

MEMORANDUM

To: Zach Smith, NYISO
From: Roger Clayton, NYSRC
Date: April 5, 2018
Re: Distributed Energy Resources - Connection Modeling & Reliability Considerations

The following is a proposed draft Agenda for a NYSRC/NYISO Workshop on the possible impact of DER on NYCA reliability. My idea is to raise awareness of this potential and be ready to develop new reliability rules when required, in coordination with activities at NERC¹, Argonne National Laboratory², IEEE 1547³ and NYISO⁴ et al.

The subject title, “Distributed Energy Resources - Connection Modeling & Reliability Considerations”¹ is taken from the NERC February, 2017 document of the same name. It lists key areas of focus and I modified that list for this draft agenda:

- Modeling
- Ramping & Variability
- Reactive power
- Frequency & voltage ride-through
- Energy storage
- Dispatchable load
- Protection
- Visibility & control
- Load & generation forecasting
- Interconnection requirements
- Reliability Standards

Integrating the NYISO’s work in addressing these items would seem to be a good way to start. I appreciate the NYISO’s support and look forward to your review/revisions to this approach, or suggestions for another way to start the dialogue. I am looking forward to our April 23, 2018 meeting with your subject matter experts with the objective of developing a draft scope for the workshop. We can then start to assign and develop presentations.

References

1. "Distributed Energy Resources - Connection Modeling & Reliability Considerations", NERC, February, 2017
2. "Impact of Distributed Energy Resources on the Bulk Power System", Argonne National Laboratory, 2017
3. "IEEE Standard for Interconnection and Interoperability of DER with Associated Electric Power Systems Interfaces", IEEE Standard 1547 revision (in progress), Q2/Q3 2018
4. "DER Roadmap for NY's Wholesale Electricity Market", NYISO, January 2017
5. "NYISO Market Initiatives – DER Roadmap & Pilot Program", NYISO presentation to ICAP SubCommittee, February 27, 2018
6. "FERC Notice of Technical Conference – DER Technical Considerations for the BPS", April 10 & 11, 2018
7. "ISO-NE Implementation of Revised IEEE Standard 1547", February 14, 2018
8. "New York Makes Historic Investment In Renewable Energy", NYISO PV Pilot Program, 3/30/18
9. "PETITION FOR AN ORDER ESTABLISHING A SEPARATE PROCEEDING TO ADVANCE NEW YORK'S ELECTRIC VEHICLE MARKET", Petition to NY PSC on REV proceeding, 2/21/18
10. "Proposed Tariff Revisions Addressing Provision of Synchronized Reserves by Inverter-Based Energy Storage Resources; Docket No. ER18-____-000", NYISO's proposed OATT revisions, 3/29/18