Update on Multi-State Transmission Activities: Transmission Investments at Center Stage in Efforts to Integrate Clean Energy Cost-Effectively and Enhance System Reliability

June 22, 2023 - In 2020, the New England states, through NESCOE, announced a shared vision of a clean, affordable, and reliable 21st century regional electric grid. The Vision Statement expressed support for the efficient use of existing transmission facilities and the construction of new facilities to ensure the grid's reliability, efficiency, and ability to integrate clean energy resources to meet states' legal requirements and mandates.

There has been important progress over the last several years. That collaborative work continues. Together, we are taking concrete steps to realize our collective vision for regional transmission investment that is grounded in proactive, thoughtful planning for the future grid. These initiatives include:

Department of Energy's (DOE) funding opportunities are key to driving down the cost of transmission infrastructure and moving our region toward an affordable, transformed grid. In Fall 2022, New England states announced and sought stakeholder input on a regional transmission initiative to integrate renewable resources, including through a Modular Offshore Wind Integration Plan (MOWIP). In January 2023, all six New England states supported the submission of a concept paper to DOE that proposed a Joint State Innovation Partnership for Offshore Wind (JSIP) as a key step toward achieving the coordinated offshore wind transmission system envisioned in MOWIP. That paper set out a multi-phased approach to building an integrated and expandable transmission network off New England's coast to interconnect thousands of megawatts of offshore wind—improving grid reliability and resilience, achieving substantial consumer savings, and helping states meet their clean energy and decarbonization requirements. In May 2023, with support again from all six New England states, Massachusetts and Connecticut submitted separate applications to DOE for the first phase of this offshore wind network, identifying needed onshore infrastructure for key points-of-interconnection (POIs).

Looking ahead, the New England states will continue to coordinate on a joint, actionable, and innovative approach to integrating offshore wind into the region's electric grid. With technical support from NESCOE and ISO New England, the New England states are working together to initiate an invitation for project proposals to submit to DOE for the next round of funding. This may include projects that further identify and develop optimal POIs for offshore wind as well as HVDC transmission lines and other offshore wind infrastructure that would utilize the three POIs for which Connecticut and Massachusetts submitted applications for federal funding. The New England states may pursue additional coordinated transmission procurement activities in late 2024 or early 2025 in connection with building out an offshore wind network as contemplated by the JSIP.

⇒ Routine Longer-term, Proactive Regional Transmission Planning. ISO New England responded promptly and positively to our call for a new policy-focused transmission planning process. First, ISO New England launched the 2050 Transmission Study, a longer-term analysis based on state-defined assumptions. This study will provide visibility into potential future transmission system needs and costs to integrate clean energy resources and ensure a reliable transition to our future grid. Second, ISO New England changed its tariff to make this longer-term planning a routine practice.

Looking ahead, NESCOE will continue to work with ISO New England to shape a subsequent tariff change – a mechanism to give states' the ability to translate longer-term planning into development of transmission infrastructure through an ISO New England-administered competitive process. A necessary component is a cost-sharing methodology for such transmission investment. The states plan to advance a consensus cost-sharing approach in summer 2023.

⇒ Smart, Visible Processes to Replace Aged Infrastructure. Maintaining transmission assets that are aged, damaged, or obsolete – Asset Condition Projects – is required for power system reliability. Today, Transmission Owner-identified Asset Condition Project projections outpace ISO New England-identified reliability projects but are subjected to materially less regional scrutiny. In February 2023, NESCOE requested near-term process changes to improve transparency, predictability, and cost discipline. The states appreciate the Transmission Owners' collaboration on creating new, more transparent approaches.

Looking ahead, NESCOE will continue to work on Asset Condition Project process improvements with ISO New England, Transmission Owners, and stakeholders at the Planning Advisory Committee, a public forum that provides input on regional planning processes. New approaches that bring states and stakeholders greater visibility and predictability will provide an important foundation for right-sizing transmission projects.

⇒ Thoughtful, Standardized Processes to Capture Opportunities to "Right-Size" Transmission. The question of whether, and to what extent, a transmission project should be scaled up will increasingly arise as the region considers transmission expansion to integrate clean energy resources and achieve state decarbonization requirements. ISO New England responded favorably to states' request to help develop a rightsizing framework for both future Asset Condition and Reliability projects.

Looking ahead, NESCOE will continue to work with ISO New England, Transmission Owners, and stakeholders, through the Planning Advisory Committee, to advance a right-sizing framework once substantial progress has been made on Asset Condition Project process improvements.

⇒ Interregional Transmission Planning. In June 2023, the New England states joined with New York and New Jersey to submit a letter to DOE requesting support for a Northeast States Collaborative on Interregional Transmission. Under the proposed structure, DOE would lead the states in investigating opportunities for mutually beneficial options for increasing the flow of electricity between ISO New England, NYISO, and PJM and assessing offshore wind infrastructure needs and solutions. Greater interconnectivity between regions lowers prices for consumers through a larger marketplace for low-cost clean energy generation, enhances reliability during periods of extreme weather and system stress, and increases access to renewable energy to meet decarbonization requirements.

Looking ahead, New England states will work with DOE and state officials in New York and New Jersey to explore the formation of this multi-state collaborative and the initiative's scope of planning, analysis, and objectives.

⇒ Reforms to the Generator Interconnection Process and Transmission Cost Oversight. NESCOE appreciates the efforts of the Federal Energy Regulatory Commission (FERC) in proposing new rules to address challenges to generator interconnection processes and other aspects of the transmission planning process. NESCOE also applauds FERC for facilitating critical discussion on transmission cost oversight and the need for independent transmission monitors. In 2022 and 2023, NESCOE provided its perspective to FERC on these issues and the need to align any changes with state and consumer interests.

Looking ahead, NESCOE will work with ISO New England and stakeholders following FERC's issuance of one or more final rules on generator interconnection and other transmission planning reforms to ensure that compliance changes are aligned with, and help achieve, a clean, affordable, and reliable 21st century regional electric grid.

The New England states will proceed apace toward progress on transmission infrastructure as we work together on market reforms that meet regional reliability needs and states' decarbonization objectives in an affordable way for consumers. Such market reforms must include durable solutions to the predictable challenge of New England winters and to geopolitical events that history has taught the region to plan around. In all, we emphasize the importance of continuing progress on meaningful public participation opportunities, accessibility, and equity to give citizens and communities a comparable voice to industry stakeholders in this 21st century grid transformative work.