

CLEAN ENERGY TRANSMISSION WORKING GROUP (CETWG)

MEETING MINUTES

Friday, November 17, 2023

Virtual Zoom Meeting

Members Present:	Jason Marshall, Jamie Van Nostrand, Michael J. Barrett, Jeffrey N. Roy, Johannes Pfeiffenberger, Doug Howgate, Hilary Pearson, Liz Delaney, Sheila Keane, Barry Ahern, Dave Burnham, Ashley Gagnon, Joseph LaRusso
Members Absent:	Ron DeCurzio, Brooke Thompson
Member Designees:	Matthew Ide for Ron DeCurzio
DOER Staff Present:	Colin Carroll, Paul Holloway, Sarah McDaniel
EEA Staff Present:	Mary Nuara
DPU Staff Present:	Shirley Barosy, Gregg Wade
Other Participants:	Matthew Ide
Public Speakers:	Peter Shattuck (Anbaric), William Zipf (Jera Americas)

1. Welcome, Agenda, Roll Call

Holloway called the meeting to order at 09:00 AM. He reviewed the meeting agenda and stated that the CETWG welcomes written comments at any time. Holloway conducted roll call and confirmed a meeting quorum.

2. Review and vote on meeting minutes

Holloway introduced the draft Meeting Minutes for the November 3, 2023 joint CETWG/GMAC meeting. Barrett motioned and Ahern seconded to approve the draft Meeting Minutes. By roll call vote the members present voted to approve the Meeting Minutes, with LaRusso abstaining.

3. Public comment

Marshall invited members of the public to provide comment and clarified the CETWG will be building opportunities for public comment into the remaining CETWG meetings and welcomes written comments. Public commenters presented in the order they had signed up prior to the meeting. Zipf introduced himself as VP of Development for Jera Americas, owner of the Canal Generating Plant in Sandwich, Massachusetts. He said that ISO-NE interconnection rules allow co-location of transmission, and that new resources sharing transmission capacity with existing resources are generally more efficient than building all new transmission and suggested that shared resources should be allowed to compete alongside new resources in future RFPs issued by the Commonwealth. He described system impact studies, which he said recognize the importance of legacy resources in interconnecting clean energy. Zipf argued that the changing economics of offshore wind have resulted in canceled contracts and raised questions about viability of offshore wind. He said that Jera

estimates that a 1,200 megawatt offshore wind project could save significant costs if it paired with an existing interconnection site. Zipf claimed this could shorten study processes and reduce interconnection costs. As an example, he states that the Canal Generating Plant is a peaking resource that is idle ninety nine percent of the time and is a perfect candidate for facilitating the interconnection of offshore wind. He further suggested that Massachusetts remove the new capacity requirement from its RFPs to allow competition from other options. Zipf said Jera wants to be able put forward innovative solutions to the Commonwealth’s clean energy goals. Marshall invited him to submit a written statement as well.

Shattuck introduced himself as president of New England efforts for Anbaric. He noted Anbaric recently interconnected two projects in New York and New Jersey. He focused his comments on three areas: the scope of transmission needs, competition, and process. Shattuck said that ISO-NE’s draft 2050 Transmission Study Draft Report found that expanding the transmission network connecting into Boston and Southern New England can help route power to Boston when the wind is not blowing. He also noted that higher capacity transmission cables can be more efficient. Regarding competition, Shattuck stated that building transmission in New England is difficult, and projects often end up being more expensive than initially projected. Shattuck said that transmission development has become a bottleneck for integrating renewable energy including offshore wind, and that since New York and New Jersey are taking steps to address this risk, there is a risk that supply chains may develop elsewhere if New England doesn’t take similar measures. Shattuck contended that competitive processes reduce costs. In terms of process, he stated that ISO-NE’s long term planning reforms make sense, but it is important for states to have the flexibility to act independently.

Marshall and Holloway invited additional public comments. No additional members of the public elected to comment.

4. Presentations on Interconnection and FERC Order 2023

Marshall introduced Liz Delaney of New Leaf Energy and Hilary Pearson of LineVision to present on Interconnection and FERC Order 2023.

Delaney

Delaney presented on the ISO-NE generator interconnection process and compliance with FERC Order 2023. She began by reviewing ISO-NE’s current interconnection process and the problems with the process, including: high rates of queue withdrawals, slow study timelines, and high volumes of projects waiting to be studied. Delaney elaborated on the primary causes of these problems stating that there is limited or no headroom available on the system in places where clean energy resources can be built, transmission planning processes and cost allocation rules are not configured to systematically and cost-effectively site new projects, and the lack of visibility and certainty about interconnection costs until late in the development cycle. Delaney described the genesis of FERC Order 2023 through the FERC rulemaking process. She said the order seeks to resolve some of the secondary causes of queue delays, while a pending rule on transmission planning and cost allocation may be able to address some of the primary causes. Delaney summarized key changes that Order 2023 introduces, including: fixed and predictable study timelines, higher barriers to entry like site control and readiness deposits, penalties for TOs and ISOs if they don’t meet study deadlines, and studying and allocating costs in groups called clusters. Finally, she listed recommendations for improving processes in the near-term. Delaney said that ISO-NE should promote a culture of continuous improvement via the establishment of an ongoing NEPOOL forum for interconnection

process reform, and that Massachusetts should consider a similar effort on the state level to identify best practices for Affected System Operator studies and tie those into the ISO-NE reform effort.

Discussion

Barrett asked why Delaney did not include siting and permitting delays on her list of interconnection problems. Delaney said that siting and permitting can present problems, but her list was focused on interconnection issues per se, and while projects do drop out because of permitting issues, that is usually outside of FERC’s jurisdiction. She deferred to other presenters who will discuss siting and permitting.

Ide suggested that the fact that the whole interconnection process is very reactionary is something that the CETWG may want to consider. He said that pre-planning the transmission system in advance could alleviate or avoid backlogs. Delaney said she agrees, there is a way to flip the script and do planning first and interconnection second rather than doing project by project.

Ahern asked whether Delaney had any insight on the management of distribution-side studies that are conducted in parallel with the federal jurisdiction process. Delaney explained that ISO-NE conducts Affected System Operator “ASO” studies, but it would be helpful to establish a forum to bring stakeholders together to discuss how to improve ASO studies in relation to Order 2023 and other issues.

Gagnon referenced ISO-NE’s work on process automation and artificial intelligence and how other regions are utilizing these technologies. Delaney said that these advanced technologies are designed to improve processes, but she is not aware of any region coming up with a solution in this area. She noted that putting together the models for power flow studies is very labor intensive.

Barrett said that the discussion of advance planning raises the question of who would do the planning, and noted the example of the Boston Planning Authority or similar organizations that help steer private sector actors to attractive areas to develop. He asked whether an entity, possibly governmental, could draw attention to best areas to develop for interconnection purposes. Delaney responded that we ultimately need to understand where it is smart to expand the system not just from the standpoint of cost effectiveness, but also from a community and land use perspective. She said that ISO-NE can identify the best locations from a transmission perspective, but there could be a role for government to indicate which locations are best for siting.

Pearson

Pearson presented on grid enhancing technologies (“GETs”), which she defined as software or hardware that increases the capacity, efficiency and/or reliability of transmission facilities, including measures like dynamic line ratings, advanced power flow control and advanced topology control. Pearson said that system operators and TOs should take steps to integrate GETs like dynamic line ratings in the interconnection process as it can improve the deliverability of renewable energy while larger grid updates are built, and pointed to examples in the Southwest Power Pool. Pearson outlined recommendations including that Massachusetts could push for a regional study of the potential benefit of using GETs in New England where they might offer a more cost-effective strategy for achieving state transmission goals, and can encourage the utilization of GETs solutions to

interconnection and curtailment challenges. She also said that while Order 2023 establishes a baseline, New England can go beyond what the order requires and formally evaluate dynamic line ratings alongside the GETs.

5. Presentation on siting and permitting transmission

Marshall introduced Michael Judge, Massachusetts Executive Office of Energy and Environmental Affairs to present on the work of the Commission on Energy Infrastructure Siting and Permitting.

Judge

Judge summarized the purpose and scope of the Commission on Energy Infrastructure Siting and Permitting, which Executive Order 620 requires to advise the Governor on: 1) accelerating the responsible deployment of clean energy infrastructure through siting and permitting reform in a manner consistent with applicable legal requirements and the Clean Energy and Climate Plan; 2) facilitating community input into the siting and permitting of clean energy infrastructure; and 3) ensuring that the benefits of the clean energy transition are shared equitably among all residents of the Commonwealth. He said that this work is driven by the need to build a lot of infrastructure in a short timeframe, while making sure communities have meaningful engagement – goals for which the current permitting framework may not be adequate for. Judge stated that the commission’s work is supported by the Interagency Siting and Permitting Task Force and the Siting Practitioner Advisory Group. Judge indicated that many communities feel that they often do not have sufficient input into the siting of major energy infrastructure projects and should be engaged early in the process of any infrastructure siting proposal and provided the opportunity to shape the impact of a final permitted project. He stated the commission will need to find a way to balance these priorities with the need to expedite permitting processes to meet Massachusetts’s clean energy and climate targets.

Discussion

Barrett said that the line between CETWG’s transmission work and the siting and permitting group can blur, and asked whether the working groups should try to create a bright line between their recommendations. Judge responded that the permitting and siting group’s charge is broad, and covers both transmission and distribution, so there is likely big overlap between the working groups recommendations. Barrett said whatever recommendations the legislature takes up will help facilitate transmission, and asked whether the same was true for the distribution side? Judge said yes, for example there are a significant number of substations that the distribution companies would need to upgrade. Barrett said that regional ISO-NE solutions are currently the primary solutions available, but they can take years to complete, so it is possible that state-level action could be more expeditious. Judge agreed.

6. Review draft report conclusions and recommendations

The authors of draft sections of the CETWG’s report conclusions and recommendations presented summaries of their sections. Keane summarized the section on ISO New England’s 2050 Transmission Study. Burnham outlined draft recommendations related to transmission planning.

Discussion

Marshall asked Burnham to clarify if his draft recommendations were applicable to both offshore and onshore transmission development. Burnham said yes, the levels of offshore

development will likely require significant onshore upgrades as well. Marshall also asked whether Burnham’s section overlaps with ongoing regional discussions. Burnham said his section’s draft recommendations expand on current regional discussions. His draft, for example, more explicitly discusses rightsizing whereas regionally that discussion has not gotten very far. Marshall also raised the principles of flexibility and adaptability and suggested that this section include an additional recommendation to enable DOER to procure all forms of clean energy to give DOER this additional flexibility.

Ahern summarized the draft conclusions and recommendations for offshore wind transmission.

Discussion

Keane requested an additional explanation of what kind of incremental information Ahern would recommend including in a new regional study on offshore transmission interconnection. Ahern answered that it could focus on the practicality of enacting certain local upgrades. Gagnon asked who he envisioned conducting such a study. Ahern said that he envisioned ISO-NE, the Commonwealth and transmission owners working together on the study. Marshall said that he agrees that ISO-NE does need to play role, and under the existing public policy transmission mechanism there is a connection between ISO studies and cost sharing among the states.

Delaney briefly summarized the current generator interconnection process before outlining draft conclusions and recommendations on this topic.

Discussion

Gagnon asked who would pay for potential procurement of long-lead time bulk power system equipment. Delaney said that such costs would likely flow through a cost allocation mechanism through ISO-NE or the states and then be allocated to load. Gagnon asked to clarify whether consumers would be paying. Delaney and Ahern clarified that some of the costs would be borne by developers, but it would be difficult to say before upgrades have been approved. Marshall suggested that Delaney’s proposed forum to continuously explore interconnection process improvements beyond initial Order 2023 compliance should be housed with the Planning Advisory Committee rather than a NEPOOL committee, because it would then be open to the public. Delaney said she is open to that suggestion, and housing at PAC would be more conducive to public participation. Burnham said that engagement from DG developers would also be helpful.

Marshall summarized draft recommendations on siting and permitting. Pearson outlined draft conclusions and recommendations pertaining to grid enhancing and alternative technologies.

Discussion

Van Nostrand asked about who should bear the consequences in situations where a developer might refuse to implement lower cost solutions, as well as who conducts GETs cost-benefit analyses. Pearson answered that ISO-NE conducts these analyses but, ultimately, transmission developers are responsible for determining which technology to implement. Ahern said that transmission operators support integrating GETs into transmission solutions. Burnham emphasized that it is important to keep the cost-benefit in mind.

7. Discussion of CETWG report drafting process

Van Nostrand discussed the CETWG drafting process and the schedule for drafting, highlighting that the rest of the CETWG meetings will be geared towards completing the working group's report by the end of the year. Marshall added that the group is awaiting draft conclusions and recommendations on cost allocation that will be added to the draft, and that the group wants to provide the group members with another opportunity to offer edits.

8. Close and Next Steps

Van Nostrand and Marshall noted that the CETWG will hold its next meeting on December 6 and closed the meeting at 11:00 AM.

Meeting Materials:

- Agenda
- Draft Meeting Minutes for the joint CETWG/GMAC meeting on October 13, 2023
- Jenner & Block Presentation on jurisdictional authority and cost allocation