March 2, 2023

2023 Stakeholder Public Policy Requirements Submittals

As described in Brent Oberlin's memo to the Planning Advisory Committee (PAC) on January 13, 2023, 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 received which included letters 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 and a tab that combines each of the template submittals into one.

The two submittals and their associated formats are:

1. **Shell Energy – letter, template**
2. **Rhode Island Energy – email, letter, template**

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

1. **Shell Energy – letter, template**

February 27, 2023

Submitted via email to (PublicPolicy@iso-ne.com)

RE: – 2023 Public Policy Transmission Upgrade Process – Shell Request

To Whom It May Concern:

Shell Energy North America (US), L.P. ("Shell Energy") and Shell New Energies US, LLC ("Shell New Energies US) (together, "Shell"), respectfully submit the following public policy request for consideration in ISO-New England ("ISO-NE")'s 2023 Public Policy Transmission Upgrade ("PPTU") process. For the reasons discussed below, the New England region should activate the 2023 PPTU process under ISO-NE's existing tariff mechanism to facilitate the integration of offshore wind and achieve state and federal climate goals. Activating this process (1) will advance the timely, efficient and coordinated transmission needed for offshore wind; (2) will create the conditions for holistic and comprehensive planning not otherwise available in ISO-NE today or in the near future; and (3) is supportive of and directionally consistent with both federal and state climate policy goals and other activity. This process should proceed in parallel with the development of offshore wind projects that are already underway with the intent to identify solutions that can build off of or enhance these developments in the most cost effective way without slowing their progress.

Shell Energy North America (US), L.P. has actively participated in wholesale electric markets through out the United States, including markets administered by ISO-NE for over twenty years. Through its affiliate, Shell New Energies, LLC, Shell has been awarded contracts by the Commonwealth of Massachusetts and the State of New Jersey to develop large offshore wind ("OSW") generation facilities in each region utilizing a portion of its interests in leasehold areas in the Atlantic Ocean. In Massachusetts, Shell New Energies, LLC, through its 50-50 joint venture Southcoast Wind Energy LLC, is developing an offshore lease area with the potential to generate over 2,400 megawatts (MW). (See https://www.boem.gov/renewable-energy/state-activities/mayflower-wind).[1]

[1] In New Jersey, Shell New Energies, LLC, through its 50-50 joint venture Atlantic Shores Offshore Wind, LLC ("Atlantic Shores"), is developing an offshore lease area with the potential to generate over 3,000 MW. (See https://www.boem.gov/renewable-energy/state-activities/atlantic-shores). With available leasehold rights secured, Shell affiliates are actively exploring the development of additional OSW projects in the Northeast in response to OSW solicitations. Through its Atlantic Shores joint venture alone, Shell has one of the largest U.S. OSW lease area portfolios on the Eastern seaboard comprising 262,404 acres able to site a total of

On January 24, 2023, the Brattle Group, Inc., concluded that proactive and holistic transmission planning is needed now in order to significantly reduce costs, increase grid reliability, minimize environmental and community impact, and help reach clean energy goals in a timely manner ("Brattle Study").[2] Indeed, there is general consensus at the state and federal level that coordinated transmission is needed to integrate offshore wind into the bulk power system and achieve federal and state climate goals.[3]

The Brattle Study cautions that "unless these planning efforts are started now, more attractive near-term transmission solutions will not be identified and the most effective long-term grid development pathways may be foreclosed."[4]

According to the Brattle Study, the benefits of coordinated transmission planning (for over 100 gigawatts (GW) of offshore wind generation) include:

1) At least $20 billion in transmission-related cost savings;
2) 60–70% fewer shore crossings and necessary onshore transmission upgrades;
3) Approximately 2,000 (50%) fewer miles of marine transmission cable installations disturbing the seabed; and

over 4.5 GW of OSW generation. In addition, Atlantic Shores Offshore Wind Bight, LLC, a subsidiary of Shell's Atlantic Shores joint venture, was named a winning bidder in the Bureau of Ocean Energy Management's ("BOEM") auction this past spring giving Shell leasehold interests in the New York Bight area in the Atlantic Ocean.

2 The Benefit and Urgency of Planned Offshore Transmission, Brattle Study (Jan. 2023).

3 The Benefit and Urgency of Planned Offshore Transmission, Brattle Study (Jan. 2023); Building for the Future through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection, Notice of Proposed Rulemaking, 179 FERC ¶ 61,028 (2022); Improvements to Generator Interconnection Procedures and Agreements, Notice of Proposed Rulemaking, 179 FERC ¶ 61,194 (2022). On September 1, 2022, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont (New England states) issued a transmission RFI seeking comments on coordinated transmission. Among the 40 sets of comments from diverse stakeholders, there was general consensus on the urgent need for planned and coordinated transmission in New England to maximize customer savings and minimize impacts to the environment and communities. On January 13, 2023, the New England states submitted a proposal to the U.S. Department of Energy, requesting federal support for a project called the "Joint State Innovation Partnership for Offshore Wind," which outlines how the states would work with developers and transmission providers to develop new lines that support offshore wind.

4 The Brattle Study at 1.

4) More competitive procurement outcomes, increased consumer savings, enhanced reliability and grid resilience, and more timely investments in the local clean energy economy.[5]

In the ISO-NE region, there are limited onshore points of interconnection ("POIs") for OSW and many projects are competing for limited interconnection capacity. In addition, the current elective transmission upgrade / cluster transmission study process is not designed for holistic, coordinated and comprehensive transmission planning to integrate OSW in a time frame to meet climate goals.[6]

It is unclear when or if the Federal Energy Regulatory Commission ("FERC") will promulgate new rules and policies that can enhance the transmission planning and interconnection process to accommodate the growth of OSW. Even if it does take action in response to recent FERC NOPRs, it will require over a year for ISO-NE to implement them, considering the technical issues that must be addressed in the NEPOOL stakeholder process.

Similarly, the New England States Committee on Electricity ("NESCOE")'s Longer-Term Planning Changes to facilitate (1) analysis of state public policy transmission needs and (2) cost allocation for the associated transmission infrastructure, while in process and encouraging, are not available now.

The PPTU process offers the benefit of an existing platform for default cost allocation, flexibility to adjust a cost allocation methodology through an alternative cost allocation filing and a ready-made framework that can be activated now. While the New England states have fairly identified shortcomings with this process, it is clear that the project-by-project business as usual process is an obstacle to integrating offshore wind. As Shell recommended in its comments in response to the New England states transmission request for information ("RFI"), the states should consider taking advantage of mechanisms like the PPTU that are already available in ISO-NE to facilitate the integration of offshore wind.

For these reasons, Shell submits this Public Policy Request ("PPR") to identify the transmission needed to satisfy the local, state and federal public policies identified below. This study should identify the costs and benefits of, and the barriers to and solutions for:

1) upgrades to onshore grid infrastructure to increase injection capacity of POI's and allow for growth in OSW integration; increased reliability, resiliency and energy deliverability; and reduced operational risk, curtailment and congestion;

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5 The Brattle Study at 6.

6 The Brattle Study at 29-30.

2) reducing the number of cables to shore from OSW in the Bureau of Ocean Energy Management (BOEM)'s wind leasehold area off the coast of Rhode Island-and Massachusetts (RI/MA leasehold area); and
3) reducing the number of POIs needed onshore to integrate OSW from BOEM's RI/MA leasehold area (i.e., multi collector stations).

The 2050 Transmission Study, which was requested by NESCOE, can be used to support this PPR and review of potential transmission solutions.

This PPR will ensure the identification and consideration of near-term coordinated transmission solutions, which may be more cost-effective solutions for integrating OSW to meet state and federal climate goals than current project-by-project radial line solutions.

The purpose of this PPR is to maximize customer savings, minimize impacts to the environment and communities, allow for the integration of future projects and avoid permanently foreclosing certain transmission solutions. This process should seek to identify cost-effective transmissions solutions that can build off of or enhance offshore wind projects that are already under development. A guiding principle should be "do no harm" to developers with existing queue positions while the PPR seeks ways to coordinate their activities more effectively.

This PPR would be enhanced by the following:

a. Coordination between ISO-NE and NESCOE and/or the New England states on the analysis and selection – if any - of a PPTU project;
b. Coordination of the Transmission Owners on the availability of federal funding for these PPTU studies;
c. Coordination of the Transmission Owners and NESCOE and/or the New England states on alternative cost allocations.
d. Development of a PPTU timeline from initiation to selection, if any, including when:
    i. state input on studies and/or projects is due; and
    ii. state input on cost allocation alternatives is due.

The Brattle Study identified siloed transmission as one of multiple challenges to the timely development of cost effective transmission solutions for integrating offshore wind (Brattle Study at 9, 29, 44-47, 49-51). Activating the 2023 PPTU process can position New England to be a leader for transmission planning from the perspective of advancing federal and state climate and OSW goals by creating the conditions for timely, efficient and cost-effective development

of transmission infrastructure for offshore wind. Importantly, as the Brattle Study demonstrates, such planning will maximize customer savings and minimize impacts to the environment and communities. Certainly, conducting a study that identified interconnection solutions would have significant value even if the PPTU process did not result in the development and funding of actual projects.

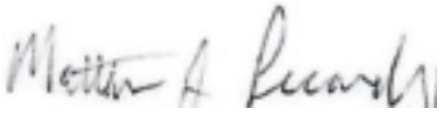
Shell identifies the following local, state, and federal public policies that drive the need for transmission triggering the need to identify and construct transmission:

> Federal: BOEM Wind Leases RI; BOEM Wind Leases MA; The White House, FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs, March 29, 2021; The White House, FACT SHEET: Biden-Harris Administration Announces New Actions to Expand U.S. Offshore Wind Energy, September 15, 2022; The White House, National Climate Task Force (describing climate goals, Inflation Reduction Act & Bipartisan Infrastructure Law); US DOE's "Building a Better Grid" Initiative; US DOE's Floating Offshore Wind Shot; US Grid Deployment Office's Grid and Transmission Program Conductor Guide
>
> State: Appendix A, The Brattle Study (listing state OSW requirements with sources); New England States Transmission RFI; Massachusetts, Bill H.5060: An Act Driving Clean Energy and Offshore Wind, July 2022 (increases OSW goals and enables transmission procurements)
>
> Local/Other: State and federal environmental and permitting laws favor fewer transmission lines (e.g., Section 205 of the Federal Power Act; National Environmental Policy Act); Future of Gas and Clean Heat investigations and fossil fuel bans (e.g., MA, RI) requiring electrification and emission-free electrons; Carbon Free Boston (initiative to become carbon neutral by 2050 by significantly reducing greenhouse gas emissions that contribute to climate change).
>
> See also: Shell's accompanying public policy input template spreadsheet.

Conclusion

Achieving society's collective decarbonization goals requires transformation of the global economy and energy system. Policy frameworks – like the PPTU process – are needed that encourage the necessary collective actions to enable all viable pathways to decarbonization. Shell looks forward to collaborating with ISO-NE, NESCOE, the New England states, transmission owners and other market participants in navigating the transformation and decarbonization of the bulk power grid.

Respectfully submitted,



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Enclosure (Shell's accompanying public policy input template spreadsheet)

Cc:

Brent Oberlin, Director, Transmission Planning, ISO-NE (boberlin@iso-ne.com)

Al McBride, Director, Transmission Service and Resource Qualification, ISO-NE (amcbride@iso-ne.com)

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
Shell	1	FERC Reliability Standards to Address Inverter-Based Resources (NOPR)					Develop new or modified Reliability Standards that address the following reliability gaps related to inverter-based resources (IBR): data sharing; model validation; planning and operational studies; and performance requirements.	181 FERC 61,125 18 CFR Part 40 [Docket No. RM22-12-000] NOPR https://www.govinfo.gov/content/pkg/FR-2022-12-06/pdf/2022-25599.pdf	While this does not specify new transmission infrastructure specifically, the proposed regulation directs NERC and ERO to take this action in view of the rapid change in the generation resource mix currently underway on the BulkPower System, including the addition of an "unprecedented proportion of nonsynchronous resources" projected over the next decade, including many resources that employ inverters and converters to provide energy to the Bulk-Power System. According to NERC, the rapid integration of IBRs is "the most significant driver of grid transformation" on the Bulk-Power System. While IBRs provide many benefits, they also present new considerations for transmission planning and operation of the BulkPower System.	The action drives changes to transmission infrastructure required to integrate large injections of renewable energy while maintaining a stable grid.	Actions may include power quality equipment (static and rotating) as well as control procedures and would be located at POI's and or adjacent generation facilities.	N/A	N/A	This and other FERC/NERC/ERO and ISO actions may be categorized as required efforts in conjuction with transmission upgrades to ensure reliability for rate payers and ongoing modernization to the grid for the shift to renewable energy, storage and offshore wind resources.
Shell	2		**Massachusetts ACT H.5060:** *An Act Driving Clean Energy and Offshore Wind*				MA Electric Distribution Companies, in coordination with the department of energy resources, to procure 5,600 MW of offshore wind no later than June 30, 2027.	Bill H.5060 https://malegislature.gov/Bills/192/H5060	Transmission costs to be incorporated into proposals; provided, however, that, to the extent there are regional or project-specific transmission costs included in a bid, the department of public utilities may, if it finds such recovery to be in the public interest, authorize or require the contracting parties to seek recovery of such transmission costs from other states or from benefitted entities or populations in other states through federal transmission rates, consistent with policies and tariffs of the Federal Energy Regulatory Commission.	Upgrades to transmission infrastructure are required in order to integrate large injections of offshore wind. In the ISO-NE 2019 Economic Study only 5800 MW of wind may connect without significant Transmission upgrades. Link to Study presentation:https://smd.iso-ne.com/operations-services/ceii/pac/2020/05/a3_2019_economic_study_offshore_wind_transmission_interconnection_analysis_ceii.pdf	The ISO-NE 2019 Economic Study Identified the following upgrades that may enable additional offshore wind projects: New 345 kV circuit in separate ROW from Cape Cod to K Street, New 345 KV circuit from Brayton Point to K Street or Mystic, New 345 kV circuit in separate ROW from Kent County to Sherman Road, New 345 kV circuit from Montville to Southwest Connecticut	N/A	N/A	Current POI's are at or soon to reach limits for injection, therefore slowing renewable energy adoption. The major 345kV POI's and their lines represent key infrastructure to conduct planned, thoughtful upgrades beyond the current serial process.
Shell	3		**Connecticut Public Act 19-71:** *An Act Concerning the Procurement of Energy Derived from Offshore Wind*				CT Department of Energy and Environmental Protection (DEEP) to procure 2,000 MW of offshore wind energy by December 31, 2030.	Public Act No. 19-71 https://www.cga.ct.gov/2019/act/pa/pdf/2019PA-00071-R00HB-07156-PA.pdf	The electric distribution companies may enter into power purchase agreements for energy, capacity, any transmission associated with such energy derived from offshore wind facilities.	Upgrades to transmission infrastructure are required in order to integrate large injections of offshore wind. In the ISO-NE 2019 Economic Study only 5800 MW of wind may connect without significant Transmission upgrades . Link to Study presentation:https://smd.iso-ne.com/operations-services/ceii/pac/2020/05/a3_2019_economic_study_offshore_wind_transmission_interconnection_analysis_ceii.pdf	The ISO-NE 2019 Economic Study Identified the following upgrades that may enable additional offshore wind projects: New 345 kV circuit in separate ROW from Cape Cod to K Street, New 345 KV circuit from Brayton Point to K Street or Mystic, New 345 kV circuit in separate ROW from Kent County to Sherman Road, New 345 kV circuit from Montville to Southwest Connecticut	N/A	N/A	Direct connection to major load centers using HVDC
Shell	4		**Rhode Island General Court: S 2583A:** *An Act to Public Utilities and Carriers -- Affordable Clean Energy Security Act*				The Electric Distribution Company to procure 600 MW of newly-developed offshore wind capacity no later than October 15, 2022.	S 2583 Substitute A http://webserver.rilin.state.ri.us/BillText/BillText22/SenateText22/S2583A.pdf	The office of energy resources shall work jointly with the division of public utilities and carriers, and with the electric distribution company as appropriate, to identify electric transmission projects that optimize energy reliability, economic, environmental, and ratepayer impacts for Rhode Island, consistent with the legislative findings and purpose of this chapter.	Upgrades to transmission infrastructure are required in order to integrate large injections of offshore wind. In the ISO-NE 2019 Economic Study only 5800 MW of wind may connect without significant Transmission upgrades . Link to Study presentation:https://smd.iso-ne.com/operations-services/ceii/pac/2020/05/a3_2019_economic_study_offshore_wind_transmission_interconnection_analysis_ceii.pdf	The ISO-NE 2019 Economic Study Identified the following upgrades that may enable additional offshore wind projects: New 345 kV circuit in separate ROW from Cape Cod to K Street, New 345 KV circuit from Brayton Point to K Street or Mystic, New 345 kV circuit in separate ROW from Kent County to Sherman Road, New 345 kV circuit from Montville to Southwest Connecticut	N/A	N/A	Direct connections to major load centers using HVDC
Shell	5		Massachusetts General Laws/Pt/Title XXII/Chaptor 164/Section 92B: Electric Sector Modernization Plans				The department shall direct each electric company to develop an electric-sector modernization plan to proactively upgrade the distribution and, where applicable, transmission systems to: (i) improve grid reliability, communications and resiliency; (ii) enable increased, timely adoption of renewable energy and distributed energy resources; (iii) promote energy storage and electrification technologies necessary to decarbonize the environment and economy; (iv) prepare for future climate-driven impacts on the transmission and distribution systems; (v) accommodate increased transportation electrification, increased building electrification and other potential future demands on distribution and, where applicable, transmission systems; and (vi) minimize or mitigate impacts on the ratepayers of the commonwealth, thereby helping the commonwealth realize its statewide greenhouse gas emissions limits and sublimits under chapter 21N.	Massachusetts General Laws/Pt/Title XXII/Chaptor 164/Section 92B: Electric Sector Modernization Plans https://malegislature.gov/Laws/GeneralLaws/Part1/TitleXXII/Chapter164/Section92B Effective August 11, 2022	Yes, the provision specifies upgrades to transmission lines and grid infrastructure to enable and increase the adoption of renewable generation. As well as plan for climate change, integration of storage and consider needs for increasd reliability.	The Provision requires the utilities to plan proactively for grid modernization, specifying renewable integration and transmission system upgrades	Actions would cover the entire state and may impact neighboring states as it is planned and implemented in conjunction with additional grid system actions	N/A	N/A	This provision in law is recent and clearly demonstrates the need for planning actions to implement the adoption of renewable energy, storage and preparedness for climate change.

Category	Explanation
Entity	Name of Commenter/Company
Reference #	Unique number
Public Policy Requirement Enacted at Federal, State, Municipality, County or other level	Indicate where (ie US, CT, Norwich, and Middlesex). Only one entry per Ref #
Description of Public Policy Requirement	Explain PPR
Reference to law, statute, regulation, etc.	Where is the public policy requirement defined (specific site)
Does the identified statue or regulation expressly require the construction of transmission infrastructure? If so, identify all relevant provisions.	Indicate whether the identified statute or regulation expressly requires the construction of transmission facilities (yes or no). If yes, identify the relevant provisions.
Explanation of how public policy requirement drives transmission need	Why is transmission needed to meet this requirement?
Possible type and location (area/substation) of transmission facilities that may be needed	Where could transmission be built to meet this need (area and/or substation location)
Are compliance alternatives identified in the statute or regulation? If so, identify all relevant provisions.	Explain whether compliance alternatives are considered in the statute. If so, please 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.	Explain whether the statue or regulation provides for non-compliance alternatives. If so, please identify all relevant provisions.
Any other additional information Entity feels is relevant	Information beyond what is asked for above

2. **Rhode Island Energy – email, letter, template**

From:	Thomson, Brian Keith
To:	Public Policy
Cc:	Rumsey, Amanda; Richards, Cleveland; Walker, Preston; Porter, John; Nadel, Steven M; Supinski, Kyle J
Subject:	Rhode Island Public Policy Transmission Needs Drivers for Consideration in ISO-NE PPTU Study Process
Date:	Monday, February 27, 2023 4:07:03 PM
Attachments:	image001.png 2023 Public Policy Transmission Upgrades Response Final (RIE).pdf Final - 2023_public_policy_input_template.xlsx

Dear Sir or Madam,

Attached please find a cover letter and documentation of the Rhode Island public policies that RIE believes may potentially drive the need for new transmission upgrades in Rhode Island. Please take these into consideration during your review of public policy drivers for the current PPTU study cycle.

Thank you

Best regards,

Brian Thomson | Sr. Transmission Regulatory Policy Specialist
RTO and Federal Regulatory Policy | phone: (267) 981-3057 | bkthomson@pplweb.com

PPL
2 N. Ninth Street
Allentown, PA 18101-1179

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

Re: Public Notification for Public Policy Requirements Submittals

Rhode Island Energy supports ISO-New England's efforts to assess and upgrade regional transmission facilities as necessary to fulfill state and federal public policy needs. Our input in the attached table, provided for the consideration of ISO-NE, notes that transmission line upgrades will be needed in Rhode Island to relieve DER generation and electrification load increases on the distribution system while preserving grid reliability on the transmission system, and also to accommodate power flows from offshore wind generation. The objectives of such lines would be:

(1) to serve as an express path to move DER solar generation around the state,
(2) to maintain the voltage performance of the RI transmission system by ensuring large electrification load is connected closer to the Bulk Electric System (BES) rather than through long distribution circuits, and
(3) to allow transfer of offshore wind generation to RI customers as well as the rest of New England.

Thank you for your consideration.

Contact Information:
Preston Walker
Manager, Transmission Planning & RTO Strategy
(484)633-0996
pwalker@pplweb.com
827 Hausman Rd, Allentown, PA 18104

Entity	Ref #	State	Description of Public Policy Requirement	Reference to law, statute, regulation, etc.	Does the identified statute 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
Rhode Island Energy	1	Rhode Island	Rhode Island has enacted several state mandates designed to significantly reduce greenhouse gas emissions, expand offshore wind resources and require that 100% of electricity demand in the state is met by renewable resources.	Renewable Energy Standard - R.I. Gen Laws § 39-26 et seq. (2004, as amended in 2022) Act on Climate - R.I. Gen Laws § 42-6.2 et seq. (2021) Affordable Clean Energy Security Act - R.I. Gen Laws § 39-31-10 (2022)	No	Integration of DER and offshore wind required to ensure RI state climate and renewable energy goals can be met is expected to exceed the capabilities of the distribution and transmission system in RI. In particular, (1) the south to north and west to east transmission corridors in RI can not accommodate the offshore wind MW totals anticipated to be necessary to meet the requirements of the Affordable Clean Energy Security Act, and (2) even when assuming distribution system investments to accommodate high penetration of DER are made, the existing distribution system in RI would still be significantly overwhelmed by the magnitude of solar DER and electrification load penetration necessary to fulfill the state goals. For both these reasons, new transmission will also be required to compliment distribution system investments and facilitate meeting Rhode Island's climate and renewable energy goals.	It is anticipated that new 345 kV and/or 115 kV transmission line upgrades will be needed in Rhode Island to relieve DER generation and electrification load increases on the distribution system to preserve grid reliability and accommodate south to north power flows from offshore wind generation. The objectives of such lines would be (1) to serve as an express path to move DER solar generation around the state, (2) to maintain the voltage performance of the RI transmission system by ensuring large electrification load is connected closer to the BES transmission system rather than through long distribution circuits, and (3) to allow transfer of offshore wind generation to RI customers as well as the rest of New England.