

# Appendix E - Explanation of Terms and Instructions for Data Preparation of ISO New England Form NX-12E, Asset Related Demands Technical Data

Effective Date: October 31, 2024

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## Table of Contents

References:.....	2
General Information.....	3
Specific Information.....	4
OP-14 Appendix E Revision History.....	7

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**References:**

ISO New England Inc. Transmission, Markets, and Services Tariff (ISO Tariff), Section I - General Terms and Conditions, I.2.2., Definitions

ISO New England Operating Procedure No. 1 - Central Dispatch Operating Responsibilities and Authority (OP-1)

ISO New England Operating Procedure No. 14 - Technical Requirements for Generators, Demand Response Resources, Asset Related Demands and Alternative Technology Regulation Resources (OP-14)

ISO New England Manual for Market Rule 1 Accounting, Manual M-28 (Manual M-28)

ISO New England Manual for Registration and Performance Auditing (Manual M-RPA), Section 3: Dispatchable Asset Related Demand NCL Auditing for DARDs Other than Storage DARDs

## **General Information**

The NX-12E Asset Related Demands Technical Data form (NX-12E) provides ISO New England (ISO) with needed data that is **not** part of Offer data. All required data shall be provided for each defined Asset Related Demand (ARD), per Section IV & V of ISO New England Operating Procedure No. 14 - Technical Requirements for Generators, Demand Response Resources, Asset Related Demands and Alternative Technology Regulation Resources (OP-14).

Once an initial NX-12E form has been provided, any change in ARD data shall be reported to ISO via Ask ISO.

In order for ISO to approve an NX-12E form, all required data shall be provided without errors and without omissions. The Lead Market Participant (Lead MP) shall correct errors or omissions of NX-12E data and re-submit to ISO. ISO, at its sole discretion, shall determine if the NX-12E data is complete and correct. The effective date for changes to NX-12E data items shall be at least seven (7) days from the date when ISO determines that the data is complete and correct.

When requested to select from a list of items, please indicate your selection by entering an "x" in the appropriate space on the NX-12E form.

**Lead Market Participant** - an ARD Lead MP [which is defined in Section I.2.2 of the ISO New England Inc. Transmission, Markets, and Services Tariff (ISO Tariff)].

**LP ID** - the Customer ID, as assigned to each entity at the time of Customer Registration, as defined in ISO New England Manuals and Procedures

**Local Control Center** the Local Control Center (LCC) with TOP responsibilities for the transmission system where the Generator is interconnected.

**ARD Name** - the name of the Asset to be used for Asset registration.

**Asset ID** - the ARD Asset ID assigned to the Asset by ISO Participant Support & Solutions at the time of the Asset's registration, as defined in ISO New England Manual for Market Rule 1 Accounting, Manual M-28 (Manual M-28)

**Designated Entity (DE)** - the name of the entity that receives, acknowledges, and responds to Dispatch Instructions and communications registered in accordance with ISO Manual for Registration and Performance Auditing (Manual M-RPA), Section 3. The Dispatchable Asset Related Demand (DARD) DE is the only entity to which ISO communicates Dispatch Instructions.

The DE name must:

- Be unique
- **Not** exceed 27 characters

**DE ID#** - the unique identification number that ISO assigns to the DE at the time of Asset registration, in accordance with ISO Manual M-RPA.

## **Specific Information**

### **Section 1: Data Revision Information**

This information includes the Data Revision Number, date prepared, name of person who prepared the data, and requested effective date.

**Data Revision No.** - the first time a Lead MP submits an NX-12E form and ISO approves it, it shall be assigned Data Revision Number 0. Each time the Lead MP submits revised data and ISO approves it, the Data Revision Number shall be incremented. The revision number shall only be incremented from one approved NX-12E to the next approved NX-12E. In other words, if changes to an approved NX-12E are needed and a new NX-12E form is submitted for ISO's approval, the data revision number shall be incremented. If, however, there are errors or missing data on the new NX-12E form, then the Lead MP shall submit another corrected form. This corrected form shall have the errors corrected and/or missing data provided, but the Data Revision Number shall be the same as the one on the previously submitted new form.

**Date Prepared** - the date on which the Lead MP submits the NX-12E form to ISO.

**Requested Effective Date** - the date when the new NX-12E form is to become effective. For a new unit, the effective date is to be at least one hundred twenty (120) days following the date on which the designated recipient at ISO receives the NX-12E form (assuming that the NX-12E form and all other required data are complete and correct). For an existing Asset, the effective date is to be at least seven (7) days following the date on which the designated recipient at ISO receives the data (assuming that the form is complete and correct). If there are errors or omissions on an NX-12E form, subsequent submittals of corrected NX-12E forms shall have a Requested Effective Date that is at least seven (7) days from the date on which ISO receives the corrected NX-12E form.

## Section 2: Basic Information

This information indicates the type, electrical location, status and classification of an Asset.

**Asset Related Demand Type** - select the type of ARD from the choices listed below and on the NX-12E form.

1. Pump Storage
2. Station Service
3. Energy Storage
4. Other

**Metering Domain (ID)** - Metering Domains are defined in Section 7.2.1 of ISO New England Manual for Market Rule 1 Accounting Manual M-28. Each node modeled for pricing purposes in the state estimator shall be associated with a single Metering Domain ID. All Load Assets receiving Zonal Price treatment in settlement shall be connected to a Metering Domain.

**Capabilities** - Check all that apply:

1. Dispatchable:  
A DARD available to be dispatched by ISO based on hourly price structure and operating limits. A DARD shall be able to receive and respond to Desired Dispatch Points (DDPs).
2. Biddable:  
DARD is able to submit Offers into the eMKT application.

## Section 3: Minimum Consumption Limit

Minimum Consumption Limit capability value is reported in MW, to three decimal places.

## Section 4: Maximum Consumption Limit

Maximum Consumption Limit capability value is reported in MW, to three decimal places.

## Section 5: Nominated Consumption Limit (NCL)

Nominated Consumption Limit capability value is reported in MW, to three decimal places.

Capabilities are determined in accordance with ISO Manual M-RPA.

## Section 6: Does the storage facility have DC Energy Storage? (Yes/ No)

Indicator of whether the storage facility has DC Energy Storage, reported as 'Yes' or 'No'.

## Section 7: Nominal DC Energy (Energy Storage Only)

Nameplate DC storage capability, reported in MWh to three decimal places.

Section 8: Usable AC Energy (Pump Storage or Energy Storage Only)

The maximum MWh that is deliverable to the Bulk Electric System before the storage facility must be recharged, reported in MWh to three decimal places.

Section 9: Does the Continuous Storage Facility include both energy storage and additional generation? (Yes/ No)

Indicator of if the storage facility can store energy from additional on-site generation that is part of the storage facility market asset, reported as 'Yes' or 'No'.

Section 10: Round-Trip Efficiency (Pump Storage or Energy Storage Only)

Summer: The estimated ratio of the net total energy delivered to the system to the total energy consumed by the storage facility and its associated loads, less any discretely reported station service load, over the course of the time period between June 1 and September 30, reported in percentage to one decimal place.

Winter: The estimated ratio of the net total energy delivered to the system to the total energy consumed by the storage facility and its associated loads, less any discretely reported station service load, over the course of the time period between October 1 and May 31, reported in percentage to one decimal place.

Section 11: Maximum Charging Rate (Pump Storage or Energy Storage Only)

The combined maximum rate at which the storage facility can consume energy regardless of the source of the energy, reported in MW to 3 decimal places.

Section 12: Minimum Time to Charge (Pump Storage or Energy Storage Only)

The minimum total hours required to charge the storage facility from its minimum allowable stored energy to its maximum allowable stored energy, reported in hours to one decimal place.

Section 13: Additional Information

List any additional information regarding the DARD that is not previously detailed in this form or the Offer parameters.

**OP-14 Appendix E Revision History**

**Document History** (This Document History documents action taken on the equivalent NEPOOL Procedure prior to the RTO Operations Date as well revisions made to the ISO New England Procedure subsequent to the RTO Operations Date.)

Rev. No.	Date	Reason
Rev 1	01/05/05	
Rev 2	02/01/05	Updated to conform to RTO terminology
Rev 3	10/01/06	Updated for ASM Phase 2
Rev 4	01/29/13	Global editorial & format changes: font to Arial, added Table of contents, added uncontrolled disclaimer to 1 <sup>st</sup> page footer, added "Hard Copy is Uncontrolled" to all page footers and changed page numbering format to Page X of Y, added References section; Section 1: Added Lead Participant and Designated Entity IDs; Removed contact details, replacing them with Person ID's. Moved Lead Participant contact from Section 6; Section 2: Removed "Status", Claim 10 and Claim 30; Sections 6 Staffing removed; Section 7 Contact information removed.
Rev 5	10/31/14	Biennial review by procedure owner; Updated general information regarding method of data changes; Updated title and edited Section 1 to delete contact information; Corrected reference document titles
Rev 5.1	09/19/16	Periodic review performed requiring no changes; Added required corporate document identity to all footers;
Rev 5.2	06/06/18	Periodic review performed requiring no changes; Made administrative changes required to publish a Minor Revision (globally updated OP-14 title in headers, reference section and General Information section);
Rev 6	09/18/19	Section 2, Asset Related Demand Type drop-down, added "Energy Storage; Globally made editorial changes consistent with current conditions, practices and management expectations; Made administrative changes required to publish Revision 6;
Rev 6.1	02/04/20	Periodic review performed requiring no changes;
Rev 7	12/22/21	Periodic review by owner; Added reference to OP-14 Section V in General Information. Revised the explanation of "LCC" in General Information section, previous wording was <u>inaccurate</u> .
Rev 7.1	12/18/23	Biennial review performed by procedure owner requiring no changes; Made administrative changes required to publish a Minor Revision.
Rev 8	10/31/24	Biennial review performed by Procedure Owner; Added energy storage parameters: Nominal DC Energy, Usable AC Energy, Summer Round-Trip Efficiency, Winter Round-Trip Efficiency, Maximum Charging Rate, and Minimum Time to Charge.