COMMENTS OF MASSACHUSETTS MUNICIPAL WHOLESALE ELECTRIC COMPANY IN RESPONSE TO NOTICE OF REQUEST FOR INFORMATION

On September 1, 2002, the States of Connecticut, Maine, New Hampshire, and Rhode Island, and the Commonwealth of Massachusetts (Participating States) announced a "joint initiative" aimed at exploring investment in electric transmission infrastructure needed to facilitate the integration of clean energy resources, including but not limited to, offshore wind generation. In connection with this announcement, the Participating States requested comments on a series of questions concerning the development of changes and upgrades to the region's transmission grid (both on land and offshore).[1] In addition, the Participating States held a technical meeting concerning this initiative on October 7, 2022 (Technical Meeting).

Massachusetts Municipal Wholesale Electric Company (MMWEC) appreciates the opportunity to comment on certain of the questions posed in the Notice.

INTEREST OF MMWEC

MMWEC is a non-profit, public corporation and political subdivision of the Commonwealth of Massachusetts, which engages in activities that include the procurement and development of resources for its twenty municipal electric system members and other participants in MMWEC power supply projects. MMWEC seeks to provide the services, expertise and strategic vision required to help municipally-owned utilities optimize their energy resources and find value in the shifting structure of New England's wholesale power markets. MMWEC has statutory authority to issue tax-exempt revenue bonds to finance ownership interests in energy facilities,

[1] Regional Transmission Initiative, Notice of Request for Information and Scoping Meeting (Sept. 1, 2022), https://newenglandenergyvision.files.wordpress.com/2022/09/transmission-rfi-notice-of-proceeding-and-scoping-revised.pdf (Notice).

including transmission projects. In addition, MMWEC acquires electric energy and ancillary services from the wholesale markets administered by ISO New England Inc. (ISO-NE). MMWEC and its members purchase regional network transmission service pursuant to the ISO-NE Open Access Transmission Tariff, and is a long-standing participant in the New England Power Pool.

COMMENTS

MMWEC's comments focus on Question No. 2, which asks that respondents:[2]

> [c]omment on ways to minimize adverse impacts to ratepayers including, but not limited to, risk sharing, ownership and/or contracting structures including cost caps, modular designs, cost sharing, etc.

MMWEC is supportive of efforts by the Participating States to consider how best to integrate the large amounts of offshore wind generation needed to meet state mandates in ways that are most cost- and time-efficient. The stakes in the discussion of this issue are high: studies have shown that 40 GW (or more) of new clean resources will be needed to meet New England decarbonization goals, including as much as 1,500 MW of offshore wind resource additions *every year* between now and 2050 to achieve a region-wide 80% decarbonization by that date.[3] The price tag for the transmission facilities needed to integrate these resources will undoubtedly be significant, which makes it particularly important for the Participating States to focus on "ways to minimize adverse impacts to ratepayers[.]"[4]

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[2] Notice at 4.

[3] Johannes Pfeifenberger et. al, *Offshore Transmission in New England: The Benefits of a Better-Planned Grid* at 4, The Brattle Grp. for Anbaric (May 1, 2020) (*Better Grid Report*), https://www.brattle.com/wp-content/uploads/2021/05/18939_offshore_transmission_in_new_england_-the_benefits_of_a_better-planned_grid_brattle.pdf.

[4] Notice at 4.

From our perspective, there are at least two ways in which the Participating States can accomplish this objective. First, we suggest that the Participating States jointly consider the procurement of a "planned" or "meshed" transmission system rather than seeking to integrate new offshore wind resources exclusively through individual, project-specific radial lines. Second, to the greatest extent possible, MMWEC urges that the Participating States procure transmission facilities needed to integrate wind resources through competitive solicitation. We address each suggestion briefly below.

Planned Transmission. MMWEC understands that there are generally two approaches to the integration of offshore wind generation. The first is the "generator lead line" (or "gen-lead") approach, in which new offshore wind generation is connected through project-specific generator lead lines. The second is the "planned" approach, in which offshore transmission is developed independently from generation with the goal of accommodating multiple projects and minimizing the overall risks and costs of achieving state offshore wind mandates.

MMWEC encourages the Participating States to give due consideration to adopting a planned approach, as we are concerned that failing to do so will ultimately prove excessively costly for consumers and inefficient for developers. Planned transmission offers New England numerous potential advantages over a gen-lead approach, including overall lower costs for transmission upgrades, fewer cable-miles and coastline cable landings, and a streamlined integration process.

Expert analyses have confirmed the benefits associated with a planned approach. Brattle's *Better Grid Report* compared the two approaches, finding that in New England a planned approach would use 49% less cables than the gen-lead alternative and would result in a reduction in onshore upgrade costs by 65%, or $1 billion. As a result, and even though offshore transmission development costs are substantially higher, the result is an estimated $20 million in annual cost

savings in the near term, rising to over $300 million per year in later years, while reducing line losses as compared with those experienced under the gen-lead approach by 40%. *Id*. at 9, 19.

There are other benefits as well. Brattle explains (at 16) that a planned approach "significant[ly] reduce[s] need and costs for onshore upgrades." *Id.* This is particularly important in New England, where there is "a history of delays and budget overruns." *Id*. at 5. Moreover, the *Better Grid Report* concluded (at 24) that:

> [d]esigning and building the offshore grid with networking capability preserves the option to create a meshed configuration to improve reliability and reduce curtailments in case of transmission outages[.]

A subsequent, October 2020 Brattle study undertaken for the "Clean Energy States Alliance" reaches similar conclusions concerning the value of planned transmission for offshore wind.[5] Focused this time on both New England and New York, the Alliance Study finds:[6]

> [e]ven including the more costly offshore transmission equipment, total costs of onshore upgrades plus offshore transmission are estimated to be lower under a planned than the current [gen-lead] approach in both New England and New York[.]
>
> The planned approach to building offshore transmission can enable significant long-term cost savings and avoid some of the higher risks associated with onshore upgrades[.]

Brattle notes that in New England alone, use of a planned rather than gen-lead approach could save consumers as much as $600 million. In addition, Brattle estimates that the use of the "current," gen-lead method to connect planned resources will require the installation of 1,620 miles

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[5] Johannes Pfeifenberger, *Offshore Wind Transmission: An Analysis of Planning in New England and New York*, The Brattle Grp. (October 23, 2020) (Alliance Study), https://www.brattle.com/wp-content/uploads/2021/06/21229_offshore_wind_transmission_-_an_analysis_of_options_for_new_england_and_new_york_offshore_wind_integration.pdf.

[6] *Id.* at 10.

of undersea transmission. If a planned approach is used, however, that number drops to 831 miles. *Id*. at 12. For these reasons, the Alliance Study concludes that planned transmission reduces the cumulative impact on fisheries, coastal communities, and the marine environment. *Id*.

The upfront investment in a planned transmission grid will do more than save long-run transmission costs. There is good reason to believe that constructing the transmission grid now will result in the interconnection of needed resources later at lower cost than would be the case under gen-lead development. Brattle explains:

> [t]oday, developers must bid before they have accurate information about their transmission upgrade costs. Removing these risks from the offshore generation procurement should lead to lower bids because of the reduced risk premium alone[.]

Id. at 13. Similarly, as explained at the Technical Meeting by Peter Shattuck, President of New England operations for Anbaric Development Partners, LLC, a planned, independent transmission system means that new generators can connect without worrying about either their queue position or distance from the shore.

There was also substantial discussion during the Technical Meeting about ongoing efforts in New Jersey to develop a planned transmission grid to accommodate that state's ambitious offshore wind mandates. MMWEC suggests that the Participating States seek a briefing from New Jersey Board of Public Utilities personnel on the conduct of that process, and what "lessons learned" from the experience can be applied in New England.

***Competition*.** MMWEC appreciates that the Participating States are focusing on consumer impacts, and shares the concern that needed new transmission investment not overwhelm already heavily burdened consumers. Over the past two decades, New England's Regional Network

Service transmission per kW-year rate has grown *nine-fold*, from $15.60 (in 2003)[7] to $142.77 (in 2022).[8] These enormous increases have been driven in part by significant project cost overruns, and compounded by an excessively high base return on equity (ROE) and incentive adders that are, in our view, largely unnecessary. Worse, the region has compiled an abysmal record of cost containment: on average, between 2013 and 2017, actual transmission costs in New England exceeded projections by 70 percent.[9] Over that same timeframe, transmission development in New England has been exclusively the province of the incumbent Transmission owners.

MMWEC urges that the Participating States develop all transmission projects planned through this initiative using competitive solicitation. The Federal Energy Regulatory Commission (FERC) has repeatedly recognized that competition disciplines cost and facilitates innovation.[10] Lawrence Willick, Executive Vice President, Transmission Regulatory for LS Power highlighted the consumer benefits of competition during its Technical Meeting presentation. Mr. Willick observed that New Jersey's solicitation in connection with its development of a planned, offshore transmission system resulted in the submission of 80 proposals, of which 57 contained some form of cost containment commitment. These included caps on project: (1) capital costs, (2) ROE, (3)

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[7] ISO-NE, *RNS Rate, Effective June 1, 2016* at 22 (2016), https://www.iso-ne.com/static-assets/documents/2016/08/2016_08_09_10_tc_a02_fct.pptx.

[8] ISO-NE, *RNS Rates Effective June 1, 2021 and January 1, 2022*, at 7 (2021), https://www.iso-ne.com/static-assets/documents/2021/07/a03_tc_2021_07_14_rns_rates_presentation.pdf.

[9] See Johannes P. Pfeifenberger, et al., *Transmission Competition Under FERC Order No. 1000: What we Know About Cost Savings to Date* at 14, The Brattle Grp. (Oct. 25, 2018) (Brattle October 2018 Report), https://www.brattle.com/wp-content/uploads/2021/05/14786_brattle_competitive_transmission_wires_10-25-18.pdf/.

[10] *Cleco Power LLC*, 101 FERC ¶ 61,008, P 117 (2002) ("The presence of multiple transmission developers would lower costs to customers"), *reh'g granted in part*, 103 FERC ¶ 61,272 (2003), order terminating proceedings, 112 FERC ¶ 61,069 (2005)*; see also Carolina Power & Light Co.*, 94 FERC ¶ 61,273, at 62,010, *on reh'g*, 95 FERC ¶ 61,282, at 61,995 (2001) (finding that an unconditional federal ROFR would unduly limit the planning authority and present the possibility of discrimination by self-interested transmission owners, potentially reduce reliability, and possibly precluding lower cost or superior transmission facilities or upgrades by third parties from being planned and constructed).

the equity component of the capital structure, and (4) annual revenue requirement. And, when valued on a lifetime cost basis, Mr. Willick explained that non-incumbent developers were proposing projects with overall costs that were 50 percent (or more) lower than those proposed by incumbents.

The Alliance Study reaches a similar conclusion, highlighting the benefits—both onshore and offshore—of a competitive approach:

> Studies of onshore transmission indicate that competitive procurement enables "significant innovation and cost savings of 20–30%" relative to the costs incurred by incumbent transmission companies; the costs of conducting the competitive processes are small compared to the savings
>
> Studies of offshore transmission costs in the U.K. similarly indicate that competition across independent offshore transmission owners reduced costs 20–30% compared to generator-owned transmission (driven by lower operating costs and financing costs from improved allocation of risk and reduced risk premium).

Alliance Study at 18 (footnotes omitted).

Finally, the Participating States seek comment on possible "ownership structures." MMWEC urges that whatever solicitation is conducted allow for (if not encourage) the submission of project proposals that include joint ownership arrangements. Earlier this month, MMWEC's Board of Directors passed a "Resolution in Support of Competitive Transmission," a copy of which is attached to these comments.[11] The Board resolution notes the increasing transmission service cost burden on MMWEC-member ratepayers, while highlighting that this burden will be even greater over time, given the documented "need for [an] extensive transmission buildout to support future offshore wind, hydro-electric projects and additional decarbonization and electrification

[11] MMWEC Resolution in Support of Competitive Transmission (Oct. 2022)(Board Resolution).

efforts in Massachusetts." The MMWEC Board expresses concern that the "[c]urrent transmission build-out in Massachusetts and the region, based on Federal Energy Regulatory Commission approved tariffs and procurement procedures, results in transmission infrastructure that is not sufficiently cost competitive and does not minimize environmental impact." By contrast, "[p]rocuring transmission independently increases competition."

MMWEC has sought to become involved in transmission development. That involvement would be good for consumers, as MMWEC's access to tax-exempt financing would allow its municipal system members to participate in projects at a lower cost. Unfortunately, efforts by MMWEC to participate in new transmission development have thus far been unsuccessful.[12] MMWEC is hopeful that an open, competitive process to select new transmission projects will give it and its municipal light plant (MLP) members the opportunity to be part of efforts to meet current Massachusetts (if not broader) mandates. As stated in the Board resolution:

> MMWEC and its Member MLPs support a transmission process designed to increase competition and reduce costs for consumers, in alignment with greener and cleaner energy policies and objectives, reflecting a dynamic and progressive approach to ensuring MLPs meet or exceed MLP carbon emissions reduction targets as outlined by state law.

CONCLUSION

MMWEC appreciates the opportunity to comment on these important matters, and looks

[12] MMWEC notes that Dave Burnham, Director of Transmission Policy for Eversource Energy highlighted at the Technical Meeting the importance of "[c]omprehensive, collaborative planning," and noted that doing so will help to "[a]chieve the lowest overall costs to consumers." Technical Meeting, Eversource Presentation at 4. MMWEC looks forward to working both with Eversource (and with non-incumbents) on the development of needed new transmission.

forward to working with the Participating States, transmission developers, and other interested parties in building the grid of the future.

Respectfully submitted,

Matthew Ide

Executive Director, Energy & Financial Markets
MASSACHUSETTS MUNICIPAL WHOLESALE ELECTRIC COMPANY
327 Moody Street
Ludlow, MA 01056
Tel. (413) 308-1356
E-mail: MIde@mmwec.org

Attachment

Massachusetts Municipal Wholesale Electric Company (MMWEC)
Resolution
In Support of Competitive Transmission

The Massachusetts Municipal Wholesale Electric Company and its Member municipal light plants (MLPs) support and promote the energy and environmental policies and objectives of the Commonwealth of Massachusetts, consistent with the not-for-profit MLP business model. The MMWEC MLPs have a strong record of environmental stewardship, including the development and purchase of clean energy resources that are valuable in achieving the carbon-reduction goals of the Municipal Light Plant Greenhouse Gas Emissions Standard and the Commonwealth's 2050 Decarbonization Roadmap.

Transmission represents a major expense for municipal light departments and transmission costs continue to rise. MMWEC has been successful at the Federal Energy Regulatory Commission (FERC) over the past several years in fighting what it believes are exorbitant returns on equity (ROE) earned by New England transmission owners, but MMWEC believes the ROE remains too high in many cases.

There will be a need for extensive transmission buildout to support future offshore wind, hydro-electric projects and additional decarbonization and electrification efforts in Massachusetts. The preliminary results of the 2050 Transmission Study, conducted by ISO New England at the request of the New England states, shows that nearly half of the transmission miles of Pool Transmission Facilities (PTF) will become overloaded by 2050. Current transmission build-out in Massachusetts and the region, based on Federal Energy Regulatory Commission approved tariffs and procurement procedures, results in transmission infrastructure that is not sufficiently cost competitive and does not minimize environmental impact. Procuring transmission independently increases competition.

MMWEC and its member municipal light plants are interested in participating in transmission ownership, but to date, have been precluded from participating in the process. MMWEC's tax exempt financing authority would allow for MLPs to participate in transmission ownership at a lower cost.

NOW, THEREFORE, BE IT RESOLVED, that MMWEC and its Member MLPs are concerned about rising transmission prices, which impact their ratepayers; and

BE IT FURTHER RESOLVED, that MMWEC recognizes that extensive transmission buildout will be needed to support future offshore wind projects and other electrification initiatives; and

BE IT FURTHER RESOLVED, that MMWEC and its Member MLPs support a transmission process designed to increase competition and reduce costs for consumers, in alignment with greener and cleaner energy policies and objectives, reflecting a dynamic and progressive approach to ensuring MLPs meet or exceed MLP carbon emissions reduction targets as outlined by state law.

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