UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

INITIAL COMMENTS OF ISO NEW ENGLAND INC.

ISO New England Inc. ("ISO-NE" or "ISO") respectfully submits these comments in response to the Federal Energy Regulatory Commission's ("Commission") Notice of Proposed Rulemaking on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection issued on April 21, 2022 in the above-captioned proceeding.[1]

I. EXECUTIVE SUMMARY

The Commission's proposed rule is the first since the July 15, 2021 Advanced Notice of Proposed Rulemaking,[2] which proposed to examine the need for reforms in regional transmission planning and generator interconnection processes established in Order Nos. 2003, 890, and 1000.[3]

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[1] *See Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 179 FERC ¶ 61,028 (2022) ("NOPR"). *See also* Notice on Requests for Extension of Time (May 25, 2022) ("Upon consideration, notice is hereby given that the deadline to submit initial comments in response to the NOPR in this proceeding is extended from July 18, 2022 to and including August 17, 2022. Additionally, notice is hereby given that the deadline to submit reply comments is extended from August 17, 2022 to and including September 19, 2022.").

[2] *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Advance Notice of Proposed Rulemaking, 176 FERC ¶ 61,024 (July 15, 2021) ("ANOPR"); Initial Comments of ISO New Inc., Docket No. RM21-17-000 (Oct. 12, 2021) ("ANOPR Comments").

[3] *Standardization of Generator Interconnection Agreements and Procedures*, 104 FERC ¶ 61,103 (2003) ("Order No. 2003"); *Preventing Undue Discrimination and Preference in Transmission Service*, 118 FERC ¶ 61,119 (2007) ("Order No. 890"); *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, 136 FERC ¶ 61,051 (2011) ("Order No. 1000").

In the NOPR, the Commission proposes to expand the existing transmission planning and cost allocation processes established in Order No. 1000 to incorporate, among other things, a long-term planning process that anticipates the needs driven by changes in system resources and demand, and provides the states a greater role in the selection and funding of transmission to meet these needs.[4] The Commission believes these reforms are necessary to address Commission-identified deficiencies in the existing processes affecting the development of transmission to accommodate the clean energy transition.[5] ISO-NE submitted comments on the ANOPR that supported the Commission's long-term regional transmission planning concept,[6] and consistent with those comments, generally supports the Commission's efforts in the NOPR to authorize a long-term planning process for public policy that seeks to provide the states a greater role.

As is well known, the New England region is at the forefront of the clean energy transition, largely due to the New England states' aggressive decarbonization goals, which are expected to drive the dramatic transformation of the resource mix in the region from conventional generators to renewable resources, and increase demand through the electrification of the economy.[7] Achieving this clean energy transition safely and reliably depends, in part, on significant transmission investments. Although New England's existing planning processes are facilitating development of regional high-voltage transmission, a longer-term planning process for public

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[4] *See* NOPR at PP 3-11 (summarizing proposed reforms).

[5] *See* NOPR at PP 24, 47-55. The NOPR identifies the existing regional transmission planning and cost allocation processes are deficient insofar as they fail to: (1) plan sufficiently long-term for needs driven by changes in the systems resources and demand; (2) account for the factors driving these needs; and (3) consider the broader set of benefits and beneficiaries of regional transmission facilities to meet these needs.

[6] *See* ANOPR Comments at 20-25.

[7] For additional details, see ISO New England Inc.'s 2022 Regional Electric Outlook, available on the ISO-NE website at https://www.iso-ne.com/static-assets/documents/2022/06/2022_reo.pdf ("2022 REO").

policy that affords the states a greater, decision-making role is a necessary element to realizing the additional investment needed for a reliable, clean energy future.[8]

As discussed in Sections III and IV below, thanks to New England states and industry stakeholders' proactive and collaborative efforts to address the region's needs, ISO-NE is already implementing or developing Tariff rules that are largely consistent with the spirit of the Commission's proposed long-term planning reforms. The Regional System Planning Process in Attachment K of the OATT already authorizes the ISO to conduct Longer-Term Transmission Studies that may extend beyond the ten-year planning horizon to provide the region visibility into the transmission investment needed to further regional policy-based objectives, such as changes in the resource mix and demand reflected in state laws and policies.[9]

Directionally consistent with the NOPR,[10] under these rules the New England states occupy a central decision-making role through their Regional State Committee, the New England States Committee on Electricity ("NESCOE"). Although the ISO conducts the Longer-Term Transmission Studies, the ISO relies on the states to determine the range of scenarios, including drivers, inputs and assumptions, and timeframes, to be used in these studies. Indeed, pursuant to these rules, the ISO, in conjunction with the states and with stakeholder input, is conducting a transmission study – known as the "2050 Transmission Study" – to identify the transmission

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[8] *See* New England States Committee on Electricity, *New England States' Vision for a Clean, Affordable, and Reliable 21st Century Regional Electric Grid,* Oct. 16, 2020, pp 3-4, https://nescoe.com/resource-center/vision-stmt-oct2020/ ("Vision Statement") (identifying a need for changes in transmission system planning process to provide "a clear understanding of the investments needed in regional transmission infrastructure" to "effectively plan for integrating clean energy resources and decarbonization of the electricity system required by certain states' laws").

[9] *See* OATT, Attachment K at § 16. *See also ISO New England Inc.*, 178 FERC ¶ 61,137 (2022) ("Longer-Term Planning Order").

[10] *See, e.g.,* NOPR at P 244.

infrastructure (and associated cost estimates) needed to reliably serve peak loads in 2035, 2040, and 2050 using future resource and load scenarios that reflect state decarbonization policies.[11] The ISO is also developing additional Tariff rules to facilitate the development of policy-based regional transmission facilities resulting from this and future longer-term studies.[12] As the ISO has indicated, the states should be responsible for determining whether to move forward with transmission and the associated cost allocation method, with the ISO playing a supporting, technical role.

Therefore, ISO-NE respectfully requests that the Commission not set back New England's longer-term planning accomplishments by adopting uniform or prescriptive compliance requirements in a final rule issued in this proceeding. Instead, the ISO requests that the Commission recognize regional differences and allow the ISO flexibility to develop a compliance approach that builds on the region's accomplishments in longer-term planning, consistent with the Commission's long-standing principles.

Consistent with this overarching request, ISO-NE requests the Commission to consider the following comments in formulating a final rule:

- The Commission should explicitly authorize, or allow for, an approach in which the region's states occupy a central decision-making role in *all* aspects of long-term transmission planning for public policy, including scenario analysis development.

- The Commission should not set uniform or prescriptive implementation requirements for long-term scenario analysis or require hardwiring these details into the region's tariff. In ISO's experience with transmission planning based on scenario analysis, these actions will limit the efficacy of the studies.

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[11] Presentations on the 2050 Transmission Study are available on the ISO-NE website at https://www.iso-ne.com/system-planning/transmission-planning/longer-term-transmission-studies/. The 2050 Transmission Study resulted from the New England states' Vision Statement, which also requested that the ISO create system plans, with cost estimates, for 2035 to 2050, to inform the region of the amount and type of transmission infrastructure needed to cost-effectively and reliably serve peak loads given the future resource and load scenarios.

[12] *See ISO New England Inc.*, Attachment K Longer-Term Planning Changes, Docket No. ER22-727-000, 3 (Dec. 27, 2021) ("Longer-Term Planning Changes Filing") (describing the next phase of the rule development effort).

- The Commission should not prescribe the transmission providers' considerations when evaluating benefits of long-term regional transmission facilities. The Commission should maintain its proposal not to mandate a minimum set of benefits for evaluating long-term regional transmission facilities, or for cost allocation purposes. Individual regions should be permitted to determine the benefits that will lead to transmission in the region.

- The Commission should allow for an approach that, with regional states' agreement, provides for the states to choose to move forward with, and select, transmission investment to address system concerns identified through the long-term planning process, and determine the cost allocation method.

- The Commission should require the establishment of a process for right-sizing aging transmission infrastructure for future needs; however, that process should be left up to each region to design and determine how best to implement.

- While the ISO supports evaluating transmission facilities that incorporate grid-enhancing technologies, the Commission should not mandate use of dynamic line rating technology in lieu of transmission. This technology cannot substitute for transmission facilities needed to solve system needs.

II. COMMUNICATIONS

ISO-NE is the independent, private, nonprofit entity that serves as the Regional Transmission Organization ("RTO") for New England. The ISO operates the New England bulk power system and administers New England's organized wholesale electricity market pursuant to the Tariff and the Transmission Operating Agreement ("TOA") with the New England Participating Transmission Owners ("PTO"). As the RTO, the ISO has the responsibility to protect the short-term reliability of the New England Control Area and to plan and operate the system according to reliability standards established by the ISO, the Northeast Power Coordinating Council, Inc. ("NPCC") and the North American Electric Reliability Corporation ("NERC").

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III. BACKGROUND

A. Basis for the NOPR

The NOPR represents the Commission's first step in the efforts initiated through the ANOPR to update its existing transmission policies to spur needed transmission to facilitate the clean energy transition. According to the NOPR, reforms are needed to address Commission-identified deficiencies in the existing transmission planning and cost allocation processes established under Order No. 1000. The Commission believes these processes fail to (1) plan on a sufficiently long-term basis for the transmission needs driven by the changes in resource mix and demand; (2) account for the drivers of these needs; and (3) consider the broad set of benefits and beneficiaries of regional transmission facilities to meet those needs.[13] The Commission seeks to address the result of these deficiencies, which is the piecemeal and inefficient development of high-voltage transmission facilities through processes outside the regional transmission planning process, such as generator interconnection processes.[14] The NOPR avers this paradigm could result in Commission-jurisdictional rates that may be unjust and unreasonable and unduly discriminatory and preferential.

To address these deficiencies, the NOPR proposes substantial reforms to the transmission planning and cost allocation processes. These include reforms to (1) establish a long-term (over twenty-years), scenario-based planning process that anticipates the needs driven by the changes in the resource mix and demand, and provides the states a decision-making role on cost allocation for

[13] *See* NOPR at PP 24, 47-55.

[14] *See* NOPR at P 24. *See also* PP 27-28, 36-37, 43.

long-term transmission facilities selected in that process; (2) partially restore incumbent transmission owners' rights-of-first-refusal to build regional transmission facilities where a joint ownership with unaffiliated entities exists; (3) enhance transparency in local transmission planning processes and provide opportunities for modifying or right-sizing aging transmission infrastructure replacements for future needs; and (4) update interregional planning rules to reflect the long-term regional transmission planning reforms.[15]

With respect to long-term planning, the NOPR proposes to require that transmission providers conduct long-term regional transmission planning for needs driven by changes in the resource mix and demand. As part of this process, transmission providers would be required to (1) identify transmission needs driven by changes in the resource mix and demand through the development of long-term scenarios that satisfy Commission-prescribed requirements; (2) evaluate the benefits of regional transmission facilities to meet these needs over a period of at least twenty years, starting from the estimated in-service date of the transmission facilities; and (3) establish transparent and not unduly discriminatory criteria to potentially select for inclusion in system plans those regional transmission facilities that more efficiently or cost-effectively meet the needs.[16] This long-term process would be in addition to existing near-term reliability and economic planning requirements, but compliance with the process would satisfy Order No. 1000 public policy requirements.[17]

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[15] *See* NOPR at PP 3-9.

[16] *See* NOPR at PP 56, 69.

[17] *See* NOPR at PP 89-90.

B. Longer-Term Planning Efforts to Meet New England's Needs

On October 12, 2021, ISO-NE submitted its ANOPR Comments. Among other things, the ANOPR Comments described the existing Regional System Planning Process and associated cost allocation rules, how those existing processes are facilitating New England's clean energy transition, and the initiatives underway to align the processes with the New England states' clean energy policy goals.[18] For efficiency, these comments incorporate by reference and expand on the ANOPR Comments to address the specific long-term planning and cost allocation reforms proposed in the NOPR.

As the ANOPR Comments conveyed, ISO-NE supports the Commission's long-term planning goals, as they are largely consistent with New England's longer-term planning efforts to facilitate the state-driven clean energy transition safely and reliably. The New England states have set aggressive targets to increase renewable resources and reduce greenhouse gas emissions to nearly zero by 2050.[19] These state-led decarbonization goals are expected to drive the dramatic transformation of electricity demand and resource mix in the region. ISO-NE forecasts that electricity demand will increase significantly over the next decade due to economy-wide electrification, including heating and transportation sectors.[20] And, based on the ISO's interconnection queue as of March 2022, the future resource mix proposed to meet that demand comprises 96% renewable resources, totaling approximately 30,000 MW, including approximately

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[18] *See* ANOPR Comments at 3-11.

[19] *See* 2022 REO at 6.

[20] *See* 2022 REO at 3. By the early part of the next decade, the ISO forecasts an additional 1,556 MW due to heating electrification, and another 1,535 MW (winter) due to transportation electrification.

20,000 MW of wind facilities.[21] A safe and reliable transition into a future grid fueled by these renewable resources to meet the anticipated demand growth requires, in part, significant transmission investment.[22]

ISO-NE's long-standing planning processes are already facilitating the transmission investment that can further clean energy transition.[23] One of these mechanisms is the Regional System Planning Process, which is the main vehicle for building high-voltage transmission facilities in New England. Currently, the New England transmission system comprises approximately 9,000 miles of high-voltage transmission lines rated, primarily, at 115 kV and 345 kV. Since 2002, the ISO's conduct of regional transmission planning has led to the investment of approximately $12 billion in reliability-based transmission across all six New England states, with an additional $1.3 billion in planned investments.[24] These transmission investments funded by New England's Transmission Customers have provided benefits well-beyond reliability. Investments to date have substantially reduced congestion and out-of-market costs, and allowed for the retirement of older, less efficient generation.

The transition to renewable resources and greater electrification of the economy will require additional investment in new transmission, an investment that can come only through regional collaboration, along with New England states' increased involvement and decision-

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[21] *See* 2022 REO at 11, 15.

[22] *See* 2022 REO at 7. The ISO has identified four pillars necessary to support a successful clean energy transition. These are: (1) significant amounts of clean energy to power the economic with a greener grid; (2) balancing resources that keep electricity and demand in equilibrium; (3) energy adequacy, meaning a dependable energy supply chain and/or robust energy reserve to manage through extended periods of severe weather or energy supply constraints; and (4) robust transmission to integrate renewable resources and move clean electricity to consumers across New England.

[23] *See* ANOPR Comments at 11-17.

[24] *See* 2022 REO at 27.

making in public policy transmission planning. To facilitate this, the New England states identified the need for a "comprehensive long-term regional transmission planning process" that could provide the region "a clear understanding of the investments needed in the regional transmission infrastructure" to integrate the "clean energy resources and decarbonization of the electricity system required by certain states' laws"[25] and affords the states a central decision-making role.[26]

In response to the New England states' request, and recognizing the importance of a clear understanding of transmission investments needed to support the clean energy transition, ISO-NE, with state and stakeholder support, incorporated new procedures in Attachment K of the OATT that authorize the ISO to conduct scenario-based transmission planning studies that may extend beyond the ten-year planning horizon.[27] Under the Longer-Term Transmission Study construct, the ISO relies on the states to determine the range of scenarios, drivers, inputs, assumptions, and timeframes for use in the studies. While state-led, the entire Longer-Term Transmission Study process follows the same open, transparent, and informative construct used for other planning studies – thus, maintaining strong stakeholder involvement, consistent with planning principles in Order Nos. 890 and 1000.[28]

The ISO is already performing the first Longer-Term Transmission Study – the 2050 Transmission Study – in partnership with the states and with stakeholder input. The study uses

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[25] *See* Vision Statement at 3-4.

[26] *See* NESCOE ANOPR Comments at 21-25.

[27] *See* OATT, Attachment K at § 16 (reflecting the Commission-accepted Longer-Term Transmission Study procedures).

[28] *See ISO New England Inc.*, 143 FERC ¶ 61,150 at P 45 (noting previous determination that the ISO's regional system planning process satisfies each Order No. 890 planning principle) ("May 2013 Order").

scenarios, inputs, assumptions, and timeframes developed with the states, and aims to identify the transmission infrastructure needed to serve peak loads and satisfy reliability criteria[29] in 2035, 2040, and 2050, along with cost estimates. In November 2021, prior to conducting the study, the ISO presented the study scope, inputs and assumptions for stakeholder feedback at the Planning Advisory Committee.[30] The ISO has made significant progress since. At the March, April and July 2022 Planning Advisory Committee meetings, the ISO presented study results showing the extent of the transmission system deficiencies,[31] and is working to develop transmission solutions roadmaps, and high-level cost estimates, to address those issues. These efforts will continue into 2023.

At the same time, the ISO is preparing the Tariff rules to facilitate development of policy-based transmission facilities resulting from the Longer-Term Transmission Studies, such as the 2050 Transmission Study, and anticipates filing these rules during the first quarter of 2023. As the ISO's ANOPR Comments stated, the ISO believes that the states should be responsible for determining whether to move forward with policy-based transmission and the associated cost

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[29] ISO-NE is subject to NERC, NPCC, and ISO New England deterministic criteria that do not permit the ISO to take the probabilities of contingencies into account.

[30] *See* ISO-NE Presentation, *2050 Transmission Study, Preliminary Assumptions and Methodology for the 2050 Transmission Study Scope of Work – Revisions 2* (Nov. 17, 2021), https://www.iso-ne.com/static-assets/documents/2021/12/draft_2050_transmission_planning_study_scope_of_work_for_pac_rev2_redline.pdf.

[31] *See* ISO-NE Presentation, *2050 Transmission Study, Updated Results and Approximate Duration of Overloads* (Jul, 20, 2022), https://www.iso-ne.com/static-assets/documents/2022/07/a7_2050_transmission_study_updated_results_and_approximate_frequency_of_overloads_1.pdf; ISO-NE Presentation, *2050 Transmission study, Sensitivity Results and Solution Development Plans* (Apr. 28, 2022), https://www.iso-ne.com/static-assets/documents/2022/05/a13_2050_transmission_study_sensitivity_results_and_solution_development_plans.pdf; ISO-NE Presentation, *2050 Transmission Study, Preliminary N-1 and N-1-1 Thermal Results* (Mar. 16, 2022), https://www.iso-ne.com/static-assets/documents/2022/03/a4_2050_transmission_study_preliminary_n_1_and_n_1_1_thermal_results_presentation.pdf.

allocation method, with the ISO playing a supporting, technical role.[32] The ISO believes this construct is directionally consistent with the NOPR's long-term planning reforms.

In addition to these longer-term planning efforts, ISO-NE is pursuing enhancements to the Economic Study rules in Attachment K of the OATT to provide stakeholders more cohesive, repeatable studies based on reference scenarios that could look as far out as a 30-year simulated timeframe.[33] The proposed scenarios would include one that accounts for New England state and other policies, which can help inform states' decisions regarding the magnitude of economic benefits that could be gained from transmission expansion, for example, to allow more renewables to flow and reduce system congestion. This policy scenario, along with the other scenarios under consideration, will provide the region more insight into system trends, consistent analysis, and facilitate comparison, all of which can further inform future decisions in transmission investment.

IV. COMMENTS

ISO-NE offers the following comments on the Commission's proposed rule, and requests that the Commission consider them in formulating a final rule in this proceeding.

A. The final rule should recognize regional differences and afford flexibility to accommodate such differences.

ISO-NE generally supports the Commission's proposal to require that transmission providers incorporate in the region's OATT a long-term, scenario-based regional transmission planning process that anticipates the transmission needs of the changing resource mix and demand,

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[32] *See* ANOPR Comments at 23.

[33] *See* ISO-NE Presentation, *Proposed Revisions to Attachment K: Economic Study Improvements, Draft Outline of Tariff Rules and Concepts* (Aug. 16-17, 2022), https://www.iso-ne.com/static-assets/documents/2022/08/a15_economic_study_process_improvements.pdf; ISO-NE Presentation, *Proposed Revisions to Attachment K: Economic Study Improvements, Continued Introduction and Scoping* (June 28, 2022, https://www.iso-ne.com/static-assets/documents/2022/06/a4_economic_study_process_improvements.pdf; ISO-NE Presentation, *Proposed Revisions to Attachment K: Economic Study Improvements, Introduction* (May 31, 2022, https://www.iso-ne.com/static-assets/documents/2022/05/a6_economic_study_process_improvements.pdf.

and provides the states a greater role in the selection and funding of transmission to address identified needs. As described in Section III above, the ISO is already engaged in Longer-Term Transmission Studies under Attachment K of the OATT, and is developing rules to facilitate transmission infrastructure resulting from these studies. These longer-term planning efforts addressing regional needs are directionally consistent with the Commission's long-term planning goals, even though implementation details differ from those the NOPR proposes to prescribe. To avoid setting back New England's recent accomplishments in collaboratively enhancing the long-term planning process, the ISO strongly urges the Commission to recognize regional differences and allow flexibility to accommodate a compliance approach that builds on these differences, rather than impose uniform or prescriptive compliance requirements. This flexibility will permit the ISO to continue to work collaboratively with the New England states and stakeholders to tailor a long-term planning approach that builds on the region's accomplishments.

In prior rulemakings, the Commission has consistently found regional flexibility is necessary and preferable to account for differences in unique challenges and needs facing each region. In Order No. 1000, for example, the Commission "recognize[d] that each transmission planning region has unique characteristics and, therefore," in the final rule, afforded "transmission planning regions significant flexibility to tailor regional transmission planning and cost allocation processes to accommodate these regional differences."[34] The Commission also retained regional flexibility to allow "transmission planning regions . . . to develop transmission cost allocation methods that best suit the needs of each transmission planning region . . . so long as those

[34] Order No. 1000 at P 61.

approaches comply with the regional and interregional cost allocation principles of this Final Rule."[35]

In certain aspects, the NOPR similarly recognizes the benefits of regional flexibility, particularly in multi-state planning regions, such as New England. For example, in relation to requirements for evaluating long-term regional transmission facilities' benefits, the NOPR states:

> [C]onsistent with Order No. 1000, we decline to propose to prescribe any particular definition of 'benefits' or 'beneficiaries,' nor require use of any specific benefits. Instead, we continue to acknowledge the benefits of regional flexibility, and . . . propose to consider such matters on review of compliance proposals.[36]

In the context of proposals for selection of solutions to meet long-term needs, the NOPR also states:

> We believe that this proposed flexibility would help accommodate regional differences . . . such as different transmission needs each transmission planning region may have, the factors driving those needs, or market structures.[37]
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> Further we believe this proposed flexibility would allow public utility transmission providers in each transmission planning region to develop selection criteria that could sufficiently balance individual state interests within each transmission planning region.[38]

Consistent with these statements, ISO-NE requests the Commission recognize regional differences and allow flexibility in all elements of longer-term planning so that the ISO may continue the ongoing longer-term planning work with the New England states and regional stakeholders, and tailor an approach that builds on the region's work in this area. This flexibility is critical for New England, where the Tariff already incorporates a longer-term planning study

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[35] Order No. 1000 at P 604.

[36] NOPR at P 184.

[37] NOPR at P 243.

[38] NOPR at P 244.

framework, a longer-term transmission study pursuant to those rules is ongoing, and efforts are underway to develop the rules that enable a state or states to move forward with transmission to address identified system concerns, and provide the associated cost allocation method. A final rule that establishes uniform or prescriptive long-term planning requirements would set back the process, undermining the region's accomplishments.

B. The final rule should explicitly allow for a long-term planning approach in which the states occupy a central determinative role in public policy-based transmission planning.

In the NOPR, the Commission proposes to require transmission providers to conduct:

> regional transmission planning on a sufficiently long-term, forward looking basis to identify transmission needs driven by changes in the resource mix and demand, evaluate facilities to meet such needs, and identify and evaluate transmission facilities for potential selection in the regional transmission plan for purposes of cost allocation as the more efficient or cost-effective transmission facilities to meet such needs.[39]

As proposed in the NOPR, transmission providers would conduct long-term planning in addition to the existing reliability- and economic-based planning processes, which the NOPR proposes to leave intact.[40] The long-term planning process, however, could replace the Order No. 1000 public process.[41] Like Order No. 1000, the NOPR places transmission providers in control of long-term planning, but requires that transmission providers consult with the region's states in developing

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[39] NOPR at P 68.

[40] *See* NOPR at PP 72-73 (clarifying the NOPR does not propose to change existing requirements associated with reliability and economic transmission planning, but that transmission providers may comply with existing Order No. 1000 public policy requirements through the long-term planning process). *See also id*. at P 89 (clarifying that the Commission "does not propose to require that public utility transmission providers modify their existing regional transmission planning processes that plan for reliability and economic transmission needs to incorporate Long-Term Scenarios.") Therefore, under the NOPR, the reliability and economic based processes remain intact. *See id*. at Christie, C., concurring at PP 8-9.

[41] *See id*.

criteria for selecting long-term transmission facilities, and seek their agreement on the method for cost recovery.[42]

ISO-NE generally supports the Commission's proposal to authorize transmission providers to conduct long-term planning separate from existing reliability-based planning to account for policy-based needs, and provide the states a greater role in this process. Indeed, many aspects of the Longer-Term Transmission Study framework in Attachment K of the OATT and the upcoming rules embody the NOPR's proposed process. Nevertheless, the ISO is concerned that a final rule adopting the NOPR's proposal that places affirmative obligations on transmission providers in the implementation of each element of the long-term planning process may preclude an approach that provides the states a central decision-making role in all aspects of policy-based transmission planning, such as the ISO's Longer-Term Transmission Study construct. This would upend or setback this successful Tariff construct developed to address the region's needs. To avoid this, the Commission should explicitly authorize, or allow for, in a final rule greater state involvement in all aspects of policy-based transmission planning – not just the criteria for selecting and methodology for allocating costs of long-term transmission facilities.

In New England's experience, a compliance-directed process that places affirmative obligations on the ISO alone will not advance long-term planning goals. For example, Order No. 1000 gave regions flexibility to design elements of the planning process, such as cost allocation methods. Yet it also placed affirmative obligations on transmission providers, which, for New England, precluded a compliance proposal in which the states took the lead in making public policy-based planning decisions, such as the selection of public policy transmission upgrades.[43]

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[42] *See* NOPR at PP 244, 278.

[43] *See ISO New England Inc.*, 150 FERC at PP 107-134, 326-335, 340-344.

The ISO's compliance proposal, developed collaboratively with the New England states, transmission owners and stakeholders, reflected the region's agreement that the states are in the best position to understand state policy goals and undertake the associated costs. Despite regional agreement, the Commission rejected the proposal on the basis that it did not comply with the specific requirements in the final rule, which placed the responsibilities on the transmission provider.[44] This rejection resulted in a significant lost opportunity for the New England region, and ISO-NE strongly urges the Commission to avoid taking action that leads to a similar outcome in this rulemaking effort.

As NESCOE's ANOPR comments succinctly explained, "the absence of an explicit role of states in decision-making under ISO-NE's current Order No. 1000 public policy process has effectively made it a dormant tool."[45] Consequently, the states have declined to identify any state or federal policies driving transmission needs for consideration under the existing Order No. 1000 public policy planning process. The states have elected instead to pursue their public policy objectives through clean energy procurement facilitated, in part, by the interconnection process, which the NOPR finds results in piecemeal transmission development.[46]

The ISO's Longer-Term Transmission Studies approach addresses this consequence by explicitly providing the New England states, through NESCOE, with a central role in decisions for public policy transmission planning.[47] Under the ISO's longer-term planning rules, the ISO is responsible for conducting the Longer-Term Transmission Studies, but the ISO relies on the states

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[44] *See id*.

[45] NESCOE ANOPR Comments at 23. *See also* ANOPR Comments at 19-20.

[46] NOPR at P 36.

[47] Notably, providing New England states a decision-making role in long-term transmission planning studies does not minimize regional stakeholder involvement, for the process follows the same open, transparent and information exchange requirements used for regional transmission planning studies performed under Attachment K of the OATT.

to determine the range of scenarios, factors, inputs, assumptions, and timeframes for use by the ISO in conducting the studies. The next phase of the rule development effort, as mentioned above, will facilitate the development of transmission infrastructure resulting from these Longer-Term Transmission Studies. As the ISO has indicated, the states should be responsible for determining whether to move forward with transmission and the associated cost allocation method, with the ISO continuing to play a supporting, technical role.

Authorizing a longer-term planning approach that provides for greater coordination and, specifically, decision-making role for the states in policy-based planning, could help avoid outcomes similar to those experienced in the context of Order No. 1000 compliance in New England. Work associated with the 2050 Transmission Study already demonstrates that the ISO need not be in the decision-making role for long-term policy-based planning to achieve the objectives. Consistent with the Longer-Term Transmission Study rules, in the 2050 Transmission Study effort, the states have the determinative role while the ISO provides its technical expertise and stakeholders review and provide their input throughout the study effort.

Furthermore, affording the states an increased decision-making role in policy-based planning is appropriate, for the decisions inherently involve substantial judgment about the policy-driven trajectory of future demand and resource additions. As the NOPR recognizes:

> providing opportunity for state involvement in regional transmission planning processes is becoming more important as states take on a more active role in shaping the resource mix and demand, which in turn means that those states are increasingly affecting the long-term transmission needs for which we are proposing to require public utility transmission providers to plan in this NOPR.[48]

[48] NOPR at P 244.

There are also advantages to providing the states this role. "State approval," as Commissioner Christie concurs, "is especially important in a multi-state region, where different states have different policies."[49] Moreover,

> facilitating involvement of state regulators in the cost allocation process, as further described below, would allow states to voluntarily coordinate to advance their policy goals through needed transmission and may minimize delays and additional costs that can be associated with siting proceedings . . ..[50]

Therefore, ISO-NE urges the Commission to permit, in the final rule in this proceeding, a longer-term planning, policy-based approach in which the ISO may rely on the states to take a central role in policy-based planning decision, so long as the approach meets Commission principles and objectives.

C. The final rule should not set prescriptive implementation requirements for long-term scenario analysis or require hard wiring these details into the region's tariff.

In conducting long-term planning, the NOPR proposes to require that transmission providers develop long-term scenarios that meet the following implementation requirements:

> (1) use a transmission planning horizon of no less than 20 years into the future in developing Long-Term Scenarios and reassess and revise those scenarios at least once every three years; (2) incorporate into their Long-Term Scenarios a set of Commission-identified categories of factors that may drive transmission needs driven by changes in the resource mix and demand; (3) develop a plausible and diverse set of at least four Long-Term Scenarios; (4) use 'best available data' in developing their Long-Term Scenarios; and (5) consider whether to identify geographic zones with the potential for development of large amounts of new generation.[51]

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[49] Christie Concurrence at P 11.

[50] NOPR at P 301.

[51] NOPR at P 78.

The NOPR also proposes to require that transmission providers describe explicitly in the region's tariff the process for developing scenarios that meet these specific requirements, and demonstrate that on compliance.[52]

Although ISO-NE supports the use of scenario analysis for long-term planning, and believes that the Longer-Term Transmission Study construct incorporates similar principles,[53] the ISO does not support the proposed prescription of implementation details. Based on the ISO's experience with transmission planning based on scenario analysis,[54] the prescription of implementation requirements and the inclusion of such details in the region's tariff will affect the efficacy of the study.

Without discretion to adjust the long-term planning scenario modeling, factors, inputs, and assumptions to regional circumstances, the final rule could lead to more conflict rather than a useful long-term planning process for long-term transmission. Instead of prescribing detailed implementation requirements, the Commission's final rule should establish principles and objectives for long-term planning analysis that address its concerns, and afford flexibility for the ISO to develop tailored long-term planning approaches and implementation details that meet the stated principles and objectives. This flexibility should extend to determining the rules for inclusion in the region's tariff, with implementation details in planning procedures or guides, consistent with the Commission's "rule of reason" standard.

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[52] *See* NOPR at P 85.

[53] *See* OATT, Attachment K, § 16.

[54] In addition to the 2050 Transmission Study described earlier, ISO-NE has performed scenario-based Economic Studies. For example, ISO-NE recently completed the 2021 Economic Study, referred to as the "Future Grid Reliability Study," which consists of a series of economic analysis that use stakeholder- and state-defined scenarios to identify the implications of a substantially-changed grid, one where clean, intermittent resources comprise the majority of the generation fleet. That study examined the year 2040. The 2021 Economic Study: Future Grid Reliability Study Phase I report is available on the ISO-NE website at https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf.

In the next subsections, ISO-NE identifies its concerns with the proposed implementation requirements for the development of long-term scenarios, and offers modifications.

i. Long-term scenarios definition

In the NOPR, the Commission proposes to define "Long-Term Scenarios" "as a tool to identify transmission needs driven by changes in the resource mix and demand – and enable the evaluation of transmission facilities to such transmission needs – across multiple scenarios that incorporate different assumptions about the future electric power system over a sufficiently long-term, forward-looking planning horizon."[55]

As mentioned above, ISO-NE supports the use of scenario analysis as the appropriate tool for long-term planning, particularly given the inherent uncertainty and imprecision introduced as the planning horizon extends further into the future, and does not have concerns with the proposed definition.[56] However, to the extent the Commission maintains its proposal to require a minimum of four scenarios, which the ISO opposes as discussed below, it should clarify in the final rule that the transmission provider is not required to identify transmission facilities to address system issues identified in each scenario run, but rather a set of "least regrets" transmission facilities that address common issues identified across multiple scenarios. This clarification is important, as there are areas in the NOPR that could be misinterpreted as requiring the transmission provider to identify transmission to address all issues identified in every scenario, rather than common issues shown across multiple scenarios.[57]

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[55] NOPR at P 84.

[56] *See* NOPR at PP 84-85.

[57] *See* NOPR at PP 84, 113.

ii. Long-term scenarios planning horizon

In the NOPR, the Commission proposes to require that transmission providers use, at a minimum, a twenty-year planning horizon to identify transmission needs driven by changes in the resource mix and demand and to evaluate transmission facilities to meet these transmission needs.[58] While ISO-NE considers a twenty-year planning horizon sensible under certain circumstances, the Commission's final rule should not constrain the planning horizon to a specific timeframe. Instead, the Commission should permit an approach that allows, but does not require, a planning horizon that extends beyond ten years. This construct is preferable to setting a minimum length, which could potentially limit the identification of system issues during the interim years, and inhibit the ability to adapt the process to evolving policies, contrary to the Commission's objectives.

In the NOPR, the Commission states that transmission providers could satisfy the existing Order No. 1000 public policy process through the NOPR's long-term planning process. ISO-NE supports this option given the challenges New England has experienced with the existing Order No. 1000 public policy process. Currently, however, that process examines public policy transmission needs based on a ten-year planning horizon. The Commission's proposal to set a minimum twenty-year planning horizon for the new long-term planning process for public policy would leave system issues for the interim years unaddressed.

The 2050 Transmission Study described in Section III above serves as an example of a long-term study, and its preliminary results show that evaluating lesser, interim years could be insightful. As noted, that study's objective is to identify the transmission limitations and the

[58] NOPR at PP 97-98.

necessary transmission infrastructure to serve peak load, based on state-identified future resource and demand scenarios, in 2050, as well as the interim years 2035 and 2040. Evaluating the interim years provides the region a blueprint of how it could structure the buildout of the system over time, including which transmission upgrades would need to move forward in a shorter timeframe, and which could wait.

Setting a minimum twenty-year planning horizon without discretion would also preclude the process from considering public policies that may include shorter timeframes, limiting the processes' ability to adapt to emerging needs or changing laws. ISO-NE's Longer-Term Transmission Studies construct addresses this by not constraining the process to studies for a given time-horizon. The New England states supported this construct:

> Another area where flexibility is key is the length of the regional planning process . . . ISO-NE has initiated the *2050 Transmission Study* in response to the New England states' previously articulated concerns on the need for longer-term visibility into system needs accounting for state laws and mandates . . . The New England states have expressed interest in transmission analysis as part of the *2050 Transmission Study*, along with cost information, over near-, medium- *and* long-term horizons. There is a critical need for states, in partnership with RTOs/ISOs, to have the ability to adapt modeling to emerging needs and changing laws as they arise.[59]

To the extent the Commission determines that a minimum planning horizon is necessary for long-term planning, the Commission's final rule should clarify that the set planning horizon does not preclude the potential evaluation of the transmission system in the interim years.

[59] NESCOE ANOPR Comments at 20-21.

iii. Frequency for longer-term scenario reassessments

In the NOPR, the Commission proposes to set timeframes for developing and completing long-term scenario analyses, and for reassessing and revising the factors and data inputs used for those analyses.[60] Specifically, "to prevent overlap," the Commission proposes to require completion of the development of scenarios "within three years – i.e., before the next three-year assessment commences."[61] The NOPR does not address a timeframe for the long-term planning process cycle.

ISO-NE does not support the Commission's proposal to set long-term scenario timeframes. Dictating these timeframes can result in overlapping studies, with the study for the next long-term planning cycle commencing before the prior long-term planning cycle concludes, so results and lessons learned from the previous study are unable to influence or be applied to the next study. Additionally, these timeframes may result in a situation where solutions are under development to address concerns in the initial study, but prevent the solution from being incorporated into the subsequent study, causing the subsequent study to identify the same system concerns. Rather than specify long-term scenario timeframes, the Commission should provide flexibility for transmission providers to determine the appropriate cycle for the long-term planning process itself. The timeframe should account for all the elements of the longer-term planning process beyond the development and conduct of long-term scenario analysis, such as implementing the process for developing and selecting transmission solutions, before the next long-term study begins. This will allow subsequent long-term planning studies to account for the outcomes of the preceding cycle, and avoid unnecessary study overlap between cycles.

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[60] *See* NOPR at PP 93, 97, 100.

[61] NOPR at P 93.

iv. Categories of factors to be incorporated in long-term scenarios

In the NOPR, the Commission proposes to require that transmission providers incorporate in long-term scenarios, at minimum, seven broad categories of factors driving the changing resource mix and demand, and specify the requirements as to how transmission providers must include these factors in long-term scenario modeling.[62] The categories are:

> (1) federal, state, and local laws and regulations that affect future resource mix and demand; (2) federal, state, and local laws and regulations on decarbonization and electrification; (3) state-approved utility integrated resource plans and expected supply obligations for load serving entities; (4) trends in technology and fuel cost within and outside of the electric supply industry, including shifts toward building and transportation electrification; (5) resource retirements; (6) generator interconnection requests and withdrawals; and (7) utility and corporate commitments and federal, state, and local goals that affect the future resource mix and demand.[63]

Transmission providers would be precluded from discounting or modifying the first three factors, and therefore assume full achievement of all laws and regulations in longer-term scenario analysis, but would have flexibility regarding the remaining factors.

As discussed above, in the context of public policy-based planning, it is the ISO's position that the transmission provider should be allowed to rely on the region's states to propose the range of scenarios, factors, inputs and assumptions to be used in scenario analysis. This construct recognizes that the states are in the best position to provide information regarding the impact of their policies on scenario assumptions, such as future loads and resource mix. It is also consistent with prior Commission planning orders permitting transmission providers to "rely on a committee of state regulators to identify transmission needs driven by public policy requirements."[64]

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[62] *See* NOPR at PP 104-112.

[63] NOPR at P 104.

[64] *See* May 2013 Order at P 108.

Therefore, ISO-NE requests that the Commission's final rule allow the necessary flexibility for the ISO to rely on the states to identify the factors driving changes in the resource mix and demand and how they should be reflected in long-term analysis, so it may leverage its Longer-Term Transmission Study construct, which is already working successfully.[65]

Importantly, the ISO's reliance on the states in this regard does not preclude strong stakeholder involvement. While state-led, ISO-NE's current procedures for the conduct of Longer-Term Transmission Studies follow the same open, transparent, and informative process used for other planning studies, and found consistent with Order No. 890 planning principles. For example, although the 2050 Transmission Study relied on the states to identify the future load and resource scenarios, inputs and assumptions –with the ISO providing technical support – each phase of the study has been presented and reviewed at Planning Advisory Committee – the open and transparent forum that provides all stakeholders a meaningful opportunity for input.

ISO-NE also requests that the Commission afford flexibility in the consideration of the factors for inclusion in each study, rather than prescribe the inclusion of certain factors in all scenarios, for they may vary from study to study depending on the study objectives. However, if the Commission ultimately finds it necessary to prescribe factors for consideration in long-term scenarios, the ISO requests that the Commission exclude "local laws and regulations" and "utility and corporate commitments" from the enumerated factors, and refrain from requiring that each single long-term scenario account for and consistently reflect the first three categories of factors.[66] In addition to being too prescriptive, these aspects of the proposal introduce unnecessary,

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[65] *See* NESCOE ANOPR Comments at 23-24.

[66] NOPR at PP 121-123. These are: federal, state, and local laws and regulations on future resource mix, decarbonization and electrification, and state-approved integrated resource plans.

substantial administrative burdens and compliance risks with the possibility for inadvertent exclusion of a required law, regulation, or integrated resource plan. Given the number and diversity of local jurisdictions and corporations in the New England multi-state region, the practical challenges of identifying, monitoring, and incorporating all applicable New England "local laws and regulations" and "utility and corporate" commitments are significant. Determining how overlapping and potentially conflicting requirements could be simultaneously achieved through transmission would be daunting at best. Moreover, the region should not have to expand the regional transmission system for the benefit of a local town or a local corporation's goals.

Additionally, requiring that each single long-term scenario account for and consistently reflect the first three categories would unnecessarily prevent testing of variations with these categories. For example, if a New England state law for electrification results in a total load of 50 gigawatts in a base case, the Commission's proposed requirement would preclude the ISO from testing 55 gigawatts as a variation in any scenario. The proposed requirements would limit the usefulness of scenario analysis.

v. Number, range, inputs and assumptions for long-term scenarios

The Commission proposes to require that transmission providers "develop a plausible and diverse set of at least four Long-Term Scenarios" that incorporate the factors enumerated above, using "best available data inputs."[67] It further proposes that at least one scenario focus on high-impact, low-frequency events, including extreme weather events.[68]

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[67] NOPR at P 121. The NOPR proposes to define "best available data inputs" as: "data inputs that are timely and developed using diverse and expert perspective, adopted via a process that satisfies the transparency principle . . . that reflects the list of factors that public utility transmission providers must incorporate in Long-Term Scenarios." NOPR at P 130.

[68] NOPR at P 24.

While ISO-NE supports the use of "best available data inputs" for long-term scenarios, the Commission should allow flexibility for the ISO to rely on the states to determine these inputs, with the ISO's technical support and stakeholder input. Similar to the factors discussed above, the study inputs drive the results of transmission planning models and, ultimately, the transmission facilities to meet state legal requirements. The Commission also should not prescribe a specific number of scenarios. That implementation detail should be left to each region to decide in the conduct of long-term planning studies based on the study objectives.

Finally, the Commission should not create new tariff requirements for the development of high-impact, low-frequency events, such as extreme weather, scenarios. Although the ISO believes that assessments of the risks and challenges that these events present to electric reliability is critical, this matter should be addressed through NERC Reliability Standards, and there are already ongoing efforts on this topic.[69] For example, work is underway to develop new or enhanced NERC Reliability Standards that would require registered entities to perform forward-looking assessments of energy adequacy risks from extreme weather events and contingencies, and identify the appropriate mitigation of such risks, to maintain system reliability.[70] The Commission should not introduce duplicative tariff obligations.

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[69] *See Reliability Technical Conference*, Post-Technical Conference Comments of ISO New England Inc., Docket No. AD21-11-000 (Feb. 22, 2022). *See also* ISO New England Inc., *ISO New England's 2022 Annual Work Plan* (Oct. 8, 2021), https://www.iso-ne.com/static-assets/documents/2021/10/2022_awp_final_10_08_21.pdf. *See also* ISO New England Inc. Presentation to Reliability Committee (Feb. 15, 2020), https://www.iso-ne.com/static-assets/documents/2022/02/a08_operational_impact_of_extreme_weather_events.pptx.

[70] *See, e.g.,* https://www.nerc.com/gov/bot/Agenda%20highlights%20and%20Mintues%202013/Policy-Input-Package-February-2022-PUBLIC-POSTING.pdf. *See also Transmission System Planning Performance Requirements for Extreme Weather*, 179 FERC ¶ 61, 195 (June 16, 2022); *One-Time Informational Reports on Extreme Weather Vulnerability Assessments Climate Change, Extreme Weather, and Electric System Reliability*, 179 FERC ¶ 61,196 (June 16, 2022).

vi. Identification of geographic zones in long-term scenarios

In the NOPR, the Commission proposes to require that transmission providers consider whether to identify geographic zones within their regions that have the potential for development of large amounts of new generation; assess developers' commercial interest in developing generation within the identified geographic zones; and incorporate the designated zones and commercial interests in each zone into long-term scenarios.[71] To implement these requirements, transmission providers would be required to follow a three-step process that involves significant data-gathering requirements for identifying geographic zones and commercial interests. Recognizing the challenges that multi-state regions, such as New England, would face in complying with such requirements, the Commission asks how transmission providers would reconcile differing energy policies or preferences without overriding them.[72]

In this case, the premise underpinning the Commission's proposed regional planning reforms is the changing resource mix and demand driven by state policies targeting decarbonization. Therefore, in ISO-NE's view, the rules need to provide the states a central decision-making role, and each transmission provider needs flexibility to customize rules that integrate the state policies in a way that works best for the respective region. The Longer-Term Transmission Study construct achieves this by providing the states, individually or jointly, through NESCOE, a central decision-making role throughout the policy-based planning process, with the ISO conducting the necessary studies and playing a technical supporting role throughout the process. This approach could serve as model for forward-looking planning to address transmission

[71] NOPR at P 145.

[72] NOPR at P 152.

needs of anticipated future generation and demand in multi-state regions where energy policy interests and preferences may differ across states.

Consistent with its position on other topics in the NOPR, the ISO supports a Commission final rule that permits, *but does not require* that transmission providers consider whether to identify geographic zones with the potential for high amounts of renewables and developers' interest in those zones, and offers flexibility for transmission providers to determine how best to achieve the identification of these zones. Transmission providers' planning constructs may already contain rules that allow for assessing and identifying geographic zones with potential for high renewable development, rendering a separate process, as the NOPR proposes, redundant or unnecessary.

For example, under the Longer-Term Transmission Study process, the ISO develops the scenarios for use in the studies based on state-identified objectives, requirements, inputs and assumptions. As part of that, the ISO develops scenario models that translate the state-provided future resources into modeling assumptions and inputs, and that include the future resources' locations and interconnections to the system.[73] That information, coupled with other readily available information, such as the interconnection queue and lease areas, suffices for the identification of geographic zones with potential for high renewable development without the complexities and onerous data-gathering tasks that the Commission's proposal would entail.

ISO-NE's clustering approach provides another means for assessing and identifying geographic zones with potential for high amounts of renewables based on developers' commercial interest in developing generation in a given area of the system, and the transmission infrastructure

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[73] *See, e.g.,* ; ISO-NE Presentation, *2050 Transmission study, Sensitivity Results and Solution Development Plans*, 15-16 (Apr. 28, 2022), https://www.iso-ne.com/static-assets/documents/2022/05/a13_2050_transmission_study_sensitivity_results_and_solution_development_plans.pdf (evaluating impacts of relocating some offshore wind resources assumed in the longer-term scenarios).

needed to interconnection those resources. That process already leverages the transmission planning process for the open and transparent identification of the transmission facilities needed to interconnect the resources, without sacrificing the dynamic competition the queue construct facilitates.

vii. Repeatable interconnection-related upgrades in long-term scenario analysis

To improve coordination between the regional transmission and interconnection processes, the NOPR proposes to require that transmission providers evaluate transmission facilities to address interconnection-related needs.[74] This evaluation would be required where (1) the transmission provider has identified a network upgrade in interconnection studies to address interconnection-related needs in at least two queue cycles during the preceding five years (beginning at the time of the withdrawal of the first underlying interconnection request); (2) the network upgrade has a voltage of at least 200 kV and/or an estimated cost of at least $30 million; (3) the network upgrade has not been built because the request driving it was withdrawn; and (4) the network upgrade has not been identified in a filed/executed interconnection agreement.[75] The identified interconnection-related needs would be incorporated as a factor in the long-term scenario analysis.

To the extent the Commission decides to move this proposal forward into a final rule, it should be careful to consider the potential for unintended consequences, such as incentivizing behavior that could exacerbate the very queue processing issues the Commission seeks to address in the proposed rulemaking on generator interconnection reforms.[76] As described above, the

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[74] NOPR at P 166.

[75] NOPR at P 166.

[76] *See Improvements to Generator Interconnection Procedures and Agreements*, 179 FERC ¶ 61,194 (2022).

Commission's proposal would shift interconnection-related needs identified in interconnection studies to the transmission planning space. This could incent Interconnection Customers to submit multiple interconnection requests and withdraw them following the completion of the studies identifying the upgrades, in order to trigger the conditions that would shift the upgrades' needs to the planning space.

Additionally, the Commission should provide transmission providers flexibility to customize the approach for considering repeatable interconnection-related upgrades in long-term planning, to respect regional differences while meeting the Commission's objectives. For example, ISO-NE does not currently implement the interconnection process in cycles. The Commission also should allow the period to commence prospectively, following the initial effective date of the accepted tariff provisions proposed to comply with the requirement (as opposed to a period prior to the effective date). Finally, the Commission should clarify whether the threshold is based on the identified interconnection-related needs or when the interconnection-related network upgrades identified to meet an interconnection-related need meet the network upgrade voltage and dollar thresholds (*i.e.*, at least 200 kV and/or estimated cost of at least $30 million) proposed in the NOPR.

D. The final rule should afford regional flexibility regarding the evaluation of benefits of long-term regional transmission facilities, as proposed in the NOPR.

In the NOPR, the Commission proposes to require that transmission providers, following the identification of long-term transmission needs driven by changes in the resource mix and demand, identify and evaluate the benefits of regional transmission facilities to meet those needs over a time horizon that covers at least 20 years, starting from the estimated in-service date of the

transmission facilities.[77] While, in the NOPR, the Commission lists and provides guidance on a broad set of long-term regional transmission benefits that could be considered,[78] the Commission declines to prescribe a definition of "benefits" or "beneficiaries" or require the use of any specific benefits. Rather, the Commission proposes to provide regions flexibility to determine the benefits and consider such matters on review of compliance proposals.[79] The NOPR proposes to consider these benefits for consideration in cost allocation.[80]

ISO-NE supports the Commission's proposal to afford regions flexibility to determine the benefits of long-term regional transmission facilities to meet identified needs driven by changes in the resource mix and demand. Consistent with the clarification in Paragraph 186 of the NOPR, the Commission should not mandate consideration of some or all of the benefits enumerated in the NOPR as a minimum set of benefits (or benefit categories) for evaluating long-term regional transmission facilities or for cost allocation purposes.[81] It should be up to individual regions to identify the benefits that will lead to transmission needed in their regions.

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[77] *See* NOPR at P 175.

[78] *See* NOPR at P 185 enumerating the following benefits:

> (1) avoided or deferred reliability transmission projects and aging infrastructure replacement; (2) either reduced loss of load probability or reduced planning reserve margin; (3) production cost savings; (4) reduced transmission energy losses; (5) reduced congestion due to transmission outages; (6) mitigation of extreme events and system contingencies; (7) mitigation of weather and load uncertainty; (8) capacity cost benefits from reduced peak energy losses; (9) deferred generation capacity investments; (10) access to lower-cost generation; (11) increased competition; and (12) increase market liquidity.

[79] *See* NOPR at P 183 (acknowledging the benefits of regional flexibility).

[80] *See* NOPR at P 326.

[81] *See* NOPR at P 186 (clarifying, the enumerated benefits are only "examples" and that the Commission is not proposing to require that "transmission providers use any specific benefits or calculate those benefits in a particular manner" when conducting long-term planning).

Although ISO-NE strongly supports the allowance of regional flexibility in identifying the benefits, additional information regarding the Commission-identified benefits would be helpful. First, if the Commission finds that there is redundancy among the Commission-identified benefits, the final rule should be clear as to which benefits the Commission considers redundant. Second, additional information regarding the "market liquidity" benefit would be helpful.[82] ISO-NE notes that it does not have the necessary information to assess this benefit. The ISO welcomes the Commission's guidance on information that could be considered and ways for calculating it.

E. The final rule should accommodate an approach in which the states are responsible for selecting long-term transmission facilities to meet public policy needs.

In the NOPR, the Commission proposes to require that transmission providers establish criteria to identify and evaluate long-term regional transmission facilities for potential selection in system plans for purposes of cost allocation.[83] Like the benefits evaluation, the Commission also proposes to provide transmission providers the flexibility to propose the selection criteria, but the criteria must be transparent and not unduly discriminatory, aim to ensure more efficient or cost-effective transmission is selected, and maximize benefits to consumers over time without over-building transmission facilities.[84] Recognizing states' role in shaping the resource mix and demand, the NOPR proposes a greater role for the states in the selection of long-term regional transmission facilities, and requires that transmission providers also consult with the states in developing the selection criteria.[85]

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[82] *See* NOPR at P 225.

[83] *See* NOPR at P 241.

[84] *See* NOPR at P 242, 245.

[85] *See* NOPR at P 244.

ISO-NE fully supports the Commission's proposal to allow regional flexibility in determining the criteria for the potential selection of long-term regional transmission facilities, and providing the states a greater role in the selection of these facilities, as directionally consistent with ISO-NE's long-term planning plans. As discussed in Section III above, in the context of policy-based planning, such as planning for the transmission needs of the future resource mix and demand, the states should be responsible for determining whether to move forward with and selecting the transmission investments, and the corresponding cost recovery method to address the identified system concerns, with the ISO playing a supporting, technical role.[86] Therefore, the proposed flexibility should extend to allowing transmission providers, with regional states' agreement, to propose rules that provide for the states to choose to move forward with long-term regional transmission for public policy.[87] If the states choose not to move a project forward, the transmission provider should have the option to conclude the long-term planning cycle. This flexibility is critical to the success of long-term planning in New England, and avoids the consequences experienced with the Order No. 1000 public policy process.

While ISO-NE supports the Commission's proposal, aspects of it would benefit from further clarity. First, with respect to the selection of long-term transmission facilities, the final rule should be clear that transmission providers' obligations are to conduct long-term transmission

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[86] As discussed earlier, in ISO-NE's second phase of the Tariff long-term planning initiative, the ISO will be working with the states to develop Tariff rules to facilitate the development of public policy transmission projects resulting from the long-term transmission studies. The ISO's approach for the states to be responsible for determining whether to move forward with transmission facilities for future resource mix and demand needs is consistent with constructs approved in SPP, where the states, through the Regional State Committee, are responsible for determining whether transmission upgrades for remote resources will be included in SPPs' system plans. *See* NOPR at P 287.

[87] *See* Christie Concurrence at P 13 ("But states are not just 'stakeholders' . . . so it is perfectly fitting for state regulators to have the important roles proposed in this NOPR, without preempting the regional planning entities from seeking additional input through their existing stakeholder processes.").

planning processes, but that they are *not* required to select any identified long-term regional transmission facilities for inclusion in system plans or cost allocation purposes.[88] Second, the Commission should clarify that the flexibility extends to determining how best to meet the minimum requirements the criteria must satisfy. It should be entirely up to the decision-makers within each region to determine implementation details such as the criteria or thresholds for maximizing benefits to consumers without overbuilding transmission, and the process for the states to communicate their agreement on the criteria to the ISO.

In the NOPR, the Commission seeks comments on whether it should provide state entities the opportunity to voluntarily fund the costs of, or a portion of the costs of, long-term regional transmission facilities, and whether the Commission should specify requirements to facilitate this.[89] ISO-NE supports the development of rules that would provide the states the option to fund all or portions of long-term regional transmission facilities. While the ISO welcomes the Commission's implementation guidance, it should leave up to each region the specific means for documenting the states' agreement and commitment to fund long-term transmission facilities, as well as the treatment of previously-selected transmission projects based on outcomes of subsequent longer-term planning cycles.

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[88] *See* Christie Concurrence at P 10 (clarifying that "while this NOPR does propose to require a 20-year planning *process* for LTRT projects, it does *not* propose to require that any individual LTRT project or group of projects must be approved for inclusion in any regional transmission expansion plan.").

[89] *See* NOPR at P 252.

F. As the NOPR proposes, the region's states should be responsible for determining the cost allocation mechanism for policy-based, long-term transmission facility investments.

Further recognizing the important role the states play in public policy transmission investment, the NOPR proposes to provide the states a central decision-making role in cost allocation for new transmission facilities selected as part the long-term planning process.[90] Specifically, the NOPR proposes to require that transmission providers in each planning region seek states' agreement on the applicable cost allocation method or methods for these facilities, and revise their OATTs to incorporate the method(s).[91] The NOPR provides the states three cost allocation options: an *ex ante* method; a state agreement process (whereby a state or states agree to an *ex post* cost allocation for a set of transmission facilities in the long-term planning process); or a combination thereof.[92] States may forego their role to decide the cost allocation method, in which case the transmission provider may propose a method.

ISO-NE supports the Commission's proposal to provide states the decision-making role in cost allocation for long-term regional transmission facilities resulting from the long-term planning process. The states are uniquely situated to balance the benefits and costs of these transmission investments intended to advance their policy goals, and should decide who pays for them. The ISO further supports the Commission's proposal to afford transmission providers flexibility in determining what constitutes state agreement and the process by which they seek agreement from the states. The Commission's final rule, however, should be clear that the intent is not for the

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[90] *See* NOPR at PP 301-301.

[91] *See* NOPR at P 302.

[92] *See id*.

OATT to dictate the process by which states engage to achieve consensus, but rather the means by which the states will communicate the agreed cost allocation method to the transmission provider. This allows the states to leverage established constructs for engaging with each other to achieve agreement, and with the transmission provider.[93]

If state agreement on the cost allocation method is unsuccessful, the Commission should not force a methodology. Rather, the Commission should afford flexibility for the region to develop a fallback methodology for use in the event the states agreed to move forward with a long-term transmission facility to advance public policy, but do not achieve agreement on a cost allocation method.

With regard to benefits for use in any *ex ante* cost allocation, the Commission should extend the same flexibility in determining the values of long-term regional transmission facilities, and not require that transmission providers account for some or the full list of benefits.[94] Rather, the Commission should require the allocation of costs commensurate with benefits.

G. The final rule should leave up to each region the process for "right-sizing" transmission projects for future needs.

As part of the long-term planning reforms, the Commission also proposes to include a process to identify potential opportunities to modify or "right-size" anticipated replacements of aging infrastructure. Specifically, the NOPR proposes to require that transmission providers evaluate whether transmission facilities operating at or above 230 kV that the transmission owner anticipates replacing in-kind with a new transmission facilities during the next ten years can be

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[93] *See* NOPR at P 306.

[94] *See* NOPR at PP 326-327.

"right-sized" to more efficiently or cost-effectively address regional transmission needs identified in the long-term planning process.[95] The NOPR further proposes to specify a process for transmission providers' implementation of this requirement.[96] Under the NOPR's proposal, only the incremental costs of right-sizing the facility would be eligible to use the cost allocation method applicable to long-term regional transmission facilities.[97]

ISO-NE supports the establishment of a process for right-sizing regional transmission facilities to meet future needs, and has identified this as a topic for discussion with stakeholders.[98] The Commission, however, should provide transmission providers flexibility to tailor an approach that accounts for regional differences and determine how best to implement it, rather than prescribe a uniform, one-size-fits-all approach, which fails to account for such differences. For example, under the Commission's proposal, only transmission facilities operated at or above 230 kV would be eligible for right-sizing considerations. This would limit the right-sizing opportunities in New England, where the regional transmission system comprises mostly transmission facilities operated at or above 115 kV, along with a limited amount of grandfathered 69 kV. Transmission providers should also have flexibility in determining how best to integrate these considerations with existing processes and to incorporate the states' input on right-sizing evaluation and selection of solutions.

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[95] *See* NOPR at P 403.

[96] *See* NOPR at P 407. First, individual transmission owners would submit their in-kind replacement estimates to the transmission provider for use in the long-term planning process. If a transmission facility is identified as a potential solution for a long-term regional transmission need, then the right-sized replacement would be evaluated in the same manner as other proposed transmission facilities to determine whether it is the more efficient or cost-effective transmission to address the need. If it is, then the right-sized transmission facility may be eligible for selection in the system plan and cost allocation.

[97] *See* NOPR at P 410.

[98] *See* ANOPR Comments at 25-27.

H. The final rule should not mandate use of grid-enhancement technologies, such as DLR.

In the NOPR, the Commission also proposes to require that transmission providers, in regional transmission planning cost allocation processes, consider dynamic line ratings ("DLR") and advanced power flow control ("APFC") devices (a) in lieu of other transmission facilities to meet identified transmission needs, and (b) when evaluating transmission facilities for potential selection in system plans for cost allocation purposes.[99] This requirement would apply in all aspects of the regional transmission planning process, including near-term and long-term planning.

ISO-NE notes the Commission's separate proceeding already exploring the use of DLRs as a tool in operations and planning processes; consideration about their capabilities should continue in that forum. While ISO-NE supports evaluating transmission facilities that incorporate DLR or APFC technologies for potential selection in regional system plans over transmission facilities that do not incorporate such technologies, the ISO does not support a requirement for transmission providers to use DLR in lieu of transmission, or to justify the basis for not using such technology to address transmission system needs.

Simply stated, DLRs cannot substitute for needed transmission facilities to solve system needs. DLRs allow for variable line ratings based on changing weather conditions or other circumstances. When performing transmission planning studies, line ratings consistent with the conditions being studied are incorporated into the models. When considering conditions such as summer peak load, it is assumed that the conditions will be hot with limited wind. Under those conditions, the presence of a DLR does not suddenly cause the line rating to be higher, but rather,

[99] *See* NOPR at P 274.

the DLR would be the same as that assumed in the planning study under these conditions. DLRs should not be relied on for planning.

Therefore, ISO-NE requests that the Commission not require use of DLRs in planning processes as a tool to replace needed transmission.

I. The final rule should allow adequate time for compliance.

In the NOPR, the Commission proposes to require that transmission providers submit compliance filings that incorporate the rule's requirements in their tariffs within eight months of the effective date of the final rule. Based on the NOPR's proposals, compliance would entail the development of significant and comprehensive compliance proposals, some of which require state consultation and agreement. Given the need to coordinate across six states and to accommodate a robust stakeholder process, ISO-NE requests that the Commission consider providing at least twelve months for the development of compliance proposals.

IV. CONCLUSION

WHEREFORE, for the reasons set forth above, ISO-NE respectfully requests that the Commission consider these initial comments in formulating any final rule in this proceeding.

Respectfully submitted,

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Dated: August 17, 2022

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Holyoke, Massachusetts, this 17th of August 2022.

/s/ Julie Horgan
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