December 20, 2017

(via electronic mail to secretary@dps.ny.gov)
Honorable Kathleen H. Burgess
Secretary to the Commission
New York State Public Service Commission
Three Empire State Plaza
Albany, New York 12223-1350

Re: CASE 15-E-0557 - In the Matter of Proposed Amendments to the New York State Standardized Interconnection Requirements (SIR) for Small Distributed Generators.
CASE 15-E-0751 - In the Matter of the Value of Distributed Energy Resources.

Dear Secretary Burgess:

With this cover letter, Department of Public Service Staff (Staff) submits proposed amendments to the Standardized Interconnection Requirements (SIRs) for Small Distributed Generators, with revisions noted in redlined format from the SIRs most recently approved by the New York Public Service Commission (Commission).\(^1\) Staff proposes a number of these

---

\(^1\) Case 16-E-0560, Joint Petition for Modification to the New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators 5 MW or Less Connected in Parallel with Utility Distribution Systems, Order Adopting Statewide Standardized Interconnection Forms (issued August 2, 2017) (Implementation Order).
amendments in compliance with the Commission’s Implementation Order regarding the value of Distributed Energy Resources.²

The Implementation Order directed Staff to develop and file recommendations for (1) integrating energy storage into the SIRs, and (2) managing interconnection applications for projects from 2 MW to 5 MW in size.³ Staff proposes further amendments in order to address technical and process changes that were developed by Staff based on consultations with stakeholders and experience administering the interconnection process.

Compliance with the Implementation Order.

As noted above, Staff developed several recommendations in response to the Implementation Order. There, the Commission instructed Staff to “work with [the New York State Energy Research and Development Authority (NYSERDA)], utilities, developers, and other interested stakeholders, through the Interconnection Policy Working Group [(IPWG)], the Interconnection Technical Working Group [(ITWG)], and other forums to develop a proposal for integrating storage into the interconnection process. . .” and to “file proposed changes to the SIR and related recommendations by December 20, 2017 for public review and comment followed by Commission consideration.”⁴ In the same Order, to inform its deliberation on the proper compensation for projects larger than 2 MW and up to 5 MW in size, the Commission further directed Staff to “identify and consider technical issues and queue management concerns that may arise with the addition of applications for such larger projects to the interconnection process” and to file any proposed SIR modifications by the same date.⁵

In compliance with the Commission’s directions, Staff consulted with interested stakeholders through the IPWG, ITWG, and NYSERDA.⁶ Staff discussed the Commission’s directives with utility and industry participants at the September 19, 2017 IPWG meeting. At the same meeting, the New York Solar Energy Industry Association (NYSEIA) presented an initial proposal for integrating energy storage into the interconnection process. On October 24, 2017, the IPWG discussed a Staff presentation on approaches to adding energy storage to the SIRs and the potential impacts of larger projects on queue management. Staff offered more detailed proposals on both topics to the IPWG on November 14, 2017.

Similarly, each of the ITWG meetings held on September 29, October 16, November 9, and November 29, 2017 devoted discussion time to the Implementation Order’s directives.⁷ The

³ Implementation Order, pp. 45-48.
⁴ Implementation Order, p. 41.
⁵ Implementation Order, p. 48.
⁶ NYSERDA staff serve as co-chairs of both working groups and have been closely involved in the discussions on the issues identified in the Implementation Order.
⁷ These ITWG meetings included stakeholder discussions on other technical issues outside the scope of the Implementation Order. These additional technical topics include updates to the technical screens, adoption of inverter requirements, and movement towards incorporating
participating New York electric utility and NYSEIA representatives offered detailed proposals for storage system requirements. The proposals were discussed in the group at the November 9 and 29, 2017 meetings.

Staff further refined its proposals in response to ITWG and IPWG discussions, and shared a draft redline of the SIRs with the participants in both working groups on November 27, 2017. Staff also reviewed comments that were offered by NYSEIA and the utilities in response to the November 27, 2017 redline. Staff maintains that there is substantial consensus among IPWG and ITWG participants on the approaches Staff is recommending in this filing, and that Staff’s efforts to engage interested parties complied with the Commission’s Implementation Order directives.

**Recommendation on Energy Storage.**

Staff asserts that the interconnection process can be adapted to support both distributed generation (DG) projects paired with storage and stand-alone storage facilities operating in parallel with the distribution system. To integrate energy storage projects, Staff recommends adding a new storage-specific section to the SIRs.

The proposed new Section D covers four types of applications: 1) new DG projects paired with storage; 2) proposals to interconnect stand-alone storage equipment; 3) adding storage to a DG facility that is already interconnected; and, 4) requests to change an existing storage system’s mode of operation. Section D does not limit the operating parameters an applicant may propose, thus allowing developers flexibility to propose the configurations that they determine may be economic under the applicable Commission compensation policy. However, the Staff filing preserves the SIR-eligibility limit that the alternating current (AC) nameplate rating of each of the elements, the DG, and the storage technology, cannot exceed 5 MW.

New Section D incorporates the existing provisions of the SIRs to define the steps and deadlines that will apply to the four new types of applications in the technical review phase. The interconnecting utility will look at the nameplate rating to determine which part of the SIRs applies to a given storage application. For example, an application to install a 2 MW solar generating system paired with 2 MW of storage capability will be processed under Section C of the SIR, which governs projects with a nameplate rating above 50 kW. Similarly, a proposal to add 40 kW of storage to an existing 40 kW DG facility will follow the rules in Section B, which applies to small systems sized up to 50 kW as long as the net export capabilities don’t exceed 50kW.

As is the case under the SIRs today, the interconnecting utility’s technical review identifies what, if any, system modifications will be needed to support the applicant’s proposal.

---

8 Storage that does not “operate in parallel” with the distribution system would not be subject to the SIRs.

9 Applicants will be required to submit detailed information on their projects’ operating characteristics with their applications. The specific information requirements applicable to a storage project are listed in the new Appendix K.
The utility then provides the applicant with an estimate of the costs of constructing those necessary system modifications. The applicant will have the choice of either accepting those costs or withdrawing the application.\(^{10}\)

Finally, once the technical review is complete and the applicant has made the decision to proceed to construction, the proposed Section D provides for the parties to sign a modified version of the New York State Standardized Contract applicable to facilities that involve storage. This modified contract, attached to the Staff redline as Appendix A.1, incorporates the approved operating parameters for the storage system.

More detailed proposals and discussions regarding incorporating energy storage into the SIRs were vetted through the ITWG over the short time between the Implementation Order and the filing deadline. Participants began discussions relating to the technical standards that would be applied to applications involving storage systems. Electric Power Research Institute (EPRI), one of the technical consultants assisting the ITWG, provided recommendations regarding how to incorporate storage into the technical screening process and framed the stakeholder discussions. Additional review/analysis time and the associated costs for such reviews of energy storage related projects were also discussed as part of the ITWG meetings. Prior to each ITWG meeting an agenda was agreed to by a liaison from each group and all proposals and comments were shared and discussed in detail during the in-person meetings. In all of the ITWG meetings and associated discussions, both the utility and industry participants were asked to provide comments and input for Staff’s consideration of the recommended SIR changes. The ITWG efforts were pursued in coordination with the IPWG discussions, and updates from each group were given at the other’s respective meetings to ensure all parties were informed of progress.

**Staff Recommendation on Projects from 2-5MW.**

The SIRs currently in effect contemplate DG projects up to 5 MW in size. In compliance with the Implementation Order, Staff asked the utilities and DG industry stakeholders for input on any technical or queue processing issues that might arise if the Commission were to extend Value Stack tariff compensation to larger projects. No such issues were identified in the course of the stakeholder meetings. However, developer stakeholders expressed concern regarding whether and how applications for smaller projects that are currently in the interconnection queue could be combined up to the 5 MW cap. The Staff proposal addresses this concern and adds a new Section E authorizing certain existing project applications to be re-studied as larger combined projects. The rules in Section E would allow project applications located on the same circuit and substation bus, which can be combined without adverse impact to another applicant, to be re-studied at the developer’s option and cost. The Staff proposal provides for the suspension of otherwise applicable progress deadlines in order to allow time for any necessary re-study, but balances this deadline suspension with applicant requirements to make prompt decisions on whether or not to proceed with a combined project. This solution provides flexibility to developers without causing undue delay to other applications in the utilities’ queues.

\(^{10}\) Consistent with the design of the existing SIRs, the Staff’s proposed redline allows the utility and the applicant to adjust the proposed operating parameters in order to minimize the costs of system upgrades, where it is technically possible to do so.
Other SIR Modifications.

As noted above, the proposed redlines of the SIRs includes a number of changes that are not directly related to the Implementation Order. Many of these recommendations are the result of Staff’s experience with the interconnection process since the Commission enacted policies supporting community distributed generation (CDG) and determined further project interconnection under statutory net energy metering (NEM) under Public Service Law (PSL) §66-j was not in the public interest.\(^\text{11}\) The proposed Staff update removes inapplicable references to NEM, since NEM compensation under PSL §66-j is not available to projects after March 9, 2017, which is the date the Phase One Order was issued.\(^\text{12}\) Staff recognizes that new wind projects remain eligible for NEM compensation pursuant to PSL §66-l until the statutory cap of three-tenths percent of the 2005 electric demand for each utility\(^\text{13}\) is met, which is why the guidance table remains in this update of the SIRs. When those caps are met, the SIRs should be updated to reflect the end of NEM for wind generation projects.

Staff also considered suggestions for clarification and cleanup offered by NYSEIA and other stakeholders, and has adopted those that Staff maintains are warranted at this time. Staff intends to continue to discuss refinements to the SIRs with the ITWG and IPWG. Staff considers the most significant of these additional proposed updates to be those relating to the technical screening criteria. The existing technical screening criteria was first introduced in the March 2016 version of the SIRs. Through the efforts of the ITWG and experience learned over the last 12-16 months, Staff determined where improvements to the existing technical screening criteria were warranted. Staff’s overall goal is to clarify some of the existing screens for standardized applications across the State, as well as to improve or replace some existing screens that are not as useful as originally expected. In order to revise the technical screening criteria, Staff asked EPRI to provide recommendations on improvements to the screening criteria, which were vetted and discussed as part of the ITWG efforts. Additionally, in recent months, the ITWG also had to incorporate energy storage projects into the existing screening criteria, as discussed above. Staff asserts that the updated screening criteria will result in a more effective and efficient preliminary technical evaluation process that will help move proposed interconnection projects along to completion, while ensuring the safety and reliability of the electrical system.

Other important changes are intended to clarify the steps involved in executing the New York State Standardized Contract. Under the existing SIRs, developers sign and submit a contract along with the application. Staff recommends shifting the execution of the contract to a later point in the interconnection process. Except for small, fast-tracked projects, Staff proposes the parties sign the New York State Standardized Contract after the utility system modifications and cost estimates have been identified. The Staff proposal also eliminates an ambiguity in the SIRs related to construction scheduling, and requires the utility to provide an initial schedule with the interconnection study results for discussion with the applicant. With these changes, a developer will have an understanding of both the project costs, and the utility’s schedule for its

---


12 Phase One Order, p. 13.

13 PSL §66-l(3)iii.
part of the construction work, at the time the developer signs the contract. Other changes recommended here include miscellaneous clarifications, corrections, and new definitions for terms that are used in the SIR.

Very Truly Yours,

_____ /s/ ______

Elizabeth Grisaru
New York State Distributed Generation Ombudsperson

Jason Pause
Utility Supervisor

Bridget M. Woebbe
Assistant Counsel