



# Planning Procedure 12

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## *Procedure for Distributed Energy Resource Data Collection*

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# Planning Procedure 12 Overview

Proposed Effective Date: August 2024

- ISO-NE proposes a new Planning Procedure to formalize and standardize the data collection of size, location, and characteristics of Distributed Energy Resources (DER)
- Distribution Providers would be responsible for providing installation-level data on DERs connected to their system
- Transmission Owners would be responsible for providing basic data to translate feeder IDs into substation names and other identifying information



# Background

- ISO-NE currently collects data on DER installations through a voluntary DER survey
  - Data format and data quality vary among providers
  - Not well suited for co-located generation/storage facilities
  - Until recently, the DER survey did not include information on the electrical location of DER, limiting its use for some applications
  - Results of DER survey distributed via the Distributed Generation Forecast Working Group ([example](#))
- ISO-NE learned from numerous Distribution Providers that additional data is often available beyond what is requested in the DER survey
- ISO-NE proposes to create a more formal process with a uniform format for providing data on DER installations
  - Both the current process and new process would cover all types/fuel sources of DER



# Background (cont.)

- Benefits of complete, consistent DER data to many ISO-NE processes were presented at the [April 17 RC meeting](#)
  - Load Forecasting
  - Power System Modeling
  - Transmission Planning
  - Transmission Service Studies
  - Operations Technical Studies
  - Energy Management System (EMS)
- Facility-by-facility data provides the granularity necessary for many of these processes, and allows ISO-NE to track trends in facility sizes and technology types



# Distribution Provider Feedback

- Additional discussions with Distribution Providers since the June RC meeting have resulted in revisions to the draft procedure:
  - Data field for storage/hybrid facilities has been changed from “Usable energy (kWh)” to “Installed energy capacity (kWh)”
    - ISO-NE has learned that Distribution Providers’ knowledge of energy storage size is typically limited to a facility’s nameplate capacity
    - Difference between installed energy capacity and energy typically charged/discharged in a daily cycle will be addressed as needed through updates to study assumptions based on observed behavior
  - Better understanding of treatment of canceled and retired DER facilities has led to updates in the description of the “Status” field
  - Updated effective date and footnotes in procedure body for clarity



# Ongoing Coordination with Distribution Providers

- ISO-NE will continue to coordinate with Distribution Providers in the lead-up to the first DER data collection under PP12 in January 2025, and on an ongoing basis thereafter
- The topic for specific discussions will dictate the appropriate venue
  - Direct discussions between ISO-NE and Distribution Providers will be set up and held on an ad hoc basis
  - Discussions on the use of DER data collected through PP12 will be held at the Distributed Generation Forecast WG, Load Forecast Committee, Planning Advisory Committee, or other groups as appropriate
  - Any updates to PP12 or its Appendices will be discussed and acted on at the NEPOOL Reliability Committee



# REVISED PP12 TEXT

*Updates since June RC presentation*



# PP12 Updates since June RC

Procedure Location	Procedure Text	Reason for Change
Title Page	EFFECTIVE DATE: <del>January 1, 2025</del> <u>August XX, 2024</u>	Clarification of effective date. Effective date is based on expected date of NEPOOL Participants Committee vote. The schedule for the first data collection will remain as described in section 3.0 (Data Collection Timeline) and as discussed at the June RC meeting.  (Exact effective date to be determined)



# PP12 Updates since June RC (cont'd)

Procedure Location	Procedure Text	Reason for Change
2.0 Applicable Entities, Footnote 2	<p>For the purposes of this planning procedure, a “Distribution Provider” is defined as operating the “wires” between the transmission system and the end-use customer. The term is not defined by a specific voltage, but rather as performing the distribution function at any voltage. Note that while this definition is similar to NERC’s definition of the same term (see NERC Glossary of Terms, <a href="https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf">https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf</a>), the definition of Distribution Provider for the purposes of this Planning Procedure is not dependent on the Distribution Provider’s peak load served, in contrast to NERC’s use of a minimum size threshold for NERC registration purposes.</p>	<p>Clarification of definition of Distribution Provider and contrast with NERC’s definition. Clarified to better highlight the definition used for the purposes of this Planning Procedure.</p> <p>(Red-lined revisions are not shown on this slide for clarity, but are available in the draft procedure posted for this meeting.)</p>

# PP12 Updates since June RC (cont'd)

Procedure Location	Procedure Text	Reason for Change
4.2 Distribution Provider Submissions, Footnote 3	The data request as part of this procedure may be compiled from Distribution Providers' interconnection queues or similar records, and it is understood that some details (such as in-service dates, maximum DC generation for solar facilities, or <del>usable kWh</del> <u>installed energy capacity</u> for storage facilities) may change as a project is developed and constructed. ISO New England's expectation is that distribution providers will provide the most up-to-date information available to them, and there is no requirement for distribution providers to conduct field verification of these quantities, <u>or to retroactively provide unavailable data for previously interconnected facilities.</u>	<p>Updated footnote to reflect change from "Usable energy" to "Installed energy capacity" in Appendix A.</p> <p>Clarification that there is no requirement to obtain data not already at hand for facilities interconnected before the implementation of PP12.</p>

# PP12 Updates since June RC (cont'd)

Procedure Location	Procedure Text	Reason for Change
Appendix A, Description of "Status" Field	DER status. Valid entries are: Online, Pending, Retired, Long-Term Outage, and Canceled. <u>Distribution Providers are not required to keep facilities in their submissions with a status of Canceled if proposed facilities are automatically removed from interconnection queues or tracking systems upon cancellation. Facility retirements or long-term outages should be reported to the extent that the Distribution Provider is notified of these conditions.</u>	Updated based on better understanding of data availability for canceled/retired DER facilities

# PP12 Updates since June RC (cont'd)

Procedure Location	Procedure Text	Reason for Change
Appendix A, field name	<del>Usable energy</del> <u>Installed energy capacity</u> (kWh)	Updated terminology for storage capacity
Appendix A, Description of “Installed Energy Capacity” Field	Total energy stored, <u>as determined by storage system nameplate or total capacity.</u> <del>If total input and output energy are both known, please provide input energy (before losses due to round trip efficiency). Does not include any nameplate capacity that is never charged/discharged in order to maintain battery life.</del> Required only for facilities including energy storage interconnected on or after January 1, 2025.	Updated to better reflect the data that is available to Distribution Providers

# PP12 Updates since June RC (cont'd)

Procedure Location	Procedure Text	Reason for Change
Appendix C, Examples 2, 3, and 4	<ul style="list-style-type: none"><li>• Replacement of example of 10 MWh battery, with 80% of energy storage available for use, with an 8 MWh battery</li><li>• Removal of references to percentage of energy storage available for use</li><li>• Change of terminology from “Usable energy” to “Installed energy capacity”</li><li>• Corresponding updates to figures</li></ul>	<p>Updated to reflect change in requested data from “Usable energy” to “Installed energy capacity”</p> <p>(Red-lined revisions are not shown on this slide for clarity, but are available in the draft procedure posted for this meeting.)</p>

# CONCLUSION AND SCHEDULE



# Conclusion

- ISO-NE proposes a new Planning Procedure to formalize and standardize the collection of size, location, and characteristics of Distributed Energy Resources (DER)
- Uniformity in data submission will lead to better accuracy of load forecasting and studies at ISO-NE, in time frames from longer-term planning to real-time operations



# Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
<a href="#"><u>Reliability Committee</u></a> <a href="#"><u>April 17, 2024</u></a>	Initial introduction & background
<a href="#"><u>Reliability Committee</u></a> <a href="#"><u>May 14, 2024</u></a>	Present draft procedure
<a href="#"><u>Reliability Committee</u></a> <a href="#"><u>June 18, 2024</u></a>	Present updated draft procedure
<b>Reliability Committee</b> <b>July 16, 2024</b>	Present updated draft procedure; Vote
<b>Participants Committee</b> <b>August 1, 2024</b>	Vote



# Questions

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