Synapse
Energy Economics, Inc.

October 28, 2022

New England States Transmission Initiative
Participating States

RE: Synapse Energy Economics, Inc.'s comments in response to the New England States Transmission Initiative Request for Information

In response to the New England States Regional Transmission Initiative (NESTI) Request for Information (RFI), Synapse Energy Economics, Inc. (Synapse) respectfully submits these comments for NESTI's consideration on behalf of our clients PowerOptions, Inc. and the New Hampshire Office of the Consumer Advocate. Synapse is a leader for public interest and government clients in providing rigorous analysis of the electric power sector. Specifically, Synapse represents consumer advocacy interests throughout New England to ensure ratepayers receive reliable, affordable, and clean energy through an equitable transition to a sustainable grid. We applaud the New England States for undertaking this initiative in recognition of the reliability, environmental, and cost-savings benefits that more collaborative regional transmission planning can deliver.

This RFI asked stakeholders to provide input on, among other topics: (1) how to unlock federal funding for regional transmission projects; (2) how to best site transmission projects to impacts to minimize impacts on historically overburdened and underserved communities; and (3) how to overcome transmission planning and project development challenges such as cost-allocation issues so that projects can provide maximum consumer benefits and reduce overall system cost.

I. NESTI CAN LEVERAGE FEDERAL FUNDING FOR OFFSHORE WIND TRANSMISSION PROJECTS THROUGH GRANT AND LOAN PROGRAMS UNDER BOTH THE IIJA AND IRA

One priority NESTI has made clear is to identify and secure sources of federal funding under the Infrastructure Investment and Jobs Act (IIJA) for any projects that result from possible future procurements. Maria Robinson of the Department of Energy's (DOE) Grid Deployment Office noted during her NESTI kick-off meeting presentation several opportunities for state agencies and public utility commissions to secure federal funding. Below, we list several of those opportunities, as well as other opportunities we've identified.

- **Transmission Facility Financing**: The IIJA revives FERC's authority to permit transmission lines in National Interest Electric Transmission Corridors (NIETC) while also broadening the scope of what DOE can consider in designating NIETCs. The IRA has created $2 billion for loans to NIETC projects. Maria Robinson suggested that New England states could seek NIETC status and thereby unlock funds. Under a NIETC designation, program

funding can cover up to 80 percent of project costs and last the lesser of 30 years or 90 percent of the project life.[1]

- **Grid Innovation Program**: DOE's Grid Innovation Program has $5 billion or $1 billion per year through 2026 for a variety of programs that improve reliability and enhance regional grid resilience through states cost-sharing on projects. The DOE explicitly notes that offshore wind projects led by states, public utility commissions, or units of local governments would be eligible for funding under this program.[2]

- **Transmission Siting Grants**: There is an additional $760 million for grants to siting authorities and other pertinent state agencies for project-specific siting under the IRA. These grants can pay for: (1) studies, analysis, examination of alternate siting corridors; (2) a 50-percent cost-share of participation in ISO/RTO and FERC processes; and (3) economic development activities for communities affected by the project.[3]

- **Offshore Wind Transmission Siting Grants**: A grant pool of $100 million is available specifically for planning offshore wind transmission build-out.[4]

- **Building a Better Grid Initiative**: DOE uses IIJA funds for both the **Building a Better Grid Initiative** and the Transmission Facilitation Program. This features a $2.5 billion loan program and also authorizes DOE to be the "anchor customer" for up to 50 percent of line capacity.

II. THE SITING PROCESS OF TRANSMISSION FACILITIES FOR OFFSHORE WIND PROJECTS CAN MINIMIZE IMPACTS ON ENVIRONMENTAL JUSTICE COMMUNITIES AND RATEPAYERS BY IDENTIFYING EXISTING IMPACTS TO INFORM EQUITABLE DECISION-MAKING MOVING FORWARD AND THROUGH LEVERAGING EXISTING RIGHT OF WAYS.

The need to rapidly expand transmission networks to bring additional clean energy resources online to the New England grid must be balanced alongside affordability, environmental justice, and equity interests. The current model for transmission development incentivizes transmission developers to build the transmission solution that interconnects offshore wind resources to onshore points of interconnection that are the least cost to *them*, and not necessarily the least cost for *the larger system*.[5]

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[1] Rocky Mountain Institute, *Scaling the Energy Transition with the Inflation Reduction Act*, Presentation at GridLab Conference, October 2022.

[2] Robinson, M. "Bipartisan Infrastructure Law and Inflation Reduction Act Program and Opportunities." Presentation at the Technical Meeting for the New England States Transmission Initiative." October 7 2022.

[3] Rocky Mountain Institute, *Scaling the Energy Transition with the Inflation Reduction Act*, Presentation at GridLab Conference, October 2022.

[4] *Id*.

[5] Existing planning processes and wholesale market rules also make it challenging to defer transmission projects that raise equity concerns by instead pursuing non-wire alternatives (see Section III of these comments).

Furthermore, underserved communities have been disproportionately impacted by the siting locations for transmission facilities and lack adequate representation in regulatory stakeholder processes.[6]

Synapse offers several ideas on how to temper disproportionate impacts and build low-cost transmission in an equitable manner. First, NESTI should consider mapping out and analyzing which communities have been most impacted by transmission development over time in New England to establish a baseline. This can then serve as a point of reference for measuring current and future impacts and will help decision-makers craft equitable transmission solutions.

Second, states must play a significant role in siting decisions to prevent transmission siting that may be least cost for developers but is sub-optimal from a regional perspective. NESTI has already made its intentions clear that states should play a central role in selecting landfall points for this reason—a stance which Synapse commends. State involvement through partnerships with technical consultants in establishing siting criteria and performing rigorous analysis will help identify landfall points that best balance public policy interests, such as intra-regional reliability and equity, with immediate project cost considerations.

Third, NESTI has already demonstrated an awareness that transmission line siting can be streamlined by leveraging existing rights of way. Transmission development costs are often uncertain and escalate because of contention over their siting. Local opposition has thwarted efforts and raised costs for other projects by delaying key permitting and approvals, as evidenced in the Northeast Clean Energy Connect. In many situations, the convenience and benefits of relying on public rights of way such as federal highways, railways, utility easements, or, as NESTI proffers, even rivers, can greatly outweigh the drawbacks of risky ad-hoc transmission project development. This approach can save developers and ratepayers costs related to permitting and approvals since rights of way are already established. It also minimizes local impacts since development is completed alongside existing infrastructure and channels. At the same time, NESTI should acknowledge that many existing rights of way are currently disproportionately impacting environmental justice and other marginalized communities when assessing equitable solutions to transmission siting. Synapse recommends that NESTI adopt planning processes that can creatively leverage existing rights of way whenever possible that also consider historical impacts as a means of minimizing local impacts, preventing opposition, and containing costs.

[6] Ethan Howland. 2022. "*FERC expands environmental justice, equity considerations in agency decision-making, EJ counsel says*." Utility Dive. August 3 [available at: https://www.utilitydive.com/news/ferc-environmental-justice-energy-equity-EJ-cole/624852/].

III. IMPLEMENTING UPDATES TO REGIONAL TRANSMISSION PLANNING PROCESSES CAN FACILITATE INTER-STATE COLLABORATION AND THEREBY SPUR TRANSMISSION THAT IMPROVES RELIABILITY, REDUCES COSTS, AND ADVANCES STATE PUBLIC POLICY REQUIREMENTS.

Expanding transmission capabilities throughout New England can improve regional reliability and affordability. It can also help achieve state policy goals such as renewable portfolio standards and greenhouse gas emission reduction requirements. Research has demonstrated that coordination between states on transmission planning can deliver large cost-savings for ratepayers, improve intra-regional reliability, and connect low-cost renewable energy resources to load centers.[7] With greater regional transmission capabilities, renewables can reach higher grid penetration levels without risking system reliability. Expanded regional transmission capability also reduces curtailment of renewable energy generation since excess localized generation can be transmitted where electricity is needed. In order to mitigate impacts to ratepayers while ensuring appropriate transmission project are build, NESTI, regulators, and stakeholders must (1) learn from the pitfalls in our existing transmission planning, (2) pursue voluntary state agreement approaches, and (3) consider non-wire alternatives to transmission projects when appropriate.

1. CURRENT TRANSMISSION PLANNING CHALLENGES

By and large, projects that satisfy public policy requirements and system reliability needs are not being built in New England; transmission planning approaches need reform to remedy this. New England has built considerable transmission reactively, resulting in higher transmission costs and lower levels of congestion relative to other RTOs.[8] While this framework has been adequate for making localized upgrades and reliability improvements, it is insufficient for the regional projects currently required—particularly for achieving rapid transitions in the generation mix. New England's reactive transmission development approach is generally too slow to support the near-term interconnections these transitions require.

A brief look at the history of FERC Order 1000 shows that disagreements over cost allocation, contrasting state policy priorities, and the lack of control over project selection have precluded inter-state coordination on building Public Policy Transmission Upgrades.[9] It is untenable for the New England states to be required to pay for projects addressing public policy requirements arising from beyond the

[7] National Renewable Energy Laboratory presentation at NESTI kick-off meeting; A Transmission Blueprint for New England: Delivering on Renewable Energy, RENEW Northeast.

[8] Potomac Economics. 2022. *2021 Assessment of the ISO New England Electricity Markets*. Available at: https://www.iso-ne.com/static-assets/documents/2022/06/iso-ne-2021-som-report-full-report-final.pdf.

[9] Order No. 1000, *Transmission Planning and Cost Allocation*, 136 F.E.R.C. ¶ 61,051 at 43-46 (2012); *NESCOE Submission Regarding Transmission Needs Driven by State and Federal Public Policy Requirements* (May 1, 2020) at 1; [9] *ISO New England Inc.*, 153 F.E.R.C. ¶ 61,012 at P 19 (2015) (Third Compliance Order).

borders of that state. Yet once a Public Policy Transmission Upgrade is triggered through the process established in ISO New England's tariff, states who disagree with a project because they deem the project to have a low benefit-to-cost ratio or feel alternative solutions would better satisfy their own public policy requirements would nevertheless be responsible for paying their share of the regional cost spread. This dynamic means states have been reluctant to move past the need identification and evaluation stage; once a particular solution is chosen, they are on the hook for funding that project one way or another. Three years ago, NESCOE issued a joint letter entitled *The New England Governor's Commitment to Regional Cooperation on Energy Issues* where they promised to ensure that when evaluating clean energy resources, "consumers in any one state do not fund the public policy requirements mandated by another state's laws."[10] The result is that, despite the fact that public policies among New England states are driving a need for projects that meet reliability, cost, and public policy interests, the type of regional projects that would unlock cost-effective, abundant renewable energy resources are not being built at a sufficient rate.

2. VOLUNTARY STATE AGREEMENT APPROACHES

In light of these challenges, transmission planning must be reformed to provide states with greater control over project selection, better methodologies for reaching agreement among cost-allocation approaches, and off-ramps for states. The recent notice of proposed rulemaking on transmission planning affirms the notion that FERC Order 1000 has failed to spur Public Policy Transmission Upgrades and that, instead, states themselves must play a central role in project selection.[11] Furthermore, an approach that complies with cost-allocation principles of dividing costs roughly commensurate with benefits bestowed will require states to design and agree on cost-allocation methodologies that allow for ample flexibility. Synapse therefore agrees with NESTI's goal of creating off-ramps for states and ratepayers to opt out of projects if and when analysis determines a project is not the most cost-effective solution or does not satisfy public policies of one state. Without off-ramps for states, future planning processes may fall victim to the same chilling effect that Order 1000 imposed on New England: states do not want to initiate any transmission planning that will seize control from them and requires them to pay for projects they may not desire.

A more constructive approach would be to consider a voluntary state agreement approach with flexible cost-allocation methodologies. NESTI can, for instance, study New Jersey's innovative State Agreement Approach within the PJM Interconnect. This model gives PJM states the option to cost-share for offshore wind project and transmission development, but it does not require states to do so. This gives individual states like New Jersey greater autonomy in choosing individual projects that meet their policy and planning criteria and the opportunity for other states to determine for themselves whether it is in their

[10] *New England Governors' Commitment to Regional Cooperation on Energy Issues* (March 15, 2019), at 2.

[11] *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 179 FERC ¶ 61,028 (April 2022). Available at: https://www.ferc.gov/media/rm21-17-000

interests to collaborate and cost-share on those projects.[12] This non-binding approach invites regional collaboration since it empowers other states to select projects that are suitable from their perspective and to hammer out an agreement on how to allocate costs.

3. Non-wire alternatives to transmission

While electrification and the transition to a sustainable electric grid will require expansion of the electric transmission system, planning and project selection processes must be flexible enough to defer transmission development when non-wire alternatives can meet the system requirements cost-effectively. Non-wires alternatives such as energy storage, demand response, and other distributed energy resources can address critical peak periods, reduce congestion, and improve reliability by flattening load profiles and supplementing utility-scale resources. If planning processes enable evaluation of non-wire alternatives alongside transmission projects, some transmission development can be negated while delivering the same benefits. This may also provide savings to ratepayers. Once market rules for distributed energy resources under FERC Order 2222 enable better participation in wholesale markets in a meaningful way, NESTI should be cognizant that non-wire alternatives can in many instances solve the same problems as transmission development at a lower cost.

IV. Conclusion

Synapse thanks NEFTI for soliciting input on transmission planning and development considerations pertinent to the New England states. We urge NESTI to ensure that New England approaches transmission planning in a manner that streamlines projects which can minimize impacts on ratepayers and marginalized communities by building cost-effective transmission that improves reliability while ensuring a clean energy future.

[12] Boreas Renewables and The Brattle Group. 2022. *A Transmission Blueprint for New England: Delivering on Renewable Energy.* Prepared for RENEW Northeast.