

Commenting on behalf of Green River Holdings, LLC a subsidiary of National Grid Renewables

National Grid Renewables applauds PJM Interconnection's (PJM) willingness to foster stakeholder discussions around potential reforms to the generator interconnection process. It is no secret that RTO interconnection processes were initially designed to give open access to traditional, centralized power production facilities – namely fossil fuel and nuclear-powered facilities. In order to facilitate the clean energy transition of today & tomorrow, the current PJM interconnection process must be improved to usher in the interconnection of hundreds of MWs of de-centralized renewable energy, battery storage, and advanced energy resources. Aggressive state clean energy policies and commercial and industrial customer preferences, in addition to the declining costs of renewable assets and the aging fossil fuel & nuclear power fleet, will result in gigawatts of clean energy development in the next decade and beyond. PJM has the opportunity to lead the organized energy markets of the United States into the clean energy future with a purposefully crafted interconnection process that considers the issues National Grid Renewables, other independent power producers, transmission owners and PJM staff alike have acknowledged as significant impediments to the generator interconnection process.

How do you find the process is working? Where are you experiencing issues? What are your thoughts on the challenges we may face given the trends PJM laid out in Workshop 1?

As noted by most stakeholders, the current Facilities Study backlog is of immediate concern and should be addressed first, prior to engaging in a more holistic stakeholder process to reform its generator interconnection (GI) process. Facilities Studies are currently averaging 2 or more years to complete with roughly only 2% of Facilities Studies being completed on time over the last three years. Facilities Studies are the most critical studies from a development perspective relating to the ultimate financial feasibility of the proposed asset. The timeliness of Feasibility and System Impact Studies is of finite value, as they provide limited information and the inevitability of future retooling & restudies, which ultimately results in more work for PJM. The cost and unpredictable schedule of the interconnection process pose a significant risk to the development and investor communities and produces unrealistic expectations for new projects entering the queue. In short, the completion of Facilities Studies puts a lot of capital at stake as no construction work can start prior to the studies' completion.

PJM and transmission owners (TOs) need to identify areas of efficiencies (for example, grouping interconnection customers (ICs) into specific geographies utilizing a common study scope where appropriate) and give ICs the option to pay for completion of work via an external consultant, in addition to any other acceleration costs required to complete studies in a timelier fashion. Noting that many projects in the Facilities Study phase may have contracted offtake, given their stage of maturity, ICs should be able to facilitate the completion of its Facilities study by paying for additional resources/studies in order to preserve the commercial viability of their projects and maintain their target in service dates.

What are your top three objectives when entering the PJM Queue or what would you like any process improvements to do?

Echoing comments from other stakeholders, National Grid Renewables strongly advocates that PJM transition from serial "First Come First Served" study approach, which at the moment is resulting in months-long delays in study completion and also causing the overloading of PJM staff, to a cluster based "First Ready First Served" approach. FERC has approved similar reforms in other jurisdictions — including MISO, PSCo, PNM, PacifiCorp, etc. As such, there is precedent available to guide PJM's tariff reform and stakeholder processes. As noted by others, and as demonstrated in other jurisdictions, transitioning to a queue cluster model will more effectively manage the study process. Grouping ICs in a cluster study approach will mitigate the extensive study delays resulting from cascading restudies triggered by IC withdrawal under a serial study. Other tenets of "First Ready First Served" interconnection study processes include:

- i. Increasing the project development criteria/burden of proof required to establish a valid queue position to ensure projects are “ready” when they enter the queue (i.e.greater site control or selecting a single POI prior to Feasibility).
- ii. Increasing at-risk financial commitments to show readiness throughout study process and/or requiring a demonstration of commercial viability (for example, having a signed PPA or PSA) in lieu of readiness milestone.
- iii. Providing more information earlier in the process, improving the quality of Feasibility and SIS study reports and making results a viable “off ramp” by forcing a decision point with increased financial collateral to advance in the study.
- iv. Identify & implement efficiencies in the study process to streamline study timelines. For example, this could be accomplished by only performing thermal analysis in the first study stage followed by dynamic and short circuit studies in the second phase.

National Grid Renewables is willing to participate in a riskier/higher stakes queue process provided both PJM and TOs are willing to commit to a more streamlined, efficient, transparent, and quicker interconnection process. With too many speculative projects entering the PJM new services queue there is a clear need to ramp up financial & physical requirements for queue entry.

Secondly, National Grid Renewables also encourages more discussion on the topic of improving Affected Systems Coordination. This is a problematic area for other RTOs and the subject of much scrutiny in other RTOs like SPP and MISO. As noted by other stakeholders, PJM identifies the Affected Systems (AS) during the SIS and notifies the Affected Parties (AP) of the potential impacts to their grid. PJM requires that all AS issues are fully resolved between the IC and AP prior to allowing the IC to interconnect to the grid. Essentially, the IC is left with the burden of facilitating coordination with the AP to identify solutions without any guidance on study scopes or study timelines. At a minimum, PJM should be more involved in all AS discussions with the IC and AP and help mediate for a timely and acceptable solution so that the IC can meet its ISA milestones accordingly and the project can accomplish its desired in-service date as memorialized in the ISA.

Thirdly, National Grid Renewables advocates for further discussion regarding optimizing transmission solutions on a longer-time horizon. As noted by other stakeholders, there is a clear need to harmonize conventional RTEP drivers with the GI process. Both RTEP and the GI process are due for a dramatic overhaul in order to facilitate the clean energy growth required by state law within the PJM region. As aggressive state policies — offshore wind goals in NJ, MD, & VA; storage mandates in NJ & VA — continue to be a driver of clean energy expansion in the PJM footprint, PJM would be well served by a better alignment of the RTEP and GI processes to recognize current and expected public policy drivers and move toward identifying optimized transmission solutions for the region. At this time, this framework is one starting point for future discussion, and would require a stakeholder process to balance the interests of PJM members.

In the end, our top priority as an organization is to participate in a collaborative, timely, & transparent interconnection process with PJM & TOs in which we can make necessary business decisions surrounding the feasibility of our development assets. National Grid Renewables would like to thank PJM for facilitating such a pertinent stakeholder discussion. We look forward to continuing this dialogue going forward.