UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection	Docket No. RM21-17-000

REPLY AND POST-TECHNICAL CONFERENCE COMMENTS OF ACADIA CENTER AND CONSERVATION LAW FOUNDATION

November 30, 2021

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Pursuant to the Advance Notice of Proposed Rulemaking ("ANOPR") issued by the Federal Energy Regulatory Commission ("Commission") on July 15, 2021, the Notice of Extension of Time dated September 3, 2021, and the Commission's November 17, 2021 Notice Inviting Post-Technical Conference Comments in the above-captioned proceeding, Acadia Center and Conservation Law Foundation ("CLF") submit these joint reply comments and limited responses to the November 15 technical conference. Previously, on October 12, 2021, Acadia Center and CLF filed joint initial comments together with other public interest parties in strong support of the Commission's general trajectory in the ANOPR including the intent to reform transmission planning to better integrate state clean energy and decarbonization laws and policies, as well as state policies on equity and environmental justice.[1] These reply comments continue to support many of the reforms raised for consideration in the ANOPR.

I. Reply Comments

The timely questions raised by the Commission's ANOPR have prompted insightful comments from parties across the country, including important discussions by a number of New England stakeholders. These comments reply primarily to comments of particular relevance to New England.[2] In particular, these comments highlight consensus around reforms the Commission should adopt to better enable the achievement of state and federal public policy, including decarbonization and environmental justice, while eliminating wasteful silo-ing in transmission planning, more strategically considering the benefits of transmission both within and across regions, and containing costs through common-sense measures including competitive solicitations, optimizing the use of existing transmission, and considering non-transmission

[1] Comments of Sustainable FERC Project et al., elibrary no. 20211012-5519.
[2] Acadia Center and CLF are also separately participating in joint reply comments with the Sustainable FERC Project *et al*. regarding broader recommendations for transmission planning and cost allocation reforms.

alternatives.

These comments also emphasize points of consensus around and potential cost savings arising from improved interregional planning, smarter cost allocation, and the consideration of siting concerns early on instead of as a completely separate, post hoc process that often scuttles plans in regions such as New England. Finally, these comments highlight the critical importance to New England and other coastal regions of improving planning for offshore wind resources, as well as the clear need to improve interconnection procedures, and the potential contributions of independent transmission monitors.

A. The Commission Must Direct the RTOs to Integrate State Laws and Policies Early and Often into Analysis, Planning, and Decision-Making.

Acadia Center and CLF strongly support the Commission's consideration of methods to better integrate relevant state laws and policies into transmission planning. To ensure just and reasonable transmission service and to maintain and strengthen the fairness and competitiveness of the wholesale electricity markets, the Commission must direct the RTOs to re-evaluate their methods of integrating relevant state laws and policies into transmission planning and other decision-making. Specifically, the Commission should direct the RTOs to:

- Re-examine and revise their mission statements and governance structures to ensure that the goal of complying with and advancing state (and federal) laws and policies is integrated into each RTO's goals and practices. For example, each RTO should have a Board committee or other formal body committed to tracking and ensuring the integration of relevant state laws and policies.

- In part by looking at best practices among the RTO regions, consider together with the relevant states whether reforms to the Regional State Committees, and coordination with those committees, would help to achieve just and reasonable outcomes that better integrate state laws and policies in a more expeditious manner. As the Office of the Massachusetts Attorney General notes, it is important to formally define the roles for states and for the regional grid operator.[3]

- Revise their tariffs and practices for identifying, considering, and integrating state

[3] Office of the Massachusetts Attorney General ("Mass. AG") Comments at 12.

> public policy, including proposing methods for integrating state laws and policies that go well beyond current prevailing coordination with Regional State Committees. This is particularly important for multi-state RTOs, which must consider state policies that are not always in complete accord.

In its initial comments, ISO New England ("ISO-NE") importantly finds that, "[a]ffording the states an increased decision-making role in addressing policy-based needs is appropriate, for the decisions inherently involve substantial judgement about the policy-driven trajectory of future demand and resource additions."[4] Accordingly, ISO-NE recently announced, and has made initial steps toward enacting, a plan to revise its tariff to allow the New England States Committee on Electricity ("NESCOE"), the regional-state committee in the region, to propose a long-term, scenario-based transmission study every three years that will be carried out by ISO-NE.[5]

This represents progress, but it is not enough. To date ISO-NE has rejected calls from the states for governance changes that would allow more comprehensive accountability to the states and to the public. In response, ISO-NE argues that its governance structures are similar to those of other RTOs.[6] However, other RTOs may also need to consider reforms to their governance structures, including in response to questions raised by the Commission's ANOPR, in order to ensure accountability and effectiveness through the ongoing energy transition. Furthermore, ISO-NE has not adopted all best practices adopted by other RTOs to improve integration of state laws and policies into decision-making.[7]

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[4] ISO-NE Comments at 22-23.
[5] *See* ISO-NE Comments at 14.
[6] *See* ISO-NE Response to the New England States' Vision Statement and Advancing the Vision Report, slide 14, Sept. 23, 2021, available at https://www.iso-ne.com/static-assets/documents/2021/09/iso-ne-response_to_states-vision_sept_23_2021.pdf ("ISO-NE Response to Vision Report").
[7] For example, state representatives participate in ISO-NE Board meetings in a non-voting capacity. *See* NYISO Bylaws, Article II, Section 7 and Article III, Section 1(c), available at https://www.nyiso.com/documents/20142/1399438/By_Laws_NYISO_2017.pdf/ec19049e-f8f3-f72d-6460-699f8db53251/.

NESCOE requested that ISO-NE convene a process with states and stakeholders to consider changes to the ISO's mission statement and governance structure to strengthen transparency and foster alignment with modern energy policy, but ISO-NE has not done so.[8] NESCOE has asked ISO-NE, at a minimum, to create a Board committee dedicated to ensuring that the states' and public concerns are considered, but to date ISO-NE appears to have declined this request.[9] NESCOE has argued that other RTOs permit state representatives to participate in meetings of their Board, but ISO-NE appears to have rejected this reasoning as well.[10] Without broad accountability to the states and the public, RTOs including ISO-NE will not be nimble, prepared, and equipped to align their duties and functions with the energy transition that is taking place across New England and the nation. Absent such alignment, the RTOs' decision-making and associated rates will not be just and reasonable, nor will investments in their regions provide the maximum benefit for the lowest cost. As Kamran Ali commented at the Commission's technical conference in this proceeding on November 15, 2021, we will be building transmission no matter what, but investing our capital in a coordinated way can save money.

In addition, the RTOs must not constrain their inclusion of state laws and policies and state representatives to certain limited points in time, or to a narrow scope of decisions. As explained by NESCOE in its initial comments, "[l]aws and regulations are not static. Bringing state officials into the conversation both early on and on a continuing basis is the best way to ensure that regional transmission planning will take into account resources - both current and future - needed to meet evolving state requirements."[11] In addition, the states are well-positioned

[8] *See* New England Energy Vision Statement, Report to the Governors, Advancing the Vision, at 17, June 2021, available at https://nescoe.com/resource-center/advancing_the_vision/ ("Advancing the Vision Report").
[9] *Id.*
[10] *See* Oct. 29, 2021 Letter from NESCOE to ISO New England Board of Directors, at 4, available at https://nescoe.com/resource-center/memo_iso_adv_vision/.
[11] NESCOE Comments at 23.

to identify impacts of RTO decision-making on equity and environmental justice, even when the RTO may not realize such impacts are present.[12] Therefore the states should play an ongoing and meaningful role in RTO planning and decision-making.

B. The Commission Must Direct Transmission Planners to Cease Silo-ing Transmission Projects into Arbitrary and Constrained Categories, Including "Reliability" and "Policy."

Critically, the silo-ing of investments does not lead to just and reasonable outcomes and as a result the Commission must direct transmission planners to adopt a more holistic approach. As the Office of the Massachusetts Attorney General explains, Commission Orders No. 1000 and No. 2003 "encouraged the development of siloed regional planning processes that separately evaluate transmission projects for reliability, economic efficiency, and public policy objectives, and thereby are unable [to] consider the full range of potential project benefits and costs."[13] Instead, "regional planners should look holistically at maximizing overall efficiency of the power system rather than segregating projects into artificial silos."[14]

At the same time that ISO-NE acknowledges that better integration of state policy is important if transmission resources are to meet the needs of the New England states, ISO-NE continues to suggest that silo-ing transmission projects into different categories is appropriate. Although ISO-NE states that, "[a]ffording the states an increased decision-making role in addressing policy-based needs is appropriate," ISO-NE distinguishes that, "[t]his stands in contrast to planning for reliability needs, which is based on established reliability standards and criteria."[15] By distinguishing in a black and white way between planning for reliability needs

[12] The states have primary jurisdiction over transmission siting and general to address issues such as protection of natural resources, equity, and environmental justice in their siting decisions.
[13] Mass. AG Comments at 21.
[14] *Id.* at 13.
[15] ISO-NE Comments at 22-23.

and policy needs, ISO-NE overlooks the need to end silo-ing even for projects that are primarily based on reliability. As the Massachusetts Department of Energy Resources concludes in its initial comments, "[a]ll future transmission projects should be considered and planned with an eye toward the region's overall need to simultaneously ensure reliability while electrification takes effect, maintain low system congestion, and integrate significant amounts of clean energy resources."[16]

The Office of the Massachusetts Attorney General provides an important example of the need for this integrated planning in its comments. As those comments explain, the Boston 2028 RFP recently conducted by ISO-NE is an example of a solicitation where "[i]n focusing on cost-effectively solving reliability needs alone, ISO-NE rejected all but one of thirty-six proposals."[17] In rejecting all but the cheapest, most narrowly focused proposal, ISO-NE lost the opportunity to solve multiple system needs in a single project that would have been more cost-effective than multiple transmission projects.[18]

NESCOE correctly finds that, "[l]ike wholesale power markets, transmission and 'public policy … are inextricably intertwined.'"[19] Therefore, state policy input must not be constrained to certain limited "public policy" projects. To clarify, this does not mean that there will never be a need for discrete, near-term reliability-based upgrades. However, it means that reliability needs are not necessarily separate from policy needs, and therefore planners must evaluate them both together.

For these reasons, the Commission must direct transmission planners to move away from

[16] Massachusetts Department of Energy Resources ("Mass. DOER") Comments at 17.
[17] *Id.* at 22 (citation omitted).
[18] *See id*. at 22-23.
[19] NESCOE Comments, citing *ISO New England Inc.*, 173 FERC ¶ 61,161 (2020) (Glick, Comm'r, dissenting at P 7).

silo-ing and require them to balance reliability needs together with policy needs, while recognizing that the two are intertwined, especially in the age of climate emergencies. By addressing both at once, when feasible, the regions can increase efficiencies, including reduced cost and time, while maximizing overall benefits. To his credit, speaking on behalf of ISO-NE, Robert Ethier appeared to move toward acknowledging this challenge in his comments at the November 15 technical conference when he stated that ISO-NE needs to learn how to balance immediate reliability needs against policy goals such as environmental benefits. Mr. Ethier further acknowledged that ISO-NE does not currently have a clear or effective method to evaluate achieving policy goals against the costs required to achieve those goals and would benefit from guidance.

It is ultimately a false narrative that reliability investments lack policy impacts, and that policy investments cannot benefit reliability at the same time. Despite the intent of Order No. 1000, under the current siloed practices in New England, there have been zero "public policy" investments. This provides clear evidence that the current system does not work. ISO-NE's recent steps toward integrating additional public policy goals are directionally positive but fall short of eliminating the harmful silo-ing that increases costs, constrains benefits, and wastes time. It is essential that the Commission direct transmission planners to stop silo-ing transmission planning into artificial buckets that increase costs and require public policy to be addressed as an afterthought at an added cost.

C. The Commission Must Establish a Minimum Set of Benefits to Be Considered in All Transmission Planning.

Most commenters agree that it is necessary to broaden the consideration of benefits that are achieved by transmission, including public policy benefits.[20] Many commenters also appear

[20] *See, e.g.*, Mass. AG Comments at 24-25; U.S. Dept. of Energy ("U.S. DOE") Comments at 23; New England for

to agree that the Commission should establish certain common benefits that must be evaluated by all transmission planners, with additional benefits determined at the regional level with local input rather than by the Commission.[21] Acadia Center and CLF concur with these points.

The Commission should direct transmission planners to adopt a core set of minimum "benefits" that must be evaluated in all transmission planning and require the RTOs to work with the states to identify additional benefits at the regional level. The Commission should direct that, at a minimum, the benefits evaluated must include (but need not be limited to):

(1) Public policy benefits consistent with state laws, regulations, and policies such as decarbonization and environmental justice;
(2) Resilience and reliability benefits, including in response to increasingly volatile and severe storms, fires, droughts, and flooding due to climate change;
(3) Avoided cost benefits, including non-transmission alternatives;
(4) The achievement of higher efficiencies and total cost-reductions due to the ability to address multiple system needs and policy goals in a single project as a result of co-optimization; and
(5) Potential efficiencies or cost-reductions achieved by interregional coordination and planning.

The Office of the Massachusetts Attorney General enumerates several additional criteria that the Commission should also consider, such as reduced energy production cost (i.e. congestion); enhanced access to lower cost generation capacity (e.g. resources in geographically distant wind and solar-rich regions); avoided reliability-must-run contracts; and reduced energy transmission losses.[22] An independent transmission monitor can help ensure that all appropriate benefits are evaluated and achieved, as addressed in more detail below.

D. The Commission Must Ensure the Reasonableness of Costs Through Measures Including Broadening the Use of Competitive Solicitations, Maximizing the Use of Existing Transmission, and Evaluating Non-Transmission Alternatives.

To ensure that the costs of transmission are just and reasonable, the Commission must

Offshore Wind Comments at 4.
[21] *See, e.g.*, Anbaric Comments at 39; Mass. AG Comments at 24-25.
[22] *See* Mass. AG Comments at 24-25.

direct transmission planners to adopt common-sense reforms including the broader use of competitive solicitations, scrutinizing and maximizing the use of existing transmission infrastructure, and the careful consideration of non-transmission alternatives that can reduce consumer costs while diminishing impacts on communities and the environment.

a. The Use of Competitive Solicitations Lowers Costs and Should Be Expanded for Transmission Planning and Acquisition.

The commenters adopt vastly different positions on the value of competition depending on whether such competition offers potential financial benefit to them or not, with most transmission utilities opposing increased competition.[23] Conversely, non-incumbents and commenters with consumer protection interests advocate for enhanced competition to help minimize costs to consumers.[24] Commenters also note that Order No. 1000's promise of increased competition in transmission solutions has not worked as intended and argue that the Commission should investigate and prioritize reforms that encourage competitive transmission solicitations.[25] Anbaric, the Office of the Massachusetts Attorney General, and other commenters argue that, at present, too much transmission planning focuses on time sensitive transmission projects that are not open to competition, or, in the case of ISO-NE, the one-for-one replacement of "asset condition" projects.[26] LS Power notes that transmission rates have skyrocketed due to transmission being built outside of competitive processes and in local planning.[27]

Acadia Center and CLF strongly disagree with the New England transmission utilities'

[23] National Grid Comments at 21-23; Eversource Comments at 13-14; VELCO Comments at 5. National Grid argues that projects based on clean energy drivers should be exempt from Order No. 1000 competition and that, instead, such projects should be built by incumbent utilities. National Grid Comments at 21-23, Att. A at 51.
[24] NESCOE Comments at 28; NARUC Comments at 13, 56; LS Power Comments at 24, 94; Mass. AG Comments at 6-7; Anbaric Comments, Attachment A at 30.
[25] *See* NESCOE Comments at 28; NARUC Comments at 13, 56; LS Power Comments at 24, 31, 94; Mass. AG Comments at 6-7; Anbaric Comments, Attachment A at 30.
[26] ELPC Comments at 15; Anbaric Comments, Attachment A at 27; Mass. AG Comments at 6.
[27] LS Power Comments at 24, 27, 31, 96.

position that competition is unnecessary or in some way harmful. ISO-NE has conducted only one competitive solicitation for transmission pursuant to Order No. 1000, the Boston 2028 Request for Proposal.[28] ISO-NE initiated this solicitation to ensure reliability following the anticipated closure of Exelon's Mystic Generating Station and did so under Order No. 1000 because the upgrades were "deemed to not be time-sensitive."[29] Although ISO-NE received 36 proposals in the Boston 2028 procurement process, it cut short the procurement and awarded the procurement to a joint proposal by New England's two largest investor-owned utilities, Eversource and National Grid.[30] Although the process resulted in the ostensibly least-cost set of upgrades, the selected upgrades were chosen solely for reliability reasons and, as discussed above, failed to consider broader public policy goals in the region.[31] Rather than demonstrate that competitive solicitations are more costly or lead to delays as argued by the utilities, the Boston 2028 procurement process shows that ISO-NE has failed to fulfill the promises of Order No. 1000 and has not increased competitive solicitations for transmission development.

Acadia Center and CLF agree with the Office of the Massachusetts Attorney General, the National Association of Regulatory Utility Commissioners ("NARUC"), and others that increased competition will lower costs for consumers. The Commission must investigate and prioritize reforms that encourage competitive transmission solicitations. Competitive solicitations to integrate offshore wind resources and other renewables and to address the states' public policy goals, such as decarbonization and clean energy targets, are especially warranted.

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[28] *See* Memo on Issuance of the Boston 2029 Request for Proposal, ISO-NE (Dec. 20, 2019), https://www.iso-ne.com/static-assets/documents/2019/12/boston_2028_rfp_announcement.pdf.
[29] *See* ISO-NE Releases RFP for Boston Area Transmission Upgrades, ISO NEWSWIRE, (Dec. 20, 2019) https://isonewswire.com/2019/12/20/iso-ne-releases-rfp-for-boston-area-transmission-upgrades/.
[30] ISO-NE Makes Selection in First Order 1000 Transmission RFP, ISO NEWSWIRE (July 24, 2020), https://isonewswire.com/2020/07/24/iso-ne-makes-selection-in-first-order-1000-transmission-rfp.
[31] *See, e.g.*, Groups Say Boston Electric Grid Upgrades Should Anticipate Offshore Wind, Energy News Network (Sept. 1, 2020), https://energynews.us/2020/09/01/groups-say-boston-electric-grid-upgrades-should-anticipate-offshorewind/.

Moreover, where "asset condition" replacement projects could not only meet reliability needs, but also address public policy needs, such projects should be open to competitive solicitations. The Commission should also prioritize reforms that encourage competitive processes that spur innovative solutions, such as non-transmission alternatives. Competitive transmission solicitations can address multiple needs beyond the narrow reliability needs that non-competitive transmission upgrades have historically focused on, while minimizing costs for consumers.

b. The Commission Must Direct Transmission Planners to Maximize the Use of Existing Transmission and to Consider Accelerated Retirements When Appropriate.

Acadia Center and CLF agree with the comments of Karen Onaran of ELCON at the November 15 technical conference that the Commission should require transmission planners to take a close and critical look at existing transmission to ensure that it is being used to its fullest capability. ELPC similarly argues that the Commission should require transmission planners "to create a systematic process for evaluating the utilization rate of existing transmission infrastructure."[32]

As part of the consideration of maximum utilization of existing transmission, the Commission must direct transmission planners to examine upcoming retirements that may affect future utilization rates. Just and reasonable rates require the consideration of cost-reducing alternatives such as the no-build alternative, as well as a "build less" alternative when appropriate. Furthermore, to ensure just and reasonable transmission rates, the Commission should require planners to consider whether accelerated retirements may be appropriate when it would alleviate congestion or provide substantial new transmission capacity such that additional transmission investments could be cost-effectively avoided or deferred.

[32] *See* ELPC Comments at 21-11.

At the November 15 technical conference, Lauren Azar commented that utilities should be required to confidentially submit a range of information to transmission planners, such as expected new generation and anticipated retirements, when transmission investments are under consideration. This type of information would greatly facilitate the ability of planners to determine the maximum and highest-benefit use of existing transmission lines, while also aiding them to plan the optimal and non-redundant use of any new transmission investments that may be needed, thereby providing overall cost savings.

In a region such as ISO-NE, where the electric utilities are not vertically integrated, the Commission should require transmission planners, or a third-party transmission monitor, to assess the relative system value provided by marginal generators whose retirement could significantly reduce the need for transmission upgrades and thereby slash consumer costs, as well as other impacts. Based on this analysis, planners should target for accelerated retirement those generators that would be likely to retire soon, or that provide only marginal benefit, where the cost savings and benefits of accelerated retirement exceed the benefits of continued operation. It would not be just and reasonable to impose on consumers transmission development costs that could otherwise be avoided with better oversight of the use of existing infrastructure.

c. Non-Transmission Alternatives Broaden Solution Sets and Often Reduce Costs, Therefore They Must Be Carefully Considered.

The Commission must direct transmission planners to consider non-transmission alternatives, such as targeted demand-reduction, that can be provided by distributed energy resources to reduce or defer the need for additional major capital investments. The American Clean Power Association ("ACP") filed joint comments with the U.S. Energy Storage Association ("ESA") that address non-transmission alternatives in detail. The Environmental Law and Policy Center, in comments filed with several other groups (referred to collectively

herein as "ELPC") also touched on important points relevant to non-transmission alternatives in their joint initial comments.

ACP and ESA describe a host of use cases for storage in particular that can aid in transmission planning, including by providing cost-reductions. These use cases include but may not be limited to: N-1 contingency relief; congestion management; provision of grid services such as voltage support, reactive power, synchronous inertia and virtual inertia, and blackstart service; and peak load relief.[33] Because these uses of storage can alleviate the need for additional investments, and/or improve resiliency while lowering costs, transmission planners should be required to consider storage as an alternative or supplement to traditional transmission investments.

The Commission should also ensure that all transmission planners, including ISO-NE, take full advantage of distributed energy resources ("DER"), including through full and ambitious implementation of Commission Order No. 2222. Flexible load and DER more broadly are key resources to lower energy system costs as transportation electrification and other load demands increase, while improving resiliency to contingencies. Maximizing the market participation and availability of flexible load and other distributed resources will reduce the need for more transmission and increase resiliency.

E. Without Enhanced Interregional Transmission Planning and Coordination, Costs Will Be Much Higher, Resilience Will Be Lower, and Needs May Not Be Effectively Met.

The Commission must also direct planners to engage in regular and improved interregional planning. This is important for several reasons, including (1) potential cost-reductions unlocked by improving access to geographically constrained resources such as

[33] ACP Comments at 72-74.

onshore or offshore wind, (2) increased competitiveness associated with less monopoly control and more resource diversity, (3) improved resiliency in the face of increasing storms and other high-impact weather events, such as polar vortexes, which tend to be geographically specific, and (4) enhanced load diversity.[34] As Orsted addresses in its comments, and as these comments address in greater detail below, interregional planning can be particularly instrumental in unlocking substantial new clean resources like offshore wind in the Northeast and Mid-Atlantic.[35] In addition, analysis of the northeast has consistently shown that stronger interregional ties could save consumers many millions of dollars during severe weather events such as cold snaps.[36]

Establishing a set of minimum benefits that planners must consider when evaluating transmission solutions would allow these benefits to be better harmonized across regions and enable more effective interregional planning. As Eversource Energy ("Eversource") argues, "FERC should consider requiring each region to evaluate interregional benefits and seek to harmonize differences between separate regional planning processes."[37] Eversource further points out that one barrier to successful interregional transmission planning is that currently "an interregional project must first be selected in each of the neighboring regions' regional planning processes before being selected in the interregional process."[38] However, "[b]y design, the separate regional processes consider only the intraregional benefits of a particular project."[39] This is a barrier to just and reasonable transmission rates and, as such, requires a remedy. The Commission should direct planners to identify potential interregional benefits of transmission

[34] *See, e.g.*, Eversource Comments at 18.
[35] *See* Orsted Comments at 9.
[36] *See* Grid Strategies, LLC, Transmission Makes the Power System Resilient To Extreme Weather at 2, *available at* https://acore.org/wp-content/uploads/2021/07/GS_Resilient-Transmission_proof.pdf.
[37] Eversource Comments at 19.
[38] *Id.* at 18.
[39] *Id.*

investments, while requiring additional interregional coordination so that such benefits can be more readily identified.

F. Requiring Transmission Planners, Including RTOs, to Consider Siting at the Planning Stage Will Improve Project Success, Reduce Total Costs, and Facilitate More Equitable Outcomes.

The Commission should require transmission planners to consider siting at the planning stage. Planners should work with states and regions to identify stakeholders, conduct outreach, and consider environmental justice and environmental impacts of potential transmission. The states should play a key role in this process due to their expertise in siting and stakeholder outreach. The Commission should engage the Office of Public Participation and the Joint Federal-State Task Force on Electric Transmission in determining how to effectively integrate siting considerations into transmission planning. Finally, planners must consider multi-value projects, impact-reducing non-transmission alternatives, and grid-enhancing technologies.

a. The Commission Must Require Consideration of Siting Issues and Stakeholder Outreach in Regional Transmission Planning.

The lack of siting considerations in current transmission planning leads to delays, inhibits timely communication with communities about proposed transmission projects, including project impacts and potential alternatives, and contributes to unjust and unreasonable rates. By providing potentially affected communities the opportunity to comment on transmission proposals early in the planning process, planners can better understand siting issues that may ultimately inhibit the success of certain transmission projects. This will allow planners to collect the information they need to identify alternative routes and solutions that match the needs of affected communities while also achieving reliability, resiliency, and decarbonization goals.

Considering siting issues in the planning process would not infringe on state siting authority, but rather complement and support the states' ultimate decisional authority over siting.

The states are best positioned to make transmission siting decisions and should retain that primary responsibility.[40] As the Midcontinent ISO ("MISO") points out, the states' role in siting also makes it "important that state considerations be taken into account in the transmission planning process."[41] Engaging states in planning is key to facilitate more equitable outcomes because "[s]tates are best suited to identify potential constraints in siting transmission infrastructure, including . . . any potential adverse impact to environmental justice communities and other marginalized populations."[42]

Incorporating siting considerations into transmission planning, as various commenters recommend,[43] could conserve resources and avoid future siting conflicts. We encourage the Commission "to develop a formal process that uses stakeholder feedback on potential siting concerns to better evaluate the costs and benefits of proposed projects, and to do so early in the planning process."[44] ELPC's recommended criteria[45] are a good starting point for discussion, and we agree that "[t]he Commission should use the Office of Public Participation and the Joint Federal-State Task Force on Electric Transmission to identify best practices for including siting in the transmission planning process."[46] New England for Offshore Wind is also correct that planning should "include an assessment of cumulative impacts to ensure equitable siting."[47]

As ELPC points out, integrating siting considerations into transmission planning should

[40] *See, e.g.*, ISO-NE Comments at 20; MISO Comments at 33; National Grid Comments at 52.
[41] MISO Comments at 33.
[42] Mass. DOER Comments at 14.
[43] *See, e.g.*, NARUC Comments at 12; New England for Offshore Wind Comments at 4; ELPC Comments at 2 ("Transmission siting must become a part of the transmission planning process.").
[44] ELPC Comments at 2.
[45] *Id.* at 9 ("Early identification of and consultation with stakeholders to encourage them to raise potential siting issues early in the planning process. Collecting and using geospatial information to categorize the risk of siting conflicts. Avoiding land and wildlife conservation conflicts and prioritizing development in previously disturbed areas. Avoiding cultural resource conflicts. Maximizing the use of existing infrastructure and rights-of-way, and undergrounding transmission lines whenever economically and logistically feasible.").
[46] *Id.* at 10.
[47] New England for Offshore Wind Comments at 4.

"not be a source of added delay to the process. The goal of including siting early in the process is to reduce unnecessary friction downstream, not to add more."[48] This point bears emphasis given the already lengthy transmission planning process and buildout of new infrastructure. However, the siting challenges that many projects have faced due to local opposition, including prominent examples in New England, suggest that bringing siting considerations into the planning process could allow for a comparison of alternatives, facilitate resolution of such conflicts, and ultimately expedite projects.

In New England, the states have repeatedly resorted to procurements outside of the ISO-NE markets to advance their clean energy and decarbonization goals, both because the wholesale markets do not currently value clean energy attributes and because barriers remain to fair participation by renewables in existing markets. However, participant-funded transmission projects associated with those low-carbon procurements, such as the Northern Pass project and the New England Clean Energy Connect ("NECEC") project selected by Massachusetts as part of a recent RFP, have both faced steep opposition from local communities affected by their siting. Northern Pass ultimately failed after years of investment, and NECEC may follow suit given the results of a recent referendum in Maine opposing completion of the project.[49]

b. The Commission Must Require Planners to Fully Consider Multi-Value Projects and Transmission Alternatives, Including Grid-Enhancing Technologies, as Alternatives to Proposed Transmission Projects.

Multi-value projects may present fewer problems with siting and use regulatory resources more efficiently. The ONE Transmission concept, which NESCOE has proposed in New England,[50] and similar concepts to promote multi-value projects, have the potential to make

[48] ELPC Comments at 2.
[49] *See* Reuters, *Maine voters reject Quebec hydropower transmission line* (Nov. 3, 2021), https://www.reuters.com/world/americas/maine-voters-reject-quebec-hydropower-transmission-line-2021-11-03/.
[50] The ONE Transmission concept proposes integrating public policy-driven transmission options into ISO-NE's

transmission planning and siting more efficient.[51] Multi-value projects may be more likely to get built because their benefits may be more apparent and compelling to state siting authorities and stakeholders. Acadia Center and CLF agree with NARUC that project viability assessments should examine siting issues and state land use laws, as they may constrain siting options.[52] A clear explanation of projected costs and benefits, including all relevant factors, is important both to assess project viability and to communicate these costs and benefits to state siting authorities and stakeholders. As NARUC points out, states may be reluctant to site new transmission projects where an applicant has not articulated quantifiable and verifiable benefits.[53]

Alternatives such as grid-enhancing technologies ("GETs") can mitigate siting impacts by avoiding or deferring the need for new transmission.[54] The Massachusetts Department of Energy Resources observes that GETs "are particularly important as new transmission facilities become more and more difficult to site across New England."[55] The Commission should require planners to evaluate transmission alternatives in all planning processes to ensure that these technologies are adequately considered.[56] In circumstances where new transmission infrastructure would have negative environmental justice, community, or ecological impacts, planners should be required to give such alternatives a high priority.

G. To Advance Just and Reasonable Outcomes in Transmission Planning That Are Consistent with Public Policy, the Commission Must Require Planners to Integrate Stakeholder Outreach and Consider Environmental Justice Impacts.

Environmental justice historically has not been sufficiently considered or prioritized in

system reliability planning. *See* NESCOE, *Overlay Network Expansion (ONE) Transmission: Concept for Discussion* (Apr. 14, 2021), https://nescoe.com/resource-center/onetx-apr2021/.

[51] NESCOE Comments at 13 ("ONE Transmission could also promote regulatory efficiency: siting a single multi-use transmission project can avoid separate siting proceedings, potentially only years removed, involving the same right-of-way or substation.").

[52] *See id*.at 8-9.

[53] *See id.* at 27.

[54] *See* NARUC Comments at 9; NESCOE Comments at 41.

[55] Mass. DOER Comments at 20.

[56] *See* ELPC Comments at 11.

transmission planning, and this must change to ensure just and reasonable outcomes consistent with public policy. Robust stakeholder engagement, targeted outreach to environmental justice communities, and consideration of environmental justice impacts in the planning process, including cumulative impacts and alternatives to proposed projects, is critical to achieve equitable outcomes.

Acadia Center and CLF agree with commenters that the Commission should require environmental justice considerations to be integrated into transmission planning. NESCOE asks the Commission to "[e]nsure that regional planning processes accommodate state efforts to advance equity and environmental justice concerns."[57] The Office of the Massachusetts Attorney General goes further, asking the Commission to "address existing inequities and deliver environmental justice *at every stage* of the transmission planning, development, and cost allocation process."[58] There is general agreement that the Office of Public Participation can play a valuable role in facilitating stakeholder engagement and promoting environmental justice.[59]

a. The Commission Must Direct Stakeholder Outreach to Communities During the Process of Transmission Planning, Not Post Facto.

The Commission should involve the Office of Public Participation ("OPP") and the Joint Federal-State Task Force on Electric Transmission in developing stakeholder engagement best practices, including outreach to potentially affected communities and traditionally disadvantaged groups. More robust participation, especially by stakeholders that are not currently engaged, can help build consensus and address local concerns. As the U.S. Department of Energy asserts, "[a]ctive participation by state and local officials *and community members* is essential to the

[57] NESCOE Comments at 5.
[58] Mass. AG Comments at 32 (emphasis added).
[59] *See, e.g.*, New England for Offshore Wind Comments at 4.

success of the transmission planning process."[60] The Office of the Massachusetts Attorney General also appropriately requests the Commission to "engage affected communities much earlier in the planning process than is status quo and ensure there are more opportunities for diverse stakeholder engagement at every stage of the planning process."[61] Acadia Center and CLF agree with New England for Offshore Wind that OPP should play a key role in developing "a robust stakeholder engagement process . . . that is inclusive from the start to ensure that communities are aware and involved . . . [especially] disadvantaged communities that have borne the brunt of many past energy and industrial impacts."[62]

The Commission should direct OPP to work with RTOs and states to provide direct stakeholder outreach in transmission planning. This outreach should involve, at a minimum: (1) ensuring that community members are aware of proposed transmission projects that may affect them, (2) providing meaningful opportunities for community members and organizations to get involved in the planning process, including opportunities for written and oral public comments, and (3) providing resources and technical assistance, including plain-language summaries and translated materials as needed. This outreach must place an emphasis on environmental justice communities because such communities bear heavier burdens from energy infrastructure, are systemically disadvantaged due to historic and persistent racial, ethnic, and socioeconomic discrimination, and have fewer financial, legal, and political resources. As the Office of the Massachusetts Attorney General recognizes, "communities that bear the greatest harms from the energy system have often had the least access to and least input into the planning and decision-making processes that affect them."[63] That dynamic needs to change.

[60] U.S. DOE Comments at 22 (emphasis added).
[61] Mass. AG Comments at 34.
[62] New England for Offshore Wind Comments at 4.
[63] Mass. AG Comments at 33.

b. The Commission Must Require Consideration of Environmental Justice Consistent with the Public Interest and Established Public Policy.

In addition to requiring robust stakeholder engagement and outreach to environmental justice communities and other potentially affected groups, the Commission must require planners to consider environmental justice impacts in evaluating proposed projects. Many state laws and federal policy increasingly prioritize avoiding impacts on environmental justice communities because these neighborhoods are already disproportionately burdened by energy infrastructure and industrial facilities. Regional planners, however, have not meaningfully incorporated environmental justice into transmission planning. For example, ISO-NE has not acted on the New England states' requests to create an equity and environmental justice working group and promote greater accessibility at the regional level.[64] Federal action is needed to ensure that regional planners appropriately consider equity and environmental justice.

Commenters identify key actions the Commission should take to "ensure that the burdens of new transmission infrastructure do not fall disproportionately on historically underserved and environmental justice communities and that the benefits are equitably shared."[65] For example, the Office of the Massachusetts Attorney General recommends that "[n]ew transmission proposals should be evaluated with equity impacts and mitigation opportunities as a central consideration."[66] We agree that the Commission should require planners to integrate these key considerations. As discussed elsewhere in these comments, the Commission should also require planners to assess cumulative impacts[67] and require transmission alternatives to be utilized where possible to minimize siting burdens on environmental justice communities.

[64] NESCOE Comments at 10.
[65] Joint State Agencies Comments at 3.
[66] Mass. AG Comments at 34.
[67] *See* New England for Offshore Wind Comments at 4; U.S. DOE Comments at 4.

Finally, the Commission should provide states with a more meaningful role in evaluating and selecting policy-driven transmission projects, which NESCOE contends is necessary to make progress in the areas identified in the ANOPR, and will "help state officials integrate equity and environmental justice considerations . . . into state energy infrastructure decision-making."[68] As NESCOE states, the Commission should consider reviewing Order No. 719 and make any changes as needed to ensure "that regional planning processes accommodate states' efforts to advance equity and environmental justice considerations."[69]

H. The Commission Must Establish Minimum Standards for Regional Cost Allocation Along with a Minimum Set of Benefits to Ensure Just and Reasonable Rates.

In New England, as in other regions, regional transmission planning is conducted in a siloed manner that assesses needs driven by reliability, economic considerations, and public policy requirements separate from one another—and the cost allocation methods for the transmission facilities developed in response to these needs are likewise separated by type.[70] As noted earlier, siloed planning and cost allocation in New England has resulted in a paradigm that fails to consider the suite of benefits that transmission facilities provide, and therefore fails to allocate the costs of such facilities roughly commensurate with the benefits.[71] The Office of the Massachusetts Attorney General correctly points out that New England's siloed approach to planning inhibits identification of multi-value solutions, and that a more integrated and holistic process is needed for projects identified through the regional transmission planning process.[72] Acadia Center and CLF agree that the "regional allocation of costs for such projects should be rooted in evaluation of regional costs and benefits and should be designed to guide cost

[68] NESCOE Comments at 11.
[69] NESCOE Comments at 32.
[70] *See* ISO-NE Comments at 5-7, 19-20.
[71] ANOPR, at ¶ 85; FERC, Order 1000 at ¶ 586(1).
[72] *See* Mass. AG Comments at 22, 25-26.

allocation determinations for regionally planned solutions portfolios."[73]

To meaningfully and effectively reform cost allocation in New England and other regions, there must be revised regional cost allocation methods that break down the planning and cost allocation silos, in part by more comprehensively identifying and measuring all of the benefits of regional transmission facilities, including reliability, resiliency, economic, and public policy benefits.[74] As the Commission noted in Order No. 1000, and in the ANOPR, if cost allocation methods do not appropriately account for the benefits associated with new transmission facilities, they can result in rates that are not just and reasonable or are unduly discriminatory or preferential.[75] Therefore, to fulfill its statutory duties, the Commission must develop a rule that facilitates the development of revised cost allocation methodologies that ensure that rates are just and reasonable. As discussed more fully below, the Commission should establish minimum guidelines and standards for cost allocation, including a minimum set of benefits metrics to be assessed in regional planning and cost allocation.

In developing these guidelines and standards, the Commission should draw on well-established and proven models for regional planning and cost allocation that help plan and pay for portfolios of multi-value projects that address reliability, resilience, economic, and public policy benefits and assess all benefits of transmission facilities. For instance, MISO's Multi-Value Project ("MVP") methodology assesses and approves projects as part of a portfolio of projects addressing reliability, economic, and public policy. As MISO notes in its initial comments, the Commission previously found that the MVP methodology identifies projects that provide regional benefits, allocates the costs of those projects accordingly, and therefore marks

[73] Mass. AG Comments at 26.
[74] ANOPR, at ¶ 86.
[75] ANOPR, at ¶ 69; FERC, Order 1000 at ¶ 487.

"an important step in facilitating investment in new transmission facilities to integrate large amounts of location-constrained resources, including renewable generation resources, to further support documented energy policy mandates or laws, reduce congestion, and accommodate new or growing loads."[76]

a. The Commission Must Establish Minimum Standards for Regional Cost Allocation Together with a Minimum Set of Benefits.

The Commission should establish minimum standards for regional cost allocation. These standards could set a project size threshold, above which regional cost allocation will be triggered and, using a minimum set of benefits identified by the Commission, as discussed below, could set a regional project benefit threshold, above which regional cost allocation will be triggered. The Commission should allow regions to determine other triggers for regional cost allocation, for example projects that advance a state's (or states') public policies and projects that benefit multiple states. The Commission should establish regional cost allocation principles applicable in all regions, like its regional cost allocation principles in Order No. 1000.

In developing regional cost allocation standards, the Commission should establish a minimum set of benefits of transmission facilities. The U.S. Department of Energy correctly advises the Commission to establish a minimum set of potential benefits (and costs) to be considered, to ensure that they are taken into account in both project selection and in the allocation of costs for selected projects.[77] As the Department of Energy points out, the Commission has determined in another context, and the D.C. Circuit has recognized, that it is "undisputed" that "high-voltage power lines produce significant regional benefits" and a cost sharing mechanism that ignores the regional benefits of a project would be inconsistent with

[76] MISO Comments at 9, *citing* Midwest Indep. Transmission System, Inc. 133 FERC ¶ 61,221 at ¶ 3 (2010).
[77] U.S. DOE Comments at 23.

Section 206.[78] As discussed above, the minimum set of benefits should include, among others, reliability and resiliency benefits and public policy benefits. The Commission should make consideration of these benefits mandatory in regional transmission cost allocation.

There is support from a diverse set of New England stakeholders for a more comprehensive assessment of the benefits of new transmission facilities and, relatedly, support for the elimination of New England's siloed approach to planning and cost allocation that has prevented consideration of multiple value streams and cost-effective transmission solutions. For instance, Avangrid, Inc. supports a cost allocation framework that "considers all beneficiaries of transmission solutions that have more than one value stream (e.g., reliability, economic, public policy, interconnection benefits)."[79] Similarly, the Office of the Massachusetts Attorney General calls for the adoption of reforms that ensure regional planners evaluate "a more comprehensive range of a project's benefits according to pre-established, uniform criteria that are clear, real, and objective, and that better capture the many diverse values a transmission project is anticipated to provide to the system."[80] Further, New England for Offshore Wind urges that analyses for cost responsibility take into account climate change, public health, cost reductions, system reliability, and resilience, and that the Commission promote a "broad and forward-looking allocation of these benefits to all beneficiaries of a project."[81]

A more comprehensive assessment of benefits and costs of new transmission facilities must allow for the regionalization of some costs that historically have been considered local. For instance, if a transmission project with regional benefits will only gain local acceptance—and therefore become permittable—if it is buried, then the costs of burial should likely be deemed a

[78] *Id*., at 15, *citing Old Dom. Elec. Coop. v. FERC*, 898 F.3d 1254, 1260 (D.C. Cir. 2018).
[79] Avangrid Comments at 9.
[80] Mass. AG Comments at 24-25.
[81] New England for Offshore Wind Comments at 4.

regional expense of building the project that should not be borne solely by the host state's ratepayers.

b. Minimum Regional Cost Allocation Standards Should be Complemented by Regional Variation.

As with transmission planning standards, the Commission must establish minimum cost allocation standards that apply in all regions, while allowing for some degree of regional flexibility. ISO-NE urges the Commission to allow for broad regional flexibility with respect to any transmission planning, interconnection, and cost allocation reforms the Commission deems necessary, citing a "long history of working together, proactively and cooperatively" in New England and "long-standing rules developed by consensus in the region."[82] As discussed above, however, the siloed nature of existing planning and cost allocation processes in New England and other regions means that not all values and benefits of new transmission facilities are appropriately accounted for, which can result in unjust and unreasonable rates. ISO-NE claims that the alternative to regional flexibility—the one-size-fits-all approach—fails to recognize the importance of "approved and appropriate regional variations."[83] In doing so, however, ISO-NE presents the Commission with a false choice between regional flexibility and Commission-issued standards.

Contrary to ISO-NE's comments, the Commission need not choose between these two approaches. Rather, the Commission can and should establish minimum planning and cost allocation standards that apply in all regions, while allowing for some degree of regional flexibility. Such a "yes and" approach will facilitate a more integrated and holistic assessment of reliability, economic, and public policy needs while allowing for regional variations, and, by

[82] ISO-NE Comments at 2, 17-18.
[83] *Id.* at 18.

allowing for a comprehensive assessment of costs and benefits, will ensure that rates are just and reasonable. This type of approach has been adopted with respect to electric sector reliability standards: the North American Electric Reliability Commission ("NERC") has developed and administers a set of continent-wide reliability standards, which are complemented in different regions by regional reliability standards.[84]

A set of Commission standards complemented by regional variations will provide an improved framework for planning and cost allocation processes in New England and elsewhere, in particular with respect to public policy transmission upgrades. As ISO-NE points out, despite facilitating $12 billion of investment in transmission since 2002 to meet reliability needs, the regional planning process has not yet identified any need for public policy transmission projects.[85] The failure to develop any public policy transmission projects in the region can be traced in part to cost-benefit analyses and cost allocation methods that fail to account for and allocate all benefits of public policy transmission projects, and allocate according to the beneficiaries. By establishing minimum standards for regional cost allocation and requiring consideration and assessment of a set of minimum benefits, the Commission can break the impasse that has prevented the development of any public policy transmission projects in New England.

The New England states, despite recent calls for regional transmission system planning reforms,[86] and despite indicating in their initial comments to the Commission that they share the Commission's focus on ensuring that transmission costs are matched with the benefits that

[84] 16 U.S.C. § 824o; NERC, "Standards," available at https://www.nerc.com/pa/Stand/Pages/default.aspx.
[85] Under Section 4A of Attachment K of the Open Access Transmission Tariff, 70% of the costs are shared by consumers through the region on a load-ratio basis; 30% of the costs are allocated to each state in direct proportion to the state's share of the public policy planning need that gives rise to the projects.
[86] New England States' Vision for a Clean, Affordable, and Reliable 21st Century Grid, October 2020, available at: https://yq5v214uei4489eww27gbgsu-wpengine.netdna-ssl.com/wp-content/uploads/2020/10/NESCOE_Vision_Statement_Oct2020.pdf.

projects provide, have "deferred" consideration of regional cost allocation until after ISO-NE completes its 2050 Transmission Study so "there is a better understanding of the type and magnitude of transmission needs," and to "prevent complexities around cost allocation from delaying overdue planning and analysis reforms."[87] Given the close relationship between planning and cost allocation, however, deferring consideration of cost allocation prevents the region from advancing meaningful reforms to transmission system planning. Focusing on planning and analysis reforms, without considering cost allocation options and implications, risks significant effort being expended on planning reforms that cannot be reconciled with separate and subsequent cost allocation reforms. Further, the New England states have yet to articulate the ways in which the outcomes of ISO-NE's 2050 Transmission Study will inform or better ensure regional consensus on reforms to regional cost allocation, in particular for public policy transmission upgrades, where cost allocation has been an especially divisive issue.

In short, it is imperative that assessment of regional transmission upgrades related to reliability, economic, and public policy needs be integrated and holistic, and that all benefits be measured to ensure just and reasonable rates. By establishing minimum standards for regional cost allocation and a minimum set of benefits, the Commission can help advance such multi-value assessments and ensure just and reasonable rates.

Even in a region such as New England where not every state has equally ambitious public policies supporting decarbonization, for instance, all benefits of transmission facilities must be accounted for. A multi-value analysis based on minimum cost allocation standards and a minimum set of benefits allows for that. Indeed, as the U.S. Department of Energy correctly points out, just because one state in a region has a certain policy does not necessarily prevent

[87] NESCOE Comments at 47; New England States' Vision Statement at 6.

citizens in the other states without the same policy from receiving benefits.[88] As a result, it would violate beneficiary-pays principles to allocate costs of transmission used to meet a certain state's policy to only the ratepayers in that state.[89] Avangrid proposes an intriguing cost allocation approach aligned with a holistic planning process that would account for tiered benefits, and payments according to tier. For example, where two out of three states have public policies supporting decarbonization, and a third does not have any such policy, public policy costs could be allocated to the first two states, with only economic and reliability costs allocated to the third state.[90]

As with upgrades related to reliability, economic efficiency, and public policy, the Commission also needs to reform cost responsibility for interconnection-related upgrades. As the U.S. Department of Energy points out, it may not be appropriate to require a generator seeking interconnection to provide all of the upfront funding for a transmission network upgrade that once built, would provide benefits for others.[91] Shifting an appropriate portion of the front-end costs of interconnection-related network upgrades to the transmission provider may be more equitable than requiring the interconnection applicant to pay all of those costs.[92]

Interconnection of additional clean generation can provide regional benefits and reduce costs. Thus, we agree with the Office of the Massachusetts Attorney General that a version of participant funding under which costs are allocated among a group of interconnection customers could help address cost and uncertainty issues for certain similarly situated developers, as well as the "free rider" problem identified by the Commission, without shifting costs to ratepayers—

[88] U.S. DOE Comments at 41.
[89] *Id*. at 41-42.
[90] Avangrid Comments at 25.
[91] U.S. DOE Comments at 45.
[92] *Id*. at 48.

such an approach might make sense for new offshore wind in New England.[93]

As the New England states seek to advance their public policies, Commission reforms to cost allocation will play a critical role. At the same time, voluntary agreements, by which two or more states can plan and pay for transmission upgrades, may also play an important role in New England and other regions.[94] Such agreements allow states to negotiate transmission upgrades and cost allocation at a sub-regional level.

I. Transmission Planning Specific to the Offshore Wind Industry Should Occur in Parallel with More Holistic and Comprehensive Transmission Planning.

A number of commenters note the challenges of expanding ISO-NE's transmission grid to accommodate the large expected offshore wind buildout required to meet New England states' decarbonization targets.[95] Several commenters advocate for transmission planning processes specific to offshore wind development.[96] Commenters also note that inadequate transmission planning for offshore wind will result in excessive costs in the long run and impede the growth of offshore wind development.[97] According to Anbaric, the current approach of using gen-tie connections as a substitute for offshore wind planning will deplete any excess capacity on the system and subsequent offshore wind projects will face larger onshore transmission upgrades, which will lead to projects being abandoned due to high transmission costs.[98] Anbaric notes that proactive offshore wind planning will result in fewer transmission corridors, which will reduce impacts to the benthic environment, and that in New England such an approach would yield 49

[93] Mass. AG Comments at 28-29.
[94] FERC Policy Statement on Voluntary Agreements, July 2021.
[95] *See* Mass. DOER Comments at 5; New England for Offshore Wind Comments at 2. Mass. DOER notes that Massachusetts alone will likely need more than 15 GW of offshore wind to meet its decarbonization targets. Mass. DOER Comments at 5.
[96] Orsted Comments at 4-6; Mass. AG Comments at 16-17; Anbaric Comments at 6-8, Att. A at 12, 15. Orsted notes that a dedicated transmission planning process for offshore wind, which could later be merged with a more comprehensive and holistic transmission plan. Orsted Comments at 4-6.
[97] Orsted Comments at 4-6; Anbaric Comments 6-8, Att. A at 12, 15.
[98] Anbaric Comments at 6-8.

percent less transmission cables than the gen-tie alternative; reduce onshore upgrade costs by 65 percent, or $1 billion; and result in $20 million in annual cost savings in the near term and $300 million per year by the end of the decade.[99]

Acadia Center and CLF generally agree that the Commission should adopt reforms that encourage transmission planning specifically targeted toward the expected growth in offshore wind generation. While it is essential that transmission planning specific to the offshore wind industry occur in parallel with more holistic and comprehensive transmission planning, a transmission plan specific to offshore wind generation would be useful in planning for its expected growth—including accommodating more than 30 GW of offshore wind generation by 2050[100]—and overcoming the lack of excess capacity on the ISO-NE grid. Moreover, we agree with Anbaric and others that proactive transmission planning will significantly reduce costs.[101] Planning a "transmission first" network, including an offshore transmission grid, to which multiple offshore wind generation projects would connect, could avoid situations where the spiraling cost of transmission required for offshore wind generation results in the abandonment of certain offshore wind projects and prevents the New England states from meeting their decarbonization targets. A situation where significantly increased transmission costs leads to offshore wind projects becoming uneconomical will occur sooner rather than later as excess capacity on the ISO-NE grid is exhausted.

Additionally, interregional planning between ISO-NE, NYISO, and PJM can help further

[99] Anbaric Comments, Att. A at 12, 15.
[100] Massachusetts 2050 Decarbonization Roadmap," *Massachusetts Executive Office of Energy and Environmental Affairs* and *The Cadmus Group*, at 57, https://www.mass.gov/doc/ma-2050-decarbonization-roadmap/download.
[101] For example, in a report prepared for Anbaric, the Brattle Group estimated that a more planned approach to transmission infrastructure for offshore wind could avoid more than $1 billion in onshore transmission upgrades. Johannes Pfeifenberger, Sam Newell & Walter Graf, Brattle Group, *Offshore Transmission in New England: The Benefits of a Better-Planned Grid*, at 8 (May 2020), https://brattlefiles.blob.core.windows.net/files/18939_offshore_transmission_in_new_england_-the_benefits_of_a_better-planned_grid_brattle.pdf.

reduce costs and increase the overall efficiency of the transmission network needed for offshore wind. The Commission should, therefore, encourage ways to improve interregional planning between these ISOs and promote planning for the creation of an offshore transmission network that would connect wind farms to the grids in these three regions.[102]

Current planning for offshore projects demonstrates the consequences of not conducting proactive transmission planning for offshore wind. To date, all of the offshore wind generation projects that intend to connect to the ISO-NE grid have proposed separate gen-ties to connect to the grid.[103] The Mayflower Wind project provides a particularly egregious example of the lack of proactive planning for offshore wind by ISO-NE. Due to limited capacity on the ISO-NE grid in southeastern New England, Mayflower is proposing *two separate* transmission corridors; one corridor will connect to the grid in Falmouth, MA, and a second corridor will connect to the grid at Brayton Point in Somerset, MA.[104] These corridors will both traverse sensitive complex benthic habitats off the coasts of Massachusetts and Rhode Island.[105]

A more proactive approach to transmission planning for offshore wind, including planning both the onshore and offshore transmission network upgrades needed for offshore wind development, would likely significantly reduce costs by obviating the need for two separate transmission corridors for Mayflower Wind to connect to the ISO-NE grid. Further, a more proactive approach to planning that eliminates the need for two separate transmission corridors could reduce environmental impacts to sensitive benthic habitats. Because transmission planning specific to offshore wind would likely dramatically reduce costs and reduce environmental

[102] In general, the reforms advocated for earlier in these comments regarding transmission planning and cost allocation should also be applied to transmission planning that is specific to offshore wind.
[103] *See* Construction and Operations Plans for Vineyard Wind 1, Revolution Wind, Vineyard Wind South, and Mayflower Wind, *available* at https://www.boem.gov/renewable-energy/state-activities.
[104] Mayflower Wind Construction and Operations Plan at 1-3, 3-2.
[105] Mayflower Wind Construction and Operations Plan at 6-134, App. D1 at Att. 1-4, App. D3 at 1-4-1-5.

impacts, the Commission should adopt reforms that encourage such planning.

a. Renewable Energy Zones Have Significant Potential to Help Plan the Transmission Upgrades Needed for Offshore Wind Development.

The identification and establishment of geographic renewable energy zones, similar to the Texas Competitive Renewable Energy Zone, would help proactively and effectively plan the transmission upgrades needed for offshore wind generation.

There were a number of comments on the usefulness of establishing renewable energy zones in New England. ISO-NE largely advocates for maintaining the status quo, noting that its clustering rules already provide the means for assessing and identifying geographic zones with potential for high amounts of renewable energy.[106] Several commenters find that renewable energy zones may have some benefit or are supportive of their establishment, but do not think the Commission should mandate the creation of such zones.[107] In contrast, several commenters recommend that the Commission require transmission providers to identify geographic renewable energy zones.[108] Both UCS and LS Power contend that geographic zones could cost-effectively plan the transmission upgrades needed to meet regional demand for offshore wind.[109] TNC recommends establishing a mandatory process to identify geographic zones, but argues that state, local, and tribal governments must be consulted in the creation of renewable energy zones.[110]

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[106] ISO-NE Comments at 24. New England Consumer Owned Systems also opposes renewable energy zones, finding that ISO-NE's procedures already support the identification of needs in the transmission system and that such zones would improperly pick winners and losers for the forward capacity market. NECOS Comments at 16-17.
[107] *See, e.g.*, National Grid Comments at 18; NESCOE Comments at 20. While National Grid finds that renewable energy zones could better integrate renewable energy, it concludes that states should have significant say in the need for and location of such zones and should not be obligated to join them. National Grid Comments at 18-20.
[108] *See* Union of Concerned Scientists ("UCS") Comments at 32; Nature Conservancy ("TNC") Comments at 7-8; LS Power Comments at 46. Several commenters note that clean energy zones would be useful to integrate renewable resources onto the grid and to meet states' public policy goals, but do not specify whether the Commission should require the creation of these zones. *See* Avangrid Comments at 12; EDF Renewables Comments at 7.
[109] *See* UCS Comments at 32, 40; LS Power Comments at 46.
[110] *See* TNC Comments at 7-9.

As noted in the prior section, transmission planning specific to offshore wind generation can successfully integrate these resources into ISO-NE's grid and meet New England states' decarbonization targets. Further, ISO-NE's clustering methodology has to date been unsuccessful in facilitating the transmission upgrades needed to integrate large amounts of offshore wind generation into the grid in southeastern New England.[111] The evidence, thus, indicates ISO-NE is incorrect when it suggests clustering can serve as a substitute for a more proactive approach to the transmission planning for offshore wind. Renewable energy zones could serve as the avenue for a more proactive approach to transmission planning for offshore wind. Further, given that offshore wind resources are increasingly cost competitive with traditional fossil fuel generation resources[112] and that an increasing number of interconnection customers in the interconnection queue are offshore wind generators, we disagree that the establishment of renewable energy zones for offshore wind would improperly pick winners and losers.

Acadia Center and CLF also agree with commenters that find renewable energy zones would be useful to integrate renewable energy resources into the system, to facilitate the buildout of the transmission upgrades necessary to integrate these resources, and to assist states in meeting their decarbonization targets. In the ISO-NE region, the creation of a renewable energy zone in southeastern New England—both onshore and offshore—could prove especially beneficial for the integration of the numerous proposed offshore wind projects off the coasts of Rhode Island and southern Massachusetts.[113] Such zones could also socialize costs amongst

[111] ISO-NE's clustering rules involve a two-phased methodology that is used in certain circumstances to expedite the consideration of two or more interconnection requests and allocate interconnection upgrade costs among interconnection customers on a cluster basis. *See* Final Second Maine Resource Integration Study, ISO-NE (Oct. 30, 2020), *available at* https://www.iso-ne.com/static-assets/documents/2021/01/ second-maine-resource- integration-study-report-non-ceii-final.pdf.

[112] *See* Lazard's Levelized Cost of Energy Analysis—Version 15.0, Lazard, at 2 (Oct. 2021), *available at* https://www.lazard.com/media/451881/lazards-levelized-cost-of-energy-version-150-vf.pdf.

[113] While these comments have focused on offshore wind, the establishment of a renewable energy zone in northern Maine could also be useful for integrating onshore wind resources in that area into the ISO-NE grid.

offshore wind generators to a greater degree than current practices, like clustering.

Acadia Center and CLF disagree that the creation of renewable energy zones should be voluntary, as a voluntary approach is a likely recipe for continued inaction. However, as suggested by TNC and others, state, local, tribal, and other stakeholders must be extensively consulted in the designation of geographic zones.

J. Due to Delays and Inefficiencies in the Interconnection Process, the Commission Must Adopt Reforms to Improve It.

As the Commission observes in the ANOPR, the current regional interconnection process has significant shortfalls. Specifically, new transmission facilities often have a development lead time that exceeds the interconnection timing needs of those interconnection customers already in the queue and the existing generator interconnection process focuses on the limited set of facilities needed to reliably interconnect a single interconnection customer, without considering whether it would be more cost effective to consider the interconnection-related network upgrades needed for multiple anticipated future generators.[114]

While many of the New England commenters agree there are significant problems with the current interconnection queue process, the comments differ regarding the level of reforms necessary to reform the process. A number of suggested reforms for the interconnection queue process have potential to reduce delays and inefficiencies and align interconnection upgrades with a broader regional transmission planning process.

a. Reliance on Increased Clustering Studies Alone Will Not Adequately Reform the Interconnection Process.

Commenters such as National Grid and NARUC contend that continued and/or expanded use of ISO-NE's clustering study approach could improve and/or make the interconnection

[114] ANOPR at ¶¶ 33, 35.

process more efficient.[115] In its comments, ISO-NE largely advocates for maintaining the status quo with respect to the generator interconnection process, noting that its clustering rules already enable it to identify the transmission infrastructure needed to facilitate the interconnection of renewable resources in remote areas.[116]

Conversely, several commenters question whether the clustering study process, in and of itself, will adequately reform the interconnection process. These commenters note that clustering is inadequate because it does not address long-term needs and is not a substitute for more holistic planning.[117] NARUC and the Massachusetts Department of Energy Resources note that although the cluster study approach provides tangible benefits, such an approach has significant limitations and, thus, maintain that any reform relying on the cluster study approach would likely need to be paired with other solutions to be meaningful.[118] Avangrid favors socializing costs among multiple interconnecting entities to a greater degree to avoid the issue of a first mover bearing the brunt of upgrades costs and associated free ridership.[119]

Acadia Center and CLF agree with the commenters that point out that an expansion of clustering studies is unlikely to solve the problems associated with the generator interconnection process by itself. While clustering does potentially solve some of the problems with generators gaming the interconnection queue process and reduces the unpredictability of the process by spreading costs among multiple interconnecting customers, it is not a substitute for long-term, holistic planning and broader cost allocation reforms. Moreover, evaluating one interconnection cluster at a time can significantly increase transmission-related interconnection costs compared

[115] *See* National Grid Comments at 41; NARUC Comments at 39-40.
[116] ISO-NE Comments at 24-25.
[117] *See* Anbaric Comments, Attachment A at 23; NARUC Comments at 40; Avangrid Comments at 18; New England for Offshore Wind Comments at 3.
[118] NARUC Comments at 40; Mass. DOER Comments at 20.
[119] *Id.*

to a more proactive, regional study process.[120]

Despite attempts over the past decade to rely on the cluster study process to spur the development of the necessary transmission upgrades to connect multiple potential onshore wind generators in northern Maine to the ISO-NE grid, these efforts, so far, have not borne fruit.[121] To date, clustering has not enabled the development of the onshore and offshore transmission upgrades needed to integrate the significant number of expected new offshore wind projects into the ISO-NE grid in southeastern New England. Therefore, although expanded clustering studies may have a role in solving problems with the interconnection process, any increased reliance on clustering must be combined with other reforms in the planning and cost allocation arenas.

b. The Interconnection Process Must Be Aligned with a Broader Regional Transmission Process.

Several commenters note that there should be greater alignment between the interconnection queue process and the regional system planning process.[122] More specifically, the Massachusetts Department of Energy Resources finds that the interconnection of resources should be part of the overarching regional planning process and that it is no longer appropriate to separately assess the transmission upgrade needs for interconnecting generators when those system upgrades can provide regional benefits.[123] Anbaric recommends moving anticipated large

[120] *See* Comments of Sustainable FERC Project, *et al.*, Exhibit A, Transmission Planning for the 21st Century: Proven Practices that Increase Value and Reduce Costs, Brattle Group & Grid Strategies, LLC, at 4, 28 (Oct. 2021) (noting that in PJM, evaluating one interconnection cluster at a time approximately doubled the transmission-related interconnection costs of offshore wind generation compared to a more proactive, regional study process).
[121] *See* EDP Renewables Comments at 13; *see also* 2016/2017 Maine Resource Integration Study, ISO-NE (March 12, 2018), *available at* https://www.iso-ne.com/static-assets/documents/2018/03/final_maine_resource_integration_study_report_non_ceii.pdf; Final Second Maine Resource Integration Study, ISO-NE (Oct.30, 2020). In fact, the lack of progress in developing transmission upgrades in northern Maine resulted in the State of Maine recently passing legislation that requires Maine's Public Utilities Commission to issue a request for proposals to construct a 345-kilovolt transmission line to connect renewable energy resources in northern Maine to the ISO-NE grid. *See An Act To Require Prompt and Effective Use of the Renewable Energy Resources of Northern Maine*, PL 2021, ch. 380.
[122] *See* NARUC Comments at 11; Mass. DOER Comments at 2; LS Power Comments at 46; Anbaric Comments, Attachment A at 23.
[123] Mass. DOER Comments at 2, 19.

system upgrades out of the interconnection process and into the regional planning process.[124]

In contrast, ISO-NE finds that New England's regional system planning and interconnection activities are well-integrated, observing that interconnection activities already feed into regional system plans.[125]

Acadia Center and CLF agree with the Massachusetts Department of Energy Resources, NARUC, and others that there must be greater alignment between the interconnection planning process and regional planning processes; thus, any broader planning reforms must ensure that the regional planning process better incorporates transmission upgrades needed for interconnection customers when those upgrades provide regional benefits. The Commission should encourage reforms that promote the inclusion of interconnection upgrades in regional planning processes where significant network upgrades beyond the gen-tie line are needed.

Acadia Center and CLF contest ISO-NE's assertion that its regional system planning and interconnection processes are well-integrated. ISO-NE's current practice of determining whether interconnection-related upgrades provide system benefits by assessing whether the upgrades are the same or similar to planned or proposed transmission projects is not adequate.[126] Instead, interconnections should be evaluated in a broader transmission planning process so that interconnections with the most efficient and cost-effective points of interconnection and with the broadest benefits can be promoted.

c. The Commission Must Direct RTOs to Streamline the Interconnection Process.

To reduce costs and increase efficiency on electric grids across the nation, the

[124] Anbaric Comments at 3, Attachment A at 23.
[125] ISO-NE Comments at 25. ISO-NE also notes that it "reviews all interconnection-related upgrades identified in Interconnection Studies to determine whether they provide system benefits" and that "[t]his is determined by assessing whether the interconnection-related upgrade is the same or similar to a planned or proposed transmission project for the system." *Id.* at 26.
[126] *See* ISO-NE Comments at 26.

Commission must prioritize reforms that can streamline, reduce timelines, reduce speculative bids, and increase efficiencies for interconnection queues. Several commenters propose reforms that would help achieve these goals, such as by fast tracking certain projects in the interconnection queue, including projects that advance public policy goals[127] or "ready" projects that are willing to meet increased deposit requirements, have entered into PPAs, or already have financing in place.[128] NARUC notes that existing methods for interconnecting resources to the transmission grid are inadequate and inefficient because of the length of time involved.[129] NARUC raises the possibility of requiring more site controls for interconnection customers to prevent them from submitting speculative bids.[130]

On the other hand, EDF Renewables cautions that fast track processes are problematic because they typically prioritize term sheet criteria or power purchase agreements, which can inadvertently erode competition.[131] However, EDF Renewables favors requiring interconnection customers to establish readiness milestones to remain in the queue, such as by demonstrating site control or financial risk, and favors reforms targeting a one-year queue timeline.[132]

Acadia Center and CLF agree with NARUC and EDF Renewables that the Commission should adopt reforms that encourage interconnecting customers to demonstrate certain readiness milestones to remain in the queue, such as demonstrating site control. We also support reforms that could encourage RTOs/ISOs to achieve one-year queue timelines. Finally, although we

[127] *See, e.g.,* NARUC Comments at 35-37.
[128] *See* Avangrid Comments at 19. However, Avangrid favors establishing bright line rules for fast-track processes. *Id.*
[129] *See* NARUC Comments at 33.
[130] *See* NARUC Comments at 33, 35-37. NARUC notes that unlike MISO, for ISO-NE, interconnecting customers can opt-out of demonstrating site control by paying a fee, which allows interconnecting customers to submit multiple speculative bids. It recommends that the Commission eliminate opt-outs and require site control demonstration. *Id.*
[131] *See* EDF Renewables Comments at 15. EDF Renewables also warns that fast track processes may allow vertically integrated utilities to gain a preference for projects they support because utilities can enter into term sheets with those projects. *Id.*
[132] *See* EDF Renewables Comments at 14-15.

understand EDF Renewables' concern that fast-track processes could inadvertently erode competition if projects with PPAs were favored in a fast track, we urge the Commission to seriously consider fast-track processes with less onerous criteria. For example, the Commission could encourage fast-track processes that favor projects that broadly advance state public policy goals and demonstrate a certain level of financing, even if they have not yet entered into PPAs.

d. The Commission Must Address Interconnection Reforms in this Docket in Tandem with Other Reforms.

Eversource suggests that if improvements to the transmission planning process are done correctly, many reforms to the interconnection queue process will be unnecessary and recommends that the Commission consider reforms to the interconnection queue process in a separate proceeding.[133] It is possible that reforms to transmission planning and cost allocation may obviate the need for several of the interconnection reforms being considered in this docket, but not all of them. Further, because the interconnection process is intrinsically related to the broader reforms being considered for transmission planning and cost allocation in this docket, reforms to the former should be considered in this docket.

K. Establishing Independent Transmission Monitors Will Help to Ensure Just and Reasonable Rates.

In New England, high transmission rates and opaque transmission planning processes warrant the establishment by the Commission of independent transmission monitors. As ISO-NE's External Market Monitor recently reported, New England ratepayers pay significantly higher transmission costs than ratepayers in other regions, including NYISO, PJM, and MISO.[134] An independent transmission monitor would provide an important oversight function by allowing for independent evaluation of transmission costs and cost recovery. Thus, we agree

[133] *See* Eversource Comments at 19, 21.
[134] Potomac Economics 2021 Report at 20.

with the Massachusetts Department of Energy Resources that an independent monitor would serve the important role of reviewing and evaluating transmission costs, cost containment, and cost recovery, and that it would help ensure that transmission solutions will provide the maximum amount of benefits to the region while minimizing the cost impacts on consumers.[135] Just as market monitors are indispensable to the administration of wholesale electricity markets, so too could monitors serve a critical role in the oversight of transmission rates.[136]

An independent transmission monitor would also help improve transparency into the transmission planning process in regions like New England. A group of state agencies, including several agencies from Connecticut and the attorneys general from Rhode Island, Vermont, and Massachusetts correctly point out in their initial comments to the Commission that in some regions transparency and the opportunity to participate in the stakeholder process for transmission planning and other RTO functions are inadequate.[137] We agree with these agencies that a lack of transparency and accountability in RTO governance structures undermines public confidence that there are entities ultimately responsible, subject to stakeholder feedback and federal approval, for determining resource adequacy and system planning and operation requirements for the region.[138] We therefore agree that the Commission should establish independent transmission monitors with sufficient authority to review transmission planning processes before projects are constructed to ensure fairness and transparency.[139]

ISO-NE urges the Commission to improve the existing planning process by increasing the role of the states and suggests that adding a transmission oversight entity could weaken the

[135] *See* Mass. DOER Comments at 2, 22.
[136] *See* NESCOE Comments at 33.
[137] *See* State Agencies Comments at 43. As the New England states indicated in their Energy Vision Statement, New England is one of those regions. Energy Vision, at 6.
[138] *See* State Agencies Comments at 43.
[139] *See id.* at 34.

existing process and potentially introduce further delays and risks.[140] But while ISO-NE points to parts of the planning process that allow for stakeholder review and input, there is insufficient evidence that existing processes provide adequate oversight, in particular with respect to transmission costs. For instance, ISO-NE's Planning Advisory Committee is open to the public, but the design of the committee's process, the schedule of its meetings, and the technical nature of the committee proceedings make it largely inaccessible to the everyday ratepayer.

II. Conclusion

Acadia Center and CLF applaud the Commission's efforts to consider these important issues, appreciate the opportunity to provide these comments, and look forward to continued consideration of transmission planning reforms. We urge the Commission to adopt rules that address the deficiencies in current transmission planning, including the failure to adequately integrate state public policy into transmission planning and to conduct forward-looking and coordinated planning within and between planning regions.

Respectfully submitted,

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[140] *See* ISO-NE Comments at 34.