**March 2, 2020**

## 2020 Stakeholder Public Policy Requirements Submittals

**As described in Brent Oberlin's memo to the Planning Advisory Committee (PAC) on January 14, 2020, stakeholders were able to provide input on Public Policy Requirements to ISO New England and the New England States Committee on Electricity (NESCOE). Two submittals were provided in a number of forms in addition to the provided template. Therefore, the information is being posted for stakeholders in two files which are posted on the "Public Policy Transmission Upgrades" section of the ISO web site[1]. The first file is this "pdf" document which consists of the following, if provided: email, letter, and spreadsheet. In some cases, the information in the spreadsheet is extremely small, requiring the user to enlarge the image to make it readable. Therefore, a second file has also been made available on the web site which consists of a spreadsheet. In the spreadsheet there is a tab for each submittal that included a template submittal and a tab that combines each of the template submittals into one.**

**The two submittals and their associated formats are:**

1. **National Grid – email, letter, template**
2. **Episcopal Diocese of Rhode Island – email, letters, template**

[1] https://www.iso-ne.com/system-planning/system-plans-studies/public-policy-transmission-upgrades/

1. **National Grid – email, letter, template**

| | |
|---|---|
| **From:** | Scott, Melissa T. |
| **To:** | Public Policy |
| **Cc:** | Martin, Tim |
| **Subject:** | [EXT] National Grid Public Policy Requirement Submittal |
| **Date:** | Friday, February 28, 2020 3:39:22 PM |
| **Attachments:** | 2020_02_28 National Grid 2020_public_policy_input_template Final.xlsx |



Brent,

In response to ISO-NE's Public Notification for Public Policy Requirement Submittals on January 14th, National Grid hereby submits the attached submittal which utilizes the ISO-NE template to provide input regarding State Public Policy Requirements driving needs on the regional transmission system. National Grid appreciates the opportunity to provide input.

Thank you,

Melissa Scott
Transmission Asset Management and Planning
National Grid

Brent Oberlin
Director of Transmission Planning
ISO New England Inc.
One Sullivan Road
Holyoke MA 01040

**Re: National Grid Public Policy Process: Additional Information**

## Study on Transmission Upgrades to Address EV Charging

National Grid supports ISO-New England's efforts to assess and upgrade regional transmission necessary to fulfill state and federal public policy needs. Our input below, provided for the consideration of the New England States Committee on Electricity (NESCOE) and ISO-NE, notes that state commitments to the decarbonization of the transportation sector requires studying the impact of electric vehicle (EV) ultra-fast charging on the regional transmission system. This may require transmission upgrades to ensure that the region meets its ambitious climate commitments.

### 1. States have set aggressive goals for GHG reductions that entail deep cuts to transportation sector emissions.

Each of the six New England states has enacted legislation or otherwise set targets for greenhouse gas reductions 80 percent or more below 1990 levels by 2050. Massachusetts, Rhode Island, Connecticut, and Maine have statutory mandates for emissions reductions, and Vermont and New Hampshire have established similar public commitments.

These goals can only be reached by addressing emissions in the transportation sector, which has overtaken electricity production as the nation's largest GHG source[1]. Fortunately, the member states of ISO-NE have recognized this priority.

- Five of the six New England states (MA, RI, VT, ME, and CT) are members of the Transportation and Climate Initiative (TCI). This group, which includes state environment, transportation, and energy agencies, was initially formed in 2010 but has recently designed an innovative cap-and-invest program for transportation emission reductions.

[1] EPA, "Green Vehicle Guide: Fast Facts on Transportation Greenhouse Gas Emissions" June 2019 https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

- Four of the six New England states (MA, RI, VT, and CT) signed onto the Multi-State Zero Emission Vehicle (ZEV) Task Force in 2013.[2] As part of this initiative, Massachusetts set a goal to register 300,000 electric vehicles in the state by 2025. [3]

National Grid supports these efforts to address climate change through electrification. In our *Northeast 80x50 Pathway* analysis released in 2018, we highlighted that achieving interim 2030 emission reduction targets would require nearly 10 million electric light duty vehicles (LDVs) on the road between New York and New England, equivalent to approximately 50 percent sector electrification. Interim targets would also entail transitions to electric or other low-carbon options for medium and heavy-duty fleets in the public and private sector.[4]

**2. The resulting changes in charging-driven load patterns will likely require transmission upgrades.**

Encouraging consumer adoption of EVs sufficient to meet these public policy targets will entail building public charging infrastructure, regardless of what entities (e.g. private developers or utilities) are responsible for building, owning, and operating chargers. While current Level 1 (120 V) and Level 2 (240 V) chargers do not pose an obvious risk to transmission and distribution reliability, widespread consumer adoption of EVs rests on adoption of direct current fast-charging (DCFC) Level 3 chargers. Range anxiety and long charging times pose obstacles to EV share of the consumer market and resolving these will require alleviating driver concerns about the availability of recharging services through high capacity, ultra-fast DCFC. These chargers are beginning to be deployed at capacities up to 350 kW per plug.[5] Chargers for heavy-duty vehicles are anticipated at over 1 MW per plug.[6]

The resulting load patterns may risk regional electricity system reliability absent transmission upgrades. Ultra-fast EV charging to support light- and heavy-duty driving will be especially necessary along highways and at service areas and could be subject to use at or near peak electricity consumption times. Likewise, heavy-duty commercial fleets will create significant load management challenges. These may require transmission investments, including transformer upgrades, to handle peak load exceeding local capacity.[7] If investments in charging infrastructure are delayed or impeded by reliability concerns, drivers will be less likely to adopt

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[2] Multi-State ZEV Action Plan: 2018-2021 www.nescaum.org › documents › 2018-zev-action-plan

[3] Massachusetts Executive Office of Energy and Environmental Affairs, "Massachusetts Zero Emission Vehicle Action Plan: Reach 300,000 Zero Emission Vehicles on Massachusetts Roads by 2025" https://www.mass.gov/files/documents/2016/08/nk/massachusetts-zero-emission-vehicle-action-plan2015.pdf

[4] National Grid, "Northeast 80x50 Pathway," p7

[5] Eric C. Evarts, "Electrify America turns on its first 350kw charger in California" Green Car Reports, December 10, 2018 https://www.greencarreports.com/news/1120372_electrify-america-turn-on-first-350-kw-fast-charger-in-california

[6] Peter Kelly-Detwiler "The Future of Electric Vehicle Charging: Executives At EVgo Weigh In" Forbes, Jan 21, 2019 https://www.forbes.com/sites/peterdetwiler/2019/01/21/the-future-of-electric-vehicle-charging-executives-at-evgo-weigh-in/#17ea4c5a5f24

[7] Hauke Engel et al, "The potential impact of electric vehicles on global energy systems" McKinsey & Company, August 2018 https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-potential-impact-of-electric-vehicles-on-global-energy-systems

non-fossil fuel options and states will have consequent difficulty meeting their transportation decarbonization targets.

3. **The commitments made by states in the ISO-NE network constitute a public policy driving transmission needs.**

The combination of state-level GHG reduction public policies and commitments in multi-state bodies support the need for transmission to support electrification. Both the states and ISO-New England have acknowledged the need for complementary strategic efforts.

The TCI December 2018 statement[8] announcing the goal of the initiative noted that, in addition to a regional carbon cap for transmission, pursuing other steps would be necessary to ensure the program's success. These steps included:

> *4. Technical, Environmental and Economic Analysis. We will jointly carry out technical environmental, and economic analysis to better understand the benefits and costs of regional transportation policy and how those benefits and costs may be distributed across different user groups.*
>
> *5. Complementary policy development. At the same time that TCI states are designing and planning for implementation of a regional policy, we may choose to explore the design and potential implementation of complementary policies, such as coordinate infrastructure planning, land use planning improvements, and the development of green banks and other innovative financing mechanisms.*

ISO-NE has also recognized that electrification is critical to state GHG reduction public policy and that it is projected to have a substantial impact on region-wide electricity demand. For instance, in RSP19, ISO-NE notes:

> Strategic electrification initiatives also are taking shape across the region, targeting economywide mandates and goals for reducing greenhouse gases. These initiatives are expected to encourage consumers to adopt emerging technologies (e.g., electric vehicles and electric heat pumps) over the next several decades, resulting in the electrification of the heating and transportation sectors. By midcentury, these efforts likely will have introduced considerable new demand for electricity across the region. Although electrification is still in its infancy, the timing and scale of its growth in the coming years will become important considerations in the region's long-term electricity outlook. Accordingly, working with stakeholders, the ISO is closely monitoring related policy developments and technological advancements to better understand their relevance in the development of long-term demand and energy forecasts for the region.[9]

The transmission system has been referred to as an "interstate highway system for electricity,"[10] an appropriate analogy as the regional push for electric transportation similarly crosses New

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[8] TCI, "TRANSPORTATION & CLIMATE INITIATIVE STATEMENT", December 18, 2018 https://www.georgetownclimate.org/files/Final_TCI-statement_20181218_formatted.pdf

[9] ISO New England, "RSP19", p 36

[10] ISO-NE "State of the Grid: 2019" Feburary 29, 2019 https://www.iso-ne.com/static-assets/documents/2019/02/20190220_pr_state-of-the-grid_presentation_final.pdf, p. 43

England states' borders. Infrastructure upgrades to accommodate electrification, particularly on interstate highways, present a need for which a regional study is appropriate, and where drivers in one state benefit from available charging infrastructure in another. No one state can meet its policy goals without other states also providing infrastructure to support interstate EV travel.

For these reasons, NESCOE and ISO-NE should consider using the PPTU process to study the need for transmission upgrades to address the future of transportation electrification.

Contact Information:

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Transmission Policy Analyst
Asset Development
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Public Policy Input Template

| Entity | Ref # | Federal | State | Municipality | County | Other | Description of Public Policy Requirement | Reference to law, statute, regulation, etc. | Does the identified statue or regulation expressly require the construction of transmission infrastructure? If so, identify all relevant provisions. | Explanation of how public policy requirement drives transmission need | Possible type and location (area/substation) of transmission facilities that may be needed | Are compliance alternatives identified in the statute or regulation? If so, identify all relevant provisions. | Does the statute or regulation provide for non-compliance alternatives, such as non-compliance monetary payments? If so, please identify all relevant provisions. | Any other additional information Entity feels is relevant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| National Grid | 1 | | X | | | | Under the Massachusetts Clean Energy Standard retail sellers are required to make 40% of their sales with clean generation attributes by 2030 and 80% by 2050 | Clean Energy Standard (310 CMR 7.75) https://www.mass.gov/doc/310-cmr-700-air-pollution-control-regulations/download | No | Transmission enables cost-effective acheivement of the New England clean energy targets. It mitigates the curtailment risk associated with the levels of intermittent resource penetration expected with the MA CES, CT order and ME legislation and prevents the overbuild of renewables to meet capacity needs. By increasing two-way transmission capacity between New England and Quebec the use of renewables in both regions could be optimized. When renewables make up the majority of the resource mix, two-way ties ensure security of supply when intermittent renewables in either region are not available and enhances transfer capabilities when there is excess renewable production. This complementary flow of power not only reduces curtailment of renewables in periods of low load, but also provides a clean resource option to meet loads without fossil fuels during times of higher loads with low wind and solar output, helping the states meet emissions targets. | Two-way interconnectors to Quebec to export excess renewables and import in times of low regional renewable output and associated reinforcements for enabling the bi-directional flow of renewables | Resources utilized for RPS compliance also qualify for CES compliance;<br><br>Obligations may be met through Alternative Compliance Payments, a rate per MWh established each year<br><br>310 CMR 7.75(5)(c) referencing 225 CMR 14.08(3)(a) | Non-compliant retail sellers will be subject to the issuance of administrative order or civil administrative penalties ($25,000 per day in violation) as stated in 310 CMR 7.75 (13) (b) referencing 310 CMR 5.22 and M.G.L. c. 21A section 16 | The concept of utilizing transmission to Quebec as a two-way, complementary exchange of power to support renewable growth in New England is explored by an MIT whitepaper (Two-Way Trade in Green Electrons: Deep Decarbonization of the Northeastern U.S. and the Role of Canadian Hydropower; Dimanchev, 2020); It states: "Flows to Quebec absorb excess wind and solar PV generation in hours when net load in New England is low or negative" and "the complementary service provided by additional transmission makes it economical to expand wind and solar PV capacity even further", indicating the role transmission has in enabling cost effective acheivement of states' public policy targets |
| | 2 | | X | | | | Under the Massachusetts Climate Protection and Green Economy Act, MA has a statewide greenhouse gas emissions limit of 80% below the 1990 level by 2050 | General Laws, Chapter 21N (Climate Protection and Green Economy Act), Section 3b | | | | None | None | |
| | 3 | | X | | | | Connecticut signed an order in 2019 that calls for pathways to achieve a 100% zero carbon target for the electric sector by 2040 | Connecticut Governor Lamont's Executive Order 3 | | | | None | None | |
| | 4 | | X | | | | By 2030, 80% and by 2050 100% of retail sales electricity in Maine will come from renewable resources | An Act to Reform Maine's Renewable Portfolio Standard Chapter 477 Public Law, S.P. 457 - L.D. 1494 | | | | Obligations may be met through Alternative Compliance payments to the commission with rates established each year<br><br>Chapter 477 Public Law, S.P. 457 - L.D. 1494 - Section 1 (9) | None | |
| | 5 | | x | | | | Five of the six New England states have committed to participation in a regional transportation emissions reduction plan, and four states are participating in a zero-emission vehicle interstate agreement. | Transportation and Climate Initiative (TCI) Memorandum of Understanding; Multi-State Zero Emission Vehicle (ZEV) Task Force | No - see column K | Each of the states has set GHG reduction goals that cannot be met without substantially reducing transportation sector emissions. The TCI and ZEV Task Force establish regional plans for these reductions. Achieving these targets will require substantial electric vehicle charging infrastructure, but the resulting load patterns may risk regional electricity system reliability without transmission upgrades. | Transmission upgrades may be necessary to support charging infrastructure located at load-intensive fast charging ports, including potential substation upgrades or transmission lines. | No | No |  |
| | | | x | | | | At least 80% reduction in GHG emissions by 2050, enacted by statute in four of the six New England states and set as a target in two others | **MA:** Global Warming Solutions Act | | | | No | No | |
| | | | x | | | | | **RI:** Resilient Rhode Island Act of 2014 | | | | No | No | |
| | | | x | | | | | **CT**: Public Act No. 18-82 | | | | No | No | |
| | | | x | | | | | **ME:** Sec. 8. 38 MRSA §576-A | | | | No | No | |
| | | | x | | | | | **VT:** Vermont Comprehensive Energy Plan; 30 V.S.A. § 202b | | | | Not statutory mandate - no compliance alternative | Not statutory mandate - no compliance alternative | |
| | | | x | | | | | **NH:** 2009 New Hampshire Climate Action Plan | | | | Not statutory mandate - no compliance alternative | Not statutory mandate - no compliance alternative | |

2. **Episcopal Diocese of Rhode Island – email, letters, template**

| | |
|---|---|
| **From:** | Handy Seth |
| **To:** | Public Policy |
| **Cc:** | Burton Dennis; Sellers Rick; Kurtz Jim; Karsten Kurt; Barnes Mike; Biederman Andrew; Wilson Frias Cynthia; Bianco, Todd; George Linda; Ucci, Nick; Kearns, Chris |
| **Subject:** | [EXT] Request for Public Policy Upgrades |
| **Date:** | Friday, February 28, 2020 9:37:31 AM |
| **Attachments:** | 2.28.20 ISO Public Policy Upgrade Letter.pdf<br>2020_public_policy_input_template (EDRI).xlsx<br>19.7.25 ISO New England Dispute Resolution Request .pdf<br>19.8.2 ISO-NE Response to Episcopal Diocese of Rhode Island Dispute Resolution Request.pdf<br>10.25.19 ASO DJ Agreed Facts.pdf |



Dear ISO Planning Advisory Committee:

Please see the attached cover letter and request for transmission improvements driven by public policy and related documents, all filed on behalf of the Episcopal Diocese of RI. The Diocese formally requests to be acknowledged as a Planning Advisory Committee stakeholder but has also asked the RI PUC, the RI DPUC, and the RI OER to supplement/support this application today.

Please contact me if you have questions or comments about this request.

Thank you.

Seth

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ISO Planning Advisory Committee
PublicPolicy@iso-ne.com

February 28, 2020

Dear ISO Planning Advisory Committee:

This firm represents the Episcopal Diocese of Rhode Island and submits the attached stakeholder response identifying public policy requirements driving transmission needs. The Diocese proposes a 2.2MW solar project in Glocester, RI, that would be interconnected to the distribution system, that is a Qualified Facility seeking to take service under RI's net metering tariff and that will not sell its energy to ISO-NE markets but will either produce electric energy only to be consumed on site or sell its output to the interconnecting utility. The Narragansett Electric Company has delayed interconnection of the Diocese project pending a level III transmission system impact analysis conducted on Group 2 in Western RI (West Farnum – Kent County). NEC has informed the Diocese that its project may be allocated the cost of any transmission system improvements resulting from that impact analysis. The Diocese has not been able to proceed with its project, lacking authorization to interconnect and information needed to budget its interconnection.

In RI PUC Docket 4981, the Diocese has petitioned the Commission for a declaratory judgment that the Diocese cannot and should not be held accountable for transmission system upgrade costs under federal and state law and policy and that the interconnection of its project should not be further delayed but authorized to proceed in parallel with the impact study (which is reported to be currently delayed for the assessment of impacts caused by FERC jurisdictional projects). The Narragansett Electric Company has opposed such declarations and the Diocese awaits the Commission's ruling on that petition. The Diocese previously asked ISO to address this matter but that request was refused because the Diocese was not considered ISO's "customer" (see correspondence attached). While the Diocese is not clear on whether it has PAC "stakeholder" status to present the attached request, in RIPUC Docket 4981the Narragansett Electric Company informed the Diocese that:

> 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. 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.

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RI PUC Docket 4981, "Comments of the Narraganset Electric Company" (Jan. 23, 2020), p. 12 (http://www.ripuc.ri.gov/eventsactions/docket/4981-NGrid-Comments%201-23-20.pdf)
The Diocese copies the RI PUC, the RI Division of Public Utilities and Carriers, and the Rhode Island Office of Energy Resources in hopes that they will also apply or will at least endorse the Diocese's request for recognition of the public policy requirements driving any transmission needs arising out of these "affected system operator" studies.

It remains unclear whether transmission system upgrades will be required as a result of the level III transmission system impact analysis conducted on Group 2 in Western RI (West Farnum – Kent County). That result is reportedly now awaiting completion of ISO's analysis of a FERC jurisdictional wind project, currently anticipated in April 2020. A much more recently requested interconnection of a 180MW FERC jurisdictional storage project had threatened to further delay this ASO study process through July 2020, but that project has evidently now withdrawn from the "queue." ISO has repeatedly advised that the interconnection of local distributed generation projects can proceed in parallel with evaluation of FERC jurisdictional projects, since distributed generation projects will not be held accountable for transmission system impacts or costs related to FERC jurisdictional projects, but NEP/NEC have not administered this study process that way.

It also remains unclear whether the RI Public Utilities Commission will ultimately order NEP/NEC to submit the costs of any needed upgrades resulting from the level III transmission system impact analysis conducted on Group 2 in Western RI (West Farnum – Kent County), that it has heretofore proposed to allocate to local distributed generation projects not participating in federal markets, to ISO as public policy upgrades or will otherwise allow such transmission system costs to be imposed on projects not falling under FERC/ISO jurisdiction.

Nevertheless, despite these contingencies, given today's deadline for these filings, the Diocese submits this request that you declare any such potential costs public policy upgrades so that it may proceed with the interconnection of its project which is intended to generate needed revenue to sustain its summer camp for inner city children, to provide more secure and cheaper and cleaner energy for Diocese facilities, and to serve the Diocese's mission of creation care. Given the urgency of RI public policy on energy security, affordability and climate change, the Diocese requests either an expedited determination on its request or that the authorities allow any required upgrade work to proceed expeditiously, subject to proper allocation based on the resolution of this request.

The Diocese also requests greater flexibility on deadlines for filing these requests so that any costs arising out of transmission system impacts identified in future impact studies conducted in Rhode Island can be submitted for classification as public policy upgrades rather than imposed on distributed generation projects interconnecting to the distribution system and not participating in federal markets. We lack transparency into New England Power's transmission system that would have allowed or would allow customers like us to anticipate the need for such transmission system upgrades. Our project was not even planned when you processed your last request for public policy requirements driving transmission needs. We do not have the transparency needed to determine

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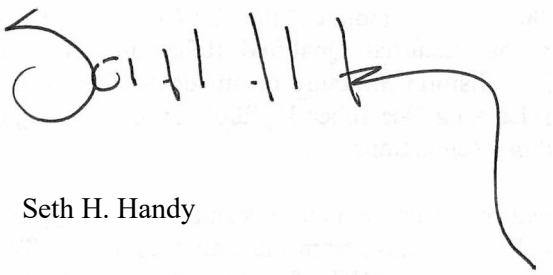
whether New England Power and/or the Narragansett Electric Company should have anticipated any needed improvements arising out of the level III transmission system impact analysis conducted on Group 2 in Western RI (West Farnum – Kent County) back then, but we do know that a great growth in distributed generation could and should have been predicted. Moving forward, PAC stakeholders will need flexibility to identify public policy requirements driving transmission needs as they arise out of level III transmission system impact analyses.

Thank you for your consideration.

Sincerely,



Seth H. Handy

cc. Dennis Burton, Episcopal Diocese of Rhode Island
Jim Kurtz, RER Energy
Nick Ucci, Acting Director, RI Office of Energy Resources
Todd Bianco, RI PUC
Cynthia Wilson Frias, RI PUC
Linda George, RI DPUC

# the episcopal diocese of rhode island

July 25, 2019

Jennifer Recht
Corporate Counsel
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841

Re: Interconnection Case RI-25728432, 872 Reservoir Rd, Chepachet, RI 02886

Dear Ms. Recht:

The Episcopal Diocese of RI hereby requests dispute resolution under Section I.6 of the General Terms and Conditions of ISO NE's Transmission, Markets and Services Tariff (the Tariff). National Grid has advised the Diocese that ISO has ordered that its proposed 2.2 megawatt solar project, together with other projects, must undergo a preliminary transmission level transfer analysis to determine potential cumulative impact on the transmission system. We are informed that NGrid assesses the apportioned cost of that transfer analysis among distributed generation customers that are applying for interconnection and become part of the "cluster." ISO's tariff directly impacts the Diocese as a "Customer." The Diocese disputes ISO's authority to order such a study for this project which is far less than 5 MW of capacity and presents a reactive rating change of less than (+/-) 5 MVAR. The Diocese also disputes any authority to assess the costs of such studies to the Diocese under Rhode Island and federal law. The delay imposed as a result of this transfer analysis threatens access to economic incentives that are critical to the viability of the project and, therefore, wrongly denies access to interconnection in violation of federal law. The assessed charge is contrary to Rhode Island law regarding the assessment of interconnection costs and therefore also violates federal law.

*The Facts*

This planned project is located on the grounds of the Episcopal Conference Center and Camp in Glocester. The purpose of the Project is to save the Diocese's summer camp for disadvantaged youth, which operates with an annual deficit in excess of $250,000, and to provide credits to all our parishes and other non-profit, religious organizations in RI. The Diocese intends to develop two solar projects on the camp property, that we refer to as the Eastern and Western projects. The separate projects are bifurcated by Reservoir Road and will separately interconnect to a new feeder along Reservoir Road. The projects will have less than 5MW of generating capacity even when aggregated. At this time, this ISO dispute solely pertains to the Eastern project.

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The Diocese filed interconnection applications with NGrid for 6.7MW of total capacity in December 2017. We received feasibility study results in April 2018 that determined both projects feasible and estimated a cost of $602,000 for each project. However, discussions with NGrid personnel indicated that some of the work would need to be done only once for the combined projects, so the estimated total was therefore approximately one million dollars to interconnect both sites. On that basis, the Diocese paid the $20,000 fee to move to the detailed phase of study in June 2018. We received feedback from NGrid engineers in July 2018 that NGrid wanted further clarifications and updates to our drawings, which we provided in September 2018 after working to understand the requests. Later in September 2018 NGrid's engineers came back with additional requests for information and changes. We proceeded to make the requested changes and also discussed other technical solutions to their issues. All these changes were submitted in December 2018 for their study.

In March 2019, NGrid requested additional time to complete the work of the studies. On April 17th, 2019, instead of receiving the Impact Study we applied and paid for (which was then long overdue), we received an email that outlined a large number of expensive upgrades (very roughly estimated to be $3MM, including significant substation upgrades). Even with all the upgrades required, the email directed that we would have to reduce the AC capacity of our total arrays from ~6.7 MW AC as originally approved by NGrid in the prefeasibility and feasibility studies to 3MW AC or less. That reduction in capacity at those costs threatens the economics of our project.

The Diocese was enormously disappointed with that change in the utility's position. We took at face value the guidance in the prefeasibility and feasibility studies that the interconnection for around 7MW AC would cost about $1M. Based on those estimates the Diocese and its partner invested hundreds of thousands of dollars to secure zoning and permitting approvals from the town of Glocester. We were informed that the final figure might be changed due to the study but were led to believe that it would be within a small range. For NGrid to say that the interconnection of 2 or 3 MW AC will cost ~$3M - a multiplier of about six times the original estimate – is an enormous problem for these projects.

After filing for dispute resolution with NGrid, the utility revisited its study and determined that 2.2 MW of capacity was feasible for the Eastern project. The Diocese indicated its intent to proceed with the Eastern project while it sought to resolve alleged voltage and capacity issues for the Western project. Then, suddenly in June 2019, NGrid informed the Diocese that the Eastern project would be subject to a transfer analysis for transmission impacts that was estimated to take 6 to 9 months to perform and could subsequently result in further transmission studies. The Diocese still lacks a clear, understandable and adequate explanation of the technical impacts and impediments for these projects, since the Impact Study we applied and paid for has not been completed or provided. Moreover, NGrid is requiring its distributed generation customers to pay an apportioned amount of the cost of the transfer analysis.

*The Law*

Under Section I.3.9 of the Tariff, each Market Participant must submit plans for additions to or changes in facilities that might "have a significant effect on the stability, reliability or operating characteristics of the Transmission Owner's transmission system, the transmission facilities of another Transmission Owner or the system of a Market Participant." Within sixty days of that filing, ISO must notify the Market Participant whether it has determined that implementation of any proposed plan will have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant, the Market Participant or Transmission Owner. Unless ISO provides such notice in writing, the Market Participant is free to proceed with the plan.

Section 1 of ISO New England Planning Procedure (PP) 5-1, "Procedure for Review of Governance Participant's Proposed Plans," describes the process and contains the procedures Market Participants must follow to comply with Tariff Section I.3.9. It provides a table that describes the Proposed Plan Application (PPA) requirements for all new generation or changes in station output that meet the defined conditions. New or Increased Generation of between 1 and 5 MW requires no PPA; it only requires a notification form. Those projects have no study or performance requirements, unless ISO determines that a PPA is required, in which case the project may be made subject to the requirements of PP5-6 and 5-3.

In section 3.1, PP5-3 says "This section provides guidance on the bulk power system performance analyses required to support a generation or transmission Proposed Plan Application. The type of change/addition and its potential effects on the interconnected system determines the depth of analysis expected in support of a particular Proposed Plan Application. It defines the levels of analysis expected over the range of Proposed Plan Applications and guides the applicant to that level best suited to the particular application at hand. General guidance on performance measures and expectations is provided in Subsection 2.0." Section 3.1.2 reads: "Level of analysis required - Based on factors such as the size of a generator and/or operating voltage level and connection of a transmission line (radial or networked), four levels of analysis are identified for supporting a particular Proposed Plan Application." PP 5-3 states that "In general, if the proposed addition or modification is not listed in Table 1, then no Proposed Plan Application is required; i.e. Level 0. If the proposed addition or modification is listed in Table 1 as requiring a Proposed Plan Application, but it does not affect other Affected Entities, then the application is required for information only; i.e. Level I." PP5-3 Table 1 clearly indicates that any generation addition or rating change of less than 5MW and Reactive rating change of less than (+/-) 5 MVAR results in a Level 0 Proposed Plan Application, with no action required.

The purpose of PP 5-6 is to describe the scope of Interconnection Studies conducted pursuant to Schedule 22 ("Large Generator Interconnection Procedures" or "LGIP"), Schedule 23 ("Small Generator Interconnection Procedures" or "SGIP") and Schedule 25 ("Elective

Transmission Upgrade Interconnection Procedures" or "ETU IP") of Section II of the Tariff. Since PP5-1 and PP5-3 do not require any studies for projects less than 5MW with reactive

rating change of less than (+/-) 5 MVAR, PP5-6 clearly does not apply to the Diocese project. But even if it did, the Diocese project is not subject to the Tariff schedules by their own terms.

- *Tariff Sch 22 (Large Generator IC Procedure, or "LGIP")* - Large Generating Facility shall mean a Generating Facility having a maximum gross capability at or above zero degrees F of more than 20 MW.
- *Tariff Sch 23 (Small Generator Interconnection Procedure, or "SGIP")* - SGIP and SGIA shall not apply to: (i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii) a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.
- *Tariff Sch 25 (elective transmission upgrade IC procedures)* - Elective Transmission Upgrade ("ETU") shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

There is no regulatory basis for ISO or NGrid to subject the Diocese project to any transmission studies.

At a recent presentation entitled RI DG Transmission System Impact Analysis and Study Plan Update held on June 21, 2019 in Lincoln, RI, Barry Ahern's slide 16, stated:

- Proposed distributed generation (DG) resources (*i.e.,* those seeking to interconnect to The Narragansett Electric Company's (NECo) electric power system) above 1 MW must be reviewed by ISO-NE, and approved by the New England Power Pool Reliability Committee (NEPOOL RC) in accordance with ISO-NE's Tariff Section I.3.9 and planning procedures. The main purpose of this review is to determine if there are any impacts to the regional transmission system pursuant to ISO Tariff Section I.3.9.
- ISO-NE requires a generator notification form (GNF) for projects sized between 1MW and 5MW, and a proposed plan application (PPA) for projects sized 5MW or greater, per ISO-NE planning procedure 5-1
- PPA submissions must be supported by a transmission impact study; GNF submissions do not automatically require a transmission study, but ISO-NE must identify cases where the cumulative impacts of DG resources causes the need for a study or analysis consistent with its planning procedures on an as-needed basis. More recently, the significant accumulation of DG proposals has caused the need for some level of transmission analysis for projects sized between 1MW and 5MW.
- Any ISO-NE required studies are performed by the applicable affected transmission system operator(s) (ASO). For DG interconnecting to NECo's electric power system, this is typically its transmission affiliate, New England Power Company (NEP).

ISO participated in this presentation alongside NGrid. The representation to developers and the public that all projects over 1MW must be "reviewed" is contrary to PP 5-3 and is misleading. The presentation concedes that transmission level studies are not warranted unless ISO has first required a PPA.

ISO has not made a determination of transmission system impact and has not required a PPA for the Diocese project. Neither ISO's tariff nor its planning procedures contemplate or authorize a PPA or any level of transmission studies for a proposed 2.2 MW project with a reactive rating change of less than (+/-) 5 MVAR. The Diocese has requested, but not received, evidence of any written notification from ISO to NGrid that any plan to interconnect the Diocese project will have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant, the Market Participant or Transmission Owner. In the absence of that notification, this project is free to proceed per the Tariff.

Rhode Island law mandates that an interconnection study must issue within ninety days of application and that a commercial impact study will be no more than $10,000, unless additional costs are incurred and assessed after the project is in operation. R.I. Gen. Laws §§39-26.3-3; 39-26.3-4. By statute, the maximum time allowed between the date of the completed application

and delivery of an executable interconnection service agreement is one hundred seventy-five (175) calendar days, or two hundred (200) calendar days if a detailed study is required. Id. at §39-26.3-4.1(d). All electric distribution company system modifications must be completed no longer than two hundred seventy (270) calendar days (or three hundred sixty (360) calendar days if substation work is necessary) from the date of receipt of the interconnection service agreement unless otherwise agreed by the customer in writing. These timelines cannot be extended due to customer delays in providing required information, all of which must be requested and obtained before completion of the impact study. Id. The deadlines for system modifications can only be extended for events beyond the control of the utility, such as third-party delays like those due to ISO requirements not attributable to utility actions, that cannot be resolved despite commercially reasonable efforts. Id. Rhode Island law puts this question of ISO's requirements at the center of this dispute regarding interconnection delays. Even if the ISO tariff and operating procedures did have requirements for a transfer analysis or any transmission studies on this project, the utility would be required to make a good faith effort to ensure that they were not applied haphazardly to a project that is in mid-course of development with such substantial investment backed expectations.

NGrid has advised developers that it has changed its practice such that it now submits its generator notification forms to ISO during the impact study phase of interconnection rather than upon completion of system modifications when the project seeks final authorization to interconnect. That change in practice came without any notice to developers, many of whom (like the Diocese) had already made substantial investments in project development and had reasonable investment backed expectations of development according to RI law and existing ISO tariffs and operating procedures. If ISO has also resolved to change its rules and procedures, it must do so after public notice and comment and may not apply such changes to projects already substantially through the development process.

The obstruction of this project without authority is a breach of the obligation to interconnect such projects as necessary to accomplish purchases and sales of electricity across the interconnection, under the Energy Policy Act Section 111(d)(15) and FERC rules at 18 CFR §292.303. The assessment of fees for that study violates Rhode Island law regarding the assessment of charges for interconnection impact studies, R.I. Gen. Laws §39-26.3-4, and therefore also violates 18 CFR §292.306, which dictates that states set the costs of interconnection. *See also* Western Massachusetts Elec. Co., 77 F.E.R.C. ¶ 61,268, at 62,120 (1996) (upgrades and concluded that, because cost of transmission reinforcements provided a system-wide benefit must be treated as grid-related costs rather than interconnection costs and thus recovered from all customers on the grid through rolled-in rates); Western Massachusetts Elec. Co., 81 F.E.R.C. ¶ 61,152, at 61,692 (1997) (rehearing denied); affirmed Western Massachusetts Elec. Co. v. FERC, (D.C. Cir.).

ISO's unauthorized request for a transfer analysis and NGrid's delays in implementing such studies violates RI law. The Diocese is taking that non-compliance up with NGrid directly (and through the RI Public Utilities Commission, if necessary), but provides this letter to also address ISO's role in that failed compliance directly to ISO.

The Diocese may also request FERC's investigation of this matter. The collaboration between ISO and NGrid in deterring project development contingent on expiring federal tax credits raises anti-trust concerns given NGrid's interest in natural gas, transmission and distribution and given the composition of ISO's board (which is heavily comprised of utility executives that share NGrid's interests). *See* FERC v. Mississippi, 456 U.S. 742, 750 (1982)(PURPA benefits for qualifying facilities designed reduce regulatory barriers to entry in energy markets and overcome reluctance of vertically integrated monopoly utilities to accept power from alternative suppliers); FERC docket ER15-325-000 (ISO not properly forecasting distributed generation when calculating the installed capacity requirement for its forward capacity market).

*Conclusion and Request*

The Diocese requests expedited resolution of this dispute because it is of great urgency. The Diocese cannot continue to operate its camp at a deficit and needs the lease revenue from this project to save the camp. Our developer has the project on a schedule that needs to be met for project viability. The Diocese urgently needs access to the electricity generated from this project to save costs at our parishes, schools and other facilities and to mitigate our impact from harmful emissions. This project is also intended to serve as a model for roll out of projects that can serve other faith communities; its failure will be a severe setback for our campaign for creation care.

The Diocese requests production of all studies, records and reports relevant to resolution of these concerns in advance of the meeting, including any technical analysis of the Project, so that our consultants can have some transparency regarding any technical cause for your requirement.

Thank you,

Dennis Burton

cc: Carol Grant, Office of Energy Resources
Chris Kearns, Office of Energy Resources
Jim Kurtz, RER Energy Group
Mike Barnes, RER Energy Group
John Isberg, National Grid

Monica Gonzalez
Assistant General Counsel-Operations and Planning

August 2, 2019

Dennis Burton
Chief Financial Officer
Episcopal Diocese of Rhode Island
275 North Maine Street
Providence, RI 02903

Dear Mr. Burton:

ISO New England Inc. has received the letter dated July 25, 2019 from the Episcopal Diocese of Rhode Island requesting dispute resolution under Section I.6 of the ISO New England Transmission, Markets, and Services Tariff (the "Tariff") concerning the Diocese's request to National Grid for interconnection of a proposed solar project in Rhode Island. Section I.6 of the Tariff sets forth the dispute resolution process for disputes arising under the Tariff among "the ISO, the Transmission Owner, the Schedule 20A Service Provider, and a Customer."[1] The Tariff defines "Customer" as "a Market Participant, a Transmission Customer or another customer of the ISO."[2] The Diocese is a customer of National Grid, and not the ISO. Therefore, the dispute resolution process in Section I.6 of the Tariff does not apply.

While the Diocese's request for dispute resolution is not subject to the Tariff, as in all cases, the ISO welcomes the opportunity to meet with you, along with National Grid, to describe the relevant ISO processes. We would look forward to having that opportunity in a meeting with you, facilitated by National Grid.

Sincerely,
Monica Gonzalez

cc: Commissioner Carol Grant, Office of Energy Resources
Chris Kearns, Office of Energy Resources
Jim Kurts, RER Energy Group
Mike Barnes, RER Energy Group
John Isberg, National Grid

[1] *See* Tariff, § I.6.
[2] *See* Tariff, § I.2.2.

ISO New England Inc.
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Holyoke, MA 01040-2841
413-535-4178
mgonzalez@iso-ne.com

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS**

**PUBLIC UTILITIES COMMISSION**

| | |
|---|---|
| Petition of the Episcopal Diocese of Rhode Island for Declaratory Judgment on Transmission System Costs and related "Affected System Operator" Studies | **Docket No. 4981** |

## AGREED FACTS

## PETITION OF THE EPISCOPAL DIOCESE FOR DECLARATORY JUDGMENT

1. The Diocese's planned project is located on the grounds of the Episcopal Conference Center and Camp in Glocester. The Project would generate rent to save the Diocese's summer camp for disadvantaged youth, currently operating with an annual deficit in excess of $250,000, while providing net metering credits to all their parishes and other non-profit, religious organizations in Rhode Island and fulfilling the Diocese mission of creation care.

2. The Diocese intends to develop two solar arrays on the camp property, the Eastern and Western projects bifurcated by Reservoir Road, using about 40 acres of remote portions of the Diocese property that consists of approximately 184 acres of former farmland.

3. The Diocese has received Master Plan approval and a special use permit from Glocester.

4. The Diocese received feasibility study results for the interconnection of each array from TNEC in April 2018 that estimated a cost of $602,000 for each site. The feasibility study for the east array included the following statement:

> The proposed generation capacity, when combined with the existing and proposed distributed generation value on the feeder queue, reaches near the feeder capacity limits at this time. Be advised that the proposed generation capacity may require substantial system modifications effecting the customer's budget and schedule planned.

The feasibility study for the west array included a similar statement, as follows:

> The proposed generation capacity, when combined with the existing and proposed distributed generation value on the feeder queue, exceeds the feeder capacity limits at this time. Be advised that the proposed generation capacity may be infeasible or may require substantial system modifications effecting the customer's budget and schedule planned.

Both feasibility studies also indicated that further engineering review by TNEC would be required in the form of ISRDG to move forward with the interconnection.

5. The Diocese applied for Impact Studies on both projects. And paid the requisite fees on 8 June, 2018.

6. On April 17th, 2019, NGrid informed the Diocese that interconnection would not be possible unless the Project was limited to 3MW or less and the Diocese paid for significant upgrades to several circuits and a substation (hereinafter "re-conductoring") at a projected cost of $3 to 3.5 million.

7. The Diocese asked NGrid's technical team how much capacity it could put on the system without re-conductoring. NGrid modeled that and said their system could only handle 2 MW without re-conductoring. The Diocese, concerned that 2 MW for $650,000 would be difficult to finance, requested 2.2 MW, and NGrid declared that 2.2MW would be feasible without reconductoring.

8. In June 2019, NGrid first informed the Diocese that the 2.2MW Eastern Array would be subject to a Transfer Analysis for Transmission Impacts Study. NGrid's affiliate, New England Power (NEP) would administer the study the cost of which would be allocated to the Diocese and other interconnecting customers in its cluster and which was estimated to take 6 to 9 months to perform.

9. The transfer study could result in a need for further, longer transmission studies and an assessment of additional costs for transmission system upgrades and the ongoing costs of

maintaining those upgrades before a final cost of interconnecting the project and project economics can be predicted.

10. NGrid has advised developers that it has changed its practice and now submits its generator notification forms to ISO during the impact study phase of interconnection rather than upon completion of system modifications when the project seeks final authorization to interconnect.

11. In August 2019, NGrid produced an Impact Study for the Eastern Array.

12. In August 2019, NGrid issued a “Final Impact Study” on the Western Array. That study said that the "expected least-cost interconnecting circuit would be the circuit adjacent to the site, which is the 34F2, a 12.47 kV regulated, three-phase, 4 wire, wye, effectively-grounded, radial distribution circuit that originates out of the Company’s Chopmist No. 34 Substation, in Foster, RI . . . .” but "no amount of system modifications could be performed on this circuit that would make this interconnection feasible. The Company can conduct further study on another circuit, which would require a new impact study.”

13. The Diocese project will be a Qualified Facility and has indicated its intent to take service under the net metering tariff.

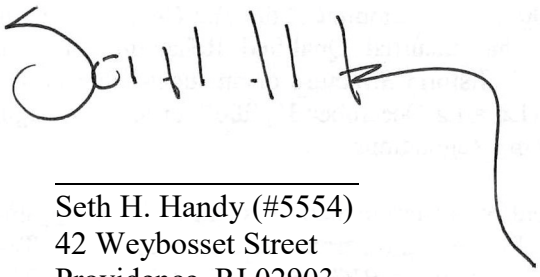
14. The Diocese Project will not sell its energy to ISO-NE markets and will either produce electric energy to be consumed only on site of the project or sell 100% of its output as a

Qualifying Facility to the interconnecting utility.

**THE EPISCOPAL DIOCESE OF RHODE ISLAND**

By its attorneys,

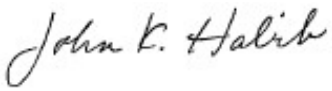
**HANDY LAW, LLC**



Seth H. Handy (#5554)
42 Weybosset Street
Providence, RI 02903
(401) 626-4839

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

By its attorney,



John K. Habib
Keegan Werlin LLP
99 High Street, Suite 2900
Boston, Massachusetts 02110
(617) 951-1400

Public Policy Input Template

| Entity | Ref # | Federal | State | Municipality | County | Other | Description of Public Policy Requirement | Reference to law, statute, regulation, etc. | Does the identified statue or regulation expressly require the construction of transmission infrastructure? If so, identify all relevant provisions. | Explanation of how public policy requirement drives transmission need | Possible type and location (area/substation) of transmission facilities that may be needed | Are compliance alternatives identified in the statute or regulation? If so, identify all relevant provisions. | Does the statute or regulation provide for non-compliance alternatives, such as non-compliance monetary payments? If so, please identify all relevant provisions. | Any other additional information Entity feels is relevant |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| The Episcopal Diocese of Rhode Island | 1 | | | | | X | RI State Enegy plan and many state laws call for diversification of energy supply and specifically growth of distributed energy resources to reduce reliance on natural gas in order to provide a more secure, more affordable and cleaner energy supply. | RI State Energy Plan (Energy 2035); RI Renewable Energy Standard (R.I. Gen. Laws 39-26); RI Net Metering (R.I. Gen. Laws 39-26.4); RI Renewabl Energy Growth (R.I. Gen. Laws 39-26.6); RI Distributed Generation Interconnection (R.I. Gen. Laws 39-26.3); other | To the extent transmission system improvements are required to satisfy public policy, both federal and state law and policy indicate such upgrades should be planned and allocated as public policy upgrades rather than allocated to generating customers interconnecting to the distribution system and not participating in federal markets. Such costs are to be considered public policy upgrades pursuant to ISO OATT, Schedule 12 and/or section 3.04(a)(iv) of the NEPOOL Transmission Operating Agreement | In RI PUC Docket 4981 the Narragansett Electric Company has argued that any potential transmssion improvements related to the interconnection of local distributed generation projects that propose to interconnect to the local distribution system and do not intend to particiate in federal markets (including projects proposed by the Diocese) have not beenplanned or proposed as public policy improvements so the cost of those transmission improvements should be imposed on the projects. Federal and state policy provides that such costs must be planned and allocated as public policy upgades. | Any potential upgrades arising out of the level III transmission system impact analysis conducted on Group 2 in Western RI (West Farnum – Kent County) | No, RI Distributed Generation Interconnection (R.I. Gen. Laws 39-26.3) only allows the electric distribution company to charge interconnecting distributed generation customers for system improvements to its own distribution system. Moreover, FERC Orde 1000, ISO OATT Schedules 11 and 12 and section 3.04(a)(iv) of the NEPOOL Transmission Operating Agreement indicate such upgrades should be planned and allocated as public policy upgrades rahter than allocated to generating customers interconnecting to the distribution system and not participating in federal markets. | No | In RI PUC Docket 4981, the Diocese has asked the Commission to order New England Power and/or the Narragansett Electric Company to allocate these costs according to federal and state law and policy and not to authorize or allow their impositionon local distributed generation projects that do not elect to participate in federal markets. The Diocese did and does not have transparency into the tranmsission system to anticipate these potential limitations or petition for their treatment as public policy upgrades in advance of its interconnection application. Given the urgency of RI Public Policy on energy security, affordability and climate change and the urgency of this project for the Diocese (its revenue is needed to sustain a summer camp for inner city children, its energy is needed for the Diocese and to serve its mission of creation care), the Diocese requests either an expedited determination or provision for the companies to make any required investment in the near term subject to proper allocation based on the resolution of this request. |