12 residential -- No. That's an industrial, that's
 13 a commercial/industrial policy. The residential
 14 policy is simply the two poles and a service
 15 drop or equivalent amount of underground work.
 16 MR. HAGOPIAN: Tim, did you
 17 change -- did the company change their policy on
 18 two poles and a service drop?
 19 MR. ROUGHEN: It's been that
 20 way for many, many years.
 21 MR. HAGOPIAN: Oh, okay.
 22 Because when I built my house, I got three poles
 23 and a service drop.
 24 MR. ROUGHEN: I won't tell
 25 anyone.

1 MS. WILSON-FRIAS: The policy
2 changed somewhere around the 2006 to 2007 time
3 frame.
4 MR. HAGOPIAN: Oh, that's good.
5 MR. BIANCO: The Division needs
6 to investigate that.
7 MR. ROUGHEN: We can go back
8 and assess a depreciated value. All eyes for
9 me. Strike that.
10 MR. BIANCO: I have a question.
11 The line extension policy is two poles and a
12 drop. But the overall services, if this new
13 customer caused the changes to the system
14 further upstream from their two poles and a
15 drop, that would go to all customers as well.
16 MR. ROUGHEN: Yes. Again,
17 we're delivering 120- to 40-volt service to the
18 customer. So if you need to upgrade the
19 transformers, you would.
20 MS. WILSON-FRIAS: Okay. So in
21 this situation, since asking three questions in
22 a row didn't work --
23 MR. ROUGHEN: Well, I forgot
24 the second two.
25 MS. WILSON-FRIAS: That's okay.

1 it's a system improvement.
2 MR. ROUGHEN: Well, again, the
3 difference between, will there be future revenue
4 to offset the cost or not. So in load, it
5 naturally provides you that future revenue,
6 whereas solar on the roof does not.
7 MS. WILSON-FRIAS: Has the
8 company given any additional thought to how this
9 could maybe be -- how such upgrades could be
10 addressed more fairly for the residential
11 customers putting on rooftop solar? Let's say
12 all five of those applications came in within
13 two weeks of each other. You know, you've got
14 somebody go -- one of the vendors going up the
15 street in the neighborhood, all the friends and
16 neighbors get together, they decide they want to
17 do it, and you get applications one through five
18 let's say within the 10 days that you're
19 reviewing the first application. Is it -- How
20 would -- How might the company be able to
21 address a situation like that?
22 MR. ROUGHEN: Well, as we
23 discussed in the tech session, I think the
24 simplest way to address this, again, if the
25 Commission is interested in addressing it -- and

1 MR. BIANCO: Cindy, that would
2 be like a system modification.
3 MR. ROUGHEN: Just an
4 improvement.
5 MR. BIANCO: That's a system
6 improvement. I'm sorry. That's a system
7 improvement, and all customers would pay for it.
8 MR. ROUGHEN: Yes.
9 MR. BIANCO: Okay. Thanks.
10 MS. WILSON-FRIAS: So the
11 second question is, just to make sure that I'm
12 correct in my premise, is that, to clarify that
13 in my original hypothetical, customer number
14 five putting rooftop solar will not be
15 responsible for that new larger transformer, the
16 start of the neighborhood.
17 MR. ROUGHEN: Yes. Because in
18 that particular case, there's no additional
19 revenue that will offset that cost over time.
20 MS. WILSON-FRIAS: Okay.
21 MR. BIANCO: And in this case,
22 is that a system modification, then?
23 MR. ROUGHEN: System
24 modification, yes.
25 MR. BIANCO: But if it's load,

1 again, we've only had I think about a dozen of
2 these in Rhode Island over the last couple of
3 years here. Obviously, we do expect more as the
4 saturation goes out.
5 One of the simpler options is a
6 flat fee per customer that we would put into an
7 account, we would draw on that account to do
8 upgrades, as needed. The challenge with that is
9 that you run into the case of the very expense
10 of upgrades get pulled into that.
11 Good example. When you're
12 simply putting a new can up on an overhead
13 system, your rearrangement of that is quite
14 simple. Not a lot to it. You disconnect a few
15 wires, you put a new transformer up, you're
16 connecting new wire. Pretty straightforward.
17 Very different scenario when
18 you're in underground residential development,
19 and you've got underground fed transformers, and
20 now you need to split the same sort of system
21 up. And instead of a three or 4,000 cost for
22 the overhead, you can easily get into a 15 or 20
23 or \$30,000 cost if you've got to go through and
24 get a new easement for that new transformer from
25 a land owner who may or may not be the one

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1 putting the solar on. Right? All the
 2 underground work that's got to be done, the
 3 rearrangement, the secondary wiring, and all the
 4 rest of it where those will cause the average
 5 cost to go up dramatically.
 6 So again, for a simple overhead
 7 service, some sort of flat fee that all
 8 customers would pay, and then we would use that,
 9 that -- those monies we collect to then
 10 construct these simple upgrades, maybe a cap of,
 11 you know, 5,000 per, or something on that
 12 nature, so that we could limit that amount we
 13 charge every customer, and whether -- we don't
 14 have to call it -- I mean, there's -- some
 15 application fee, but it's just a socialize
 16 system modification cost.
 17 But again, we just need to
 18 think about the limits of what you would do
 19 there so that you don't get into the very
 20 expensive upgrades that will then drive that per
 21 dollar per KW cost higher.
 22 MS. WILSON-FRIAS: What do you
 23 do in Massachusetts and New York?
 24 MR. ROUGHEN: We have exactly
 25 the same policy. When number five comes along

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1 and causes the situation, that the transformer
 2 needs upgrading, they pay that full price.
 3 Now, I will say, you know, it's
 4 our experience with third-party providers, that
 5 they kind of keep some money in reserve so that
 6 when they run into these with their customers
 7 they pay them half the customer. So it's
 8 already covered in terms of certain third-party
 9 suppliers. Some. I'm not saying all of them.
 10 But we have heard, you know, some were doing
 11 that so that the customer didn't have to pay the
 12 upgrade, and they were just kind of taking out
 13 of -- they had their own pool or something they
 14 did.
 15 I would suggest that they
 16 probably, as saturation goes up, and this
 17 becomes more prevalent, they may elect not to
 18 continue doing that, but we have heard that in
 19 the past.
 20 MS. WILSON-FRIAS: If the
 21 Commission were interested in exploring this
 22 further, does the company have any proposal of
 23 what the best mechanism might be to flush this
 24 out and think about different types of solutions
 25 other than the one that you've just offered?

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1 MR. ROUGHEN: Again, only
 2 having dealt with a dozen or so in the state of
 3 Rhode Island, I really -- I do think it's
 4 premature to think through what we should do for
 5 these or not do with these. Every customer,
 6 they can ask, every residential customer can ask
 7 for a pre-application report. It's available to
 8 them, and we'll give them the same information
 9 we give every other customer.
 10 So the share -- If someone --
 11 And installers have asked me this multiple times
 12 over the years, how do I know when I'll have an
 13 upgrade. And I say, look around and see how
 14 much other solars on the other houses nearby.
 15 And if there's a lot of it nearby, you should
 16 ask for a pre-application report. And if
 17 there's none of it nearby, you're probably going
 18 to be okay.
 19 So there's practical steps
 20 these installers can take to prevent the
 21 surprise of their customers seeing that they're
 22 going to have to pay for an upgrade. So I think
 23 there's mechanisms already out there, and I
 24 don't think the problem is big enough for the
 25 resources required to implement a different

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1 solution at this, at this time.
 2 MS. CURRAN: Does anyone have
 3 any further questions?
 4 MS. HUTCHINSON: I might have
 5 one redirect question. Would I be able to have
 6 just five minutes?
 7 MS. CURRAN: Sure.
 8 MS. HUTCHINSON: Thank you.
 9 MS. CURRAN: All right. We'll
 10 take a five-minute break.
 11 (Recess taken at 11:32 a.m.)
 12 Deposition resumed at
 13 11:43 a.m.)
 14 MS. CURRAN: Okay. Everybody
 15 ready?
 16 MS. HUTCHINSON: Thank you,
 17 Chairperson. I do have more than one direct,
 18 but I'll keep it short. I'm going to direct
 19 these to you, Mr. Roughen.
 20 BY MS. HUTCHINSON:
 21 Q. Earlier this morning, Mr. Roughen, do you recall
 22 a line of questioning regarding the time frame
 23 under the statute and who is able to stop that
 24 clock?
 25 A. Yes, I do.

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1 Q. Okay. And part of your response was to address
 2 the company's process. And I believe you gave
 3 some testimony regarding how the company will
 4 need to be more stringent in applying those time
 5 frames and deadlines during the application
 6 process.
 7 A. Yes.
 8 Q. Is that correct?
 9 A. Yes.
 10 Q. In putting together and preparing -- assisting
 11 in the preparation of the revisions to the
 12 tariff to incorporate specific statutory
 13 provisions, is it your understanding of the
 14 statute that the company would be able to stop
 15 the clock during both the application process
 16 and post execution of the interconnection
 17 service agreement for customer nonpayments?
 18 A. Yes.
 19 Q. Okay. And is it also your understanding of the
 20 statute that, if the customer delays in
 21 providing required information, that the company
 22 would need to process the application? So this
 23 case, we'd be talking about that phase between
 24 the application pre-interconnection service
 25 agreement. Is it also your understanding of the

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1 statute that the company would be able to stop
 2 the clock for the processing of that
 3 application?
 4 A. Yes.
 5 Q. Okay. And with respect to -- So is it fair to
 6 say, then, that if there were to be -- because
 7 it's not explicitly spelled out in the statute,
 8 that this time -- that the clock may be stopped
 9 for those reasons specifically, is it fair to
 10 say that, as part of the company's practice,
 11 that they would need to take a more conservative
 12 approach in how they process the applications
 13 and when they might feel they need to cancel an
 14 application?
 15 A. Yes. That would be true.
 16 Q. Okay. Thank you. And then the next area I'd
 17 like to focus you to has to do with the earlier
 18 set of questions regarding who can charge the
 19 customer for transmission upgrades. Do you
 20 remember that line of questioning?
 21 A. Yes, I do.
 22 Q. Okay. And I believe that the response that was
 23 given is that these charges would come from New
 24 England Power but would be a pass through to the
 25 Narragansett Electric Company who would then

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1 charge the customer; is that correct?
 2 A. Yes.
 3 Q. Okay. Is it possible that New England Power
 4 Company could charge the customer directly for
 5 those transmission upgrades?
 6 A. Yes, they could.
 7 Q. So is there a reason why we do it the way we do
 8 it, which is to have it be a pass through by --
 9 A. Yes.
 10 Q. -- the Narragansett Electric Company?
 11 A. Yes. Specifically, you know, the
 12 administrator efficiency is internally as well
 13 as ease for the customer to know it's a single
 14 check. And once they know we've received that
 15 payment, the process will start to build the
 16 system modifications. They don't have to deal
 17 with multiple parties. And we try to make it as
 18 easy as we can on your customers.
 19 MS. HUTCHINSON: Okay. Thank
 20 you. That's all the questions I have.
 21 MS. CURRAN: Does anyone else
 22 have any questions for these two witnesses?
 23 Thank you very much.
 24 MR. HAGOPIAN: I don't have any
 25 questions.

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1 MS. CURRAN: All right.
 2 MR. HAGOPIAN: Thank you.
 3 MS. CURRAN: And does the
 4 Division wish to put on a witness?
 5 MR. HAGOPIAN: I'm going to put
 6 a witness on.
 7 MS. CURRAN: And put in the
 8 memo --
 9 MR. HAGOPIAN: Indeed.
 10 So the Division has seated
 11 staff, division staff member Al Contente.
 12 Could you swear in the witness,
 13 please.
 14 ALFRED CONTENTE, SWORN
 15 BY MR. HAGOPIAN:
 16 Q. Could you state your name for the record.
 17 A. It's Al Contente.
 18 Q. Mr. Contente, who are you employed by?
 19 A. Division of Public Utilities and Carriers.
 20 Q. And what are your duties?
 21 A. I'm an analyst on the Cohen Division and
 22 generally handle the facilities, engineering,
 23 and energy efficiency matters.
 24 Q. And interconnection matters.
 25 A. And facilities alike. Sure.

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1 Q. So were you assigned to review this docket?
2 A. Yes, I was.
3 Q. And did you, in fact, review that docket?
4 A. Yes, I did.
5 Q. And can you tell us what you did in furtherance
6 of that review?
7 A. I attended a meeting, a tech session, on
8 November 28th, '17, and I prepared the memo that
9 I had filed on the 28th of December.
10 Q. Okay. And so you went through the tariff
11 changes?
12 A. Yes.
13 Q. Okay. And you prepared a memo of your actions
14 on that?
15 A. Yes, I did.
16 Q. And is that marked as Division's 1, full?
17 A. I would assume so. I don't --
18 Q. Yes.
19 A. Yes.
20 Q. Okay. Do you adopt -- Do you have any
21 revisions -- first of all, do you have any
22 revisions you need to make to that docket?
23 A. No, I do not.
24 Q. Do you adopt this document as your testimony as
25 if you were testifying under oath?

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1 MS. CURRAN: And does OER have
2 anything?
3 MR. MARCACCIO: We have no
4 witnesses.
5 MS. CURRAN: Did you want to
6 do --
7 MR. MARCACCIO: No.
8 MS. CURRAN: Is there anything
9 further?
10 MS. HUTCHINSON: I don't think
11 further from National Grid, Chairperson.
12 MS. GOLD: I just want to
13 commend the parties for working so diligently to
14 improve the process Interconnecting Distributed
15 Generation. I know it's been an ongoing
16 process. And we appreciate it. And I also want
17 to thank the staff for their thorough vetting of
18 questions that emerge from the November 28th
19 tech session. It's really useful. And look
20 forward to continuing to track this program as
21 we get more clean energy in the state.
22 MS. HUTCHINSON: Thank you,
23 Commissioner.
24 MS. CURRAN: We're adjourned.
25 Thank you.

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1 A. Yes, I do.
2 Q. Okay. Did you sponsor or did the -- did you
3 sponsor any interdata requests, responses to
4 data requests?
5 A. Oh, yes.
6 Q. And they are marked as Divisions 2, full. Well,
7 actually --
8 MS. WILSON-FRIAS: They're
9 actually PUC Exhibit 4.
10 MR. HAGOPIAN: PUC 4. That's
11 right.
12 A. Yes.
13 Q. And do you adopt those as your testimony here
14 today as well under oath?
15 A. Yes, I do.
16 MR. HAGOPIAN: I have nothing
17 further.
18 MS. HUTCHINSON: No questions.
19 MR. MARCACCIO: No questions.
20 MR. NAULT: No questions.
21 MS. CURRAN: Thank you very
22 much, Mr. Contente.
23 That's it for the Division's
24 case?
25 MR. HAGOPIAN: That's it.

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1 (The proceedings concluded
2 at 11:51 a.m.)
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C E R T I F I C A T E

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I, LISA L. CROMPTON, Certified Shorthand Reporter, hereby certify that the foregoing is a true and accurate transcription of my stenographic notes of the proceedings in this matter on the date and time specified in the caption hereof.

Lisa L. Crompton 

LISA L. CROMPTON

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