Clean Power Research

July 19, 2022

Ms. Carmen Diaz
Acting Secretary of the Board
Board of Public Utilities
44 South Clinton Avenue, 1st Floor
P.O. Box 350
Trenton, New Jersey 08625-0350

Re: In the Matter of Modernizing New Jersey's Interconnection Rules, Processes, and Metrics | Docket No. QO21010085

Dear Ms. Diaz:

Clean Power Research appreciates the opportunity to provide comments on distributed energy resources (DER) interconnection processes as they pertain to New Jersey's Energy Master Plan and its grid modernization objectives.

Clean Power Research has served the energy and utility industry with software, research, and consulting services for over 23 years, with an emphasis on automation and digitization of customer application processing workflows. More than 60 utilities and agencies across the United States—including Orange & Rockland Utilities, Consolidated Edison, Avangrid, Central Hudson Gas & Electric, Eversource Energy, American Electric Power, Ameren, DTE, Consumers Energy, Georgia Power, Southern California Edison, NV Energy, and PacifiCorp, among others—actively use our cloud-based software solution to address a wide range of DER-related challenges. Notably, our partner utilities collectively have processed more than 1.5 million customer applications for over 100 DER interconnection and incentives programs using our workflow automation software, PowerClerk®.

Clean Power Research agrees with the finding from Guidehouse's draft "*Grid Modernization Study: New Jersey Board of Public Utilities*" report (dated June 13, 2022) that notable opportunities exist to streamline and automate behind-the-meter DER interconnection processes. Through our experience as a trusted partner in the rapidly growing DER space, we offer the following observations to complement the work done so far by the Board and Guidehouse:

1. A truly effective interconnection application software should be able to accommodate multiple DER programs. Implementing a flexible software solution to support multiple programs across different technologies and program types provides tremendous value to utilities in terms of implementation resources, ongoing maintenance needs, speed to launch new programs, and more, while streamlining user experience for customers, installation contractors, and utility program managers. In particular, the ability to connect projects across separate programs (e.g., submitted for a single customer account or a single service point) should help reduce redundant entry and review of shared application components such as processing relevant permits.

2. The software should be designed to improve accuracy and consistency of the data entered by applicants. Inconsistencies and errors found in data submitted by applicants are exceedingly common pain points associated with interconnection application processes. These issues frequently result in unnecessary delays

due to the additional back and forth between utility program administrator and applicants for correction. Aside from educating customers and contractors on the best practices for filling out applications, the software solution may also be designed to prevent these situations. For example, providing standardized lists of equipment with drop-down selections helps eliminate guesswork on the applicant's part, and integrating the software with utility's customer information system for real-time validation of applicant inputs can catch many manual data entry errors. Standardized data also enables program administrators to maintain clean, organized data for reporting and audit purposes.

3. A high degree of configurability is critical to ensure the implemented solution can adapt to rapidly changing requirements. Given the nature of DERs and their economic and environmental impacts, interconnection processes are subject to regulatory requirements which sometimes change quite rapidly. For utilities to accommodate such situations, the interconnection application software must be highly configurable to allow changes in elements such as workflow design, connection to external data sources, and flexible user access privileges. For example, the state of California requires its investor-owned utilities to provide limited access privileges to regulatory bodies including licensing boards for purposes relating to consumer protection. Use cases like this may call for access privileges to specific projects to be granted and revoked dynamically and automatically based on application status.

4. An ability to facilitate cross-department intake of application information expedites processing of complex projects. Managing interconnection queue length is a multi-faceted effort, and interconnection application software alone may not completely address the problem. However, software should streamline processes, including where there are dependencies with utility groups outside of the interconnection department. Such examples include applications which necessitate a new revenue meter service (which might require submittal of a service request to the utility's metering department) or applications for interconnection into part of the distribution network with high penetration of existing DERS (which may trigger a technical screening task for the utility's engineering department). Effective interconnection application software should have the capability to allow the interconnection department and other tangential departments to easily exchange data, ultimately helping the interconnection program administrators better track the status of the queue while helping the applicants manage all their data entry on a single platform.

In the 18 years that we have provided workflow and process automation solutions to utilities and energy agencies, we have seen these organizations dramatically reduce their DER application processing time, in many cases optimizing submission and automating approval so that projects are finalized in a matter of minutes. While this speed of processing is important, a modern system should also deliver tangible benefits of transparency, security, efficiency and 24/7 availability to a broad set of stakeholders, from applicants, utilities, and regulators to trade allies, industry associations, and the public. We applaud the Board for taking the leadership in bringing focus to this important opportunity for grid modernization.

Clean Power Research would like to thank the Board for the opportunity to comment on this matter. We look forward to answering any questions the Board may have.

Sincerely,

Jeffrey S. Ressler
CEO
Clean Power Research