MEMORANDUM

To: Zach Smith, NYISO From: Roger Clayton, NYSRC

Date: March 1, 2018

Re: Distributed Energy Resources - Connection Modeling & Reliability Considerations

The following is a proposed draft Agenda for a NYSRC/NYISO Seminar 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" 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. Let's talk.

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