



Sherri L. Golden
Secretary of the Board
44 South Clinton Avenue, 1st Floor
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August 2, 2024

Dear Secretary Golden,

Piq Energy respectfully offers comments to Docket No. QO21010085, regarding proposed rules and amendments to N.J.A.C. 14:8, which governs the interconnection of distributed energy resources (“DERs”). Piq Energy software technology company based in San Francisco, CA, who supports renewable energy developers, including community solar developers operating in New Jersey.

Piq Energy thanks the Board of Public Utilities (“Board”) for the opportunity to provide feedback and recommends the following as it pertains to the proposed regulations:

- **Streamline the Interconnection Process & Create Uniformity Across Electric Distribution Companies (“EDCs”):** The EDCs should install or upgrade to a software-based application platform to track key information throughout the application process. This software should also automatically notify customers of any missing information, eliminating delays in rectifying outstanding issues so applications can be processed, and determinations can be made in a timely manner. This software should automate the technical analysis of all applications.
- **Improve and Require More Frequent Updates to EDC Hosting Capacity Maps:** The hosting capacity maps provided by the EDCs are the best metric for determining where it is feasible to interconnect DERs to the grid, but these maps are built with static information. The EDC hosting capacity map should enable on-demand pre-application simulations for any POI, thus providing the most up-to-date connection information possible. Data gathered by the EDC from on-demand pre-application studies enables *proactive planning* (see comment below).
- **Provide more clarity on the Pre-Application Verification/Evaluation (PAVE) Process for Community Solar Energy Projects:** We applaud the Board for creating a pre-application process for projects 500kW and greater and for making community solar projects eligible for an enhanced PAVE process. However, we would ask for the Board to provide more clarity on what would trigger the enhanced PAVE process for community solar projects, thereby reducing delays, improving project planning, and increasing communication between the applicant and the EDC.
- **Require Implementation of New Technologies:** EDCs should leverage new technologies, such as Distributed Energy Resource Management Systems (“DERMS”) and smart inverters, to ensure that existing infrastructure and future technologies work for grid flexibility, resilience, and reliability. Utilities’ allowing smart inverters to function as they are designed (i.e., allowing them to “ride through” small disturbances such as voltage frequency changes), coupled with the eventual rollout for DERMS, will reduce strain on the grid and facilitate the greater rollout of DERs. Additionally, to improve the application process, EDCs should establish clear timeframes for the study, payment, and other crucial aspects of the process in collaboration and consultation with developers. New Jersey should look to the New York Public Service Commission’s

requirements that are mandated from their Standard Interconnection Process¹ as an example. We also support the requirement of EDCs implementing a flexible queue process that is uniform and adopts a “first ready, first through” approach to ensure that ready projects are not stalled by unviable or unready projects.

- **Relax EDCs distribution planning criteria to allow more DERs to operate:** We recognize that EDCs strive to provide safe and reliable service, and planning criteria play a major role in promoting this. However, the criteria some EDCs use to require additional equipment and/or express feeders is creating a situation where many smaller projects will fail to be constructed as they will not pass the economic test to make them profitable. We respectfully ask the Board to consider this as they evaluate the utilities’ requirements for telemetry, reclosers, direct transfer trip, and express feeders. The EDC should use robust simulation techniques to understand the risk to reliability instead of defaulting to overbuilding.
- **Promote the cost sharing of interconnection upgrades among the EDCs, ratepayers, and developers:** By taking most of the burden off the developers to pay for interconnection upgrade costs, we would help the deployment of DERs to the grid by reducing upfront costs and increasing the viability of project financing. Additionally, cost sharing will lower energy costs in the long term, increase reliability and efficiency, and promote economic growth. However, ratepayers should only have to pay for capital upgrades if there is a direct benefit to them. Ratepayers, who are the first to be impacted, should not be forced to fund grid improvements that do not directly benefit them. Developers should have the option to choose cost sharing in the interconnection application process, allowing for flexibility in financing, or to maintain that status quo if that is preferred.
- **Adopt use of Alternating Current (AC) values:** Switching from direct current (DC) to AC values would improve the interconnection process in several ways. Since the grid operates on AC power, hosting capacity maps would more accurately reflect the actual power being sent to the grid. Currently, there is no uniformity among the EDCs in their use of AC or DC values; some utilities use AC while others instead opt to use DC. This provides complications for developers who must apply hundreds of MWs of projects across multiple service areas. Requiring EDCs to uniformly use AC values would allow utility companies to more accurately and safely manage the integration of DERs, ensuring the reliability and efficiency of the electrical grid.
- **Provide clarification on certification of customer-generator interconnection equipment:** Under the proposed rules, there is little information on what would be required if a facility does not qualify for interconnection as a level 1 (i.e., the proposed rules say only that the EDC will “use good utility practice to allow interconnection of a customer-facility to such facilities, where feasible”²). Does this imply that the EDC will perform a study? If the expectation is that the developer will be responsible for this study, it should be clear so they can plan accordingly while they are pursuing projects.
- **Require Proactive System Planning:** Proactive system planning would allow EDCs to anticipate and upgrade infrastructure in advance of system integration, resulting in cost efficiency, increased resiliency, and economies of scale. With proactive system planning, EDCs can use predictive models and historical data to anticipate changes in load patterns before they occur. Data from on-demand pre-application studies will provide the clearest signal possible to near expected load and generation patterns. This would also allow for the grid to integrate energy storage systems more effectively when the Storage Incentive Program goes live, enabling EDCs to collaborate

¹ <https://dps.ny.gov/system/files/documents/2024/02/sir-effective-february-1-2024.pdf>

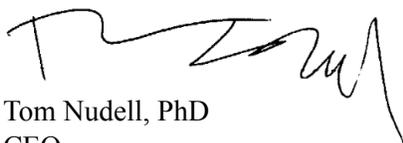
² 14:8-5.4 (d)

with developers to best plan and develop where and when energy storage systems should be deployed.

- **Allow for Conditional Approval as Agreement to Terms:** Some EDCs are challenged by the number of agreements that require execution, often involving a lengthy process that requires execution from a high-level executive that can take weeks. Revising the regulations 14:8-5.4(K2) to eliminate the requirement for a signed interconnection agreement for approved projects at the time conditional approval is issued and instead to allowing for the conditional approval to act as the EDC's concurrence to the terms of the agreement enables more flexibility for EDCs.
- **Allow for EDCs to Accept a Promise-to-Pay:** Projects are often delayed due to material lead times. EDCs require payment up front to procure materials for a project. This is often a lengthy process that requires the construction costs to be estimated before an invoice goes to the developer. We advocate for the EDCs to accept a promise-to-pay all costs associated with the interconnection from the developer (at their discretion) as the catalyst for ordering materials. This would significantly reduce delays to projects that are otherwise ready for operation (i.e., but for delays in delivery of materials to the EDC).
- **Add Material Procurement to Key-Performance-Indicators ("KPIs") to be Reported:** We support the proposal³ requiring the EDCs to provide KPIs to developers in processing and reporting applications. Understanding the difficulties involved in aggregating the necessary materials to successfully interconnect DERs to the grid, we ask that EDCs be required to report their status in procuring the necessary materials for each application. Developers are often left in the dark about the EDCs' progress in procuring these materials, which could lead to significant delays and the sidelining of resources that can be dispersed elsewhere. Material procurement being included in the list of KPIs will enable an even more transparent application process for all parties.

Thank you for your consideration of these comments and work to ensure a clean energy future.

Sincerely,



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³ N.J.A.C 14:8-5