### Analytical Framework - Grid Transformation Analysis

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#### Overview

- ISO-NE Objectives
- Overarching Assumption/Focus of Presentation
- Proposed Analytical Framework
- Analytical Tools
- Questions & Comments



#### ISO-NE Objectives

- The current ISO objectives were initially developed in the late 1990s when we were transitioning from a cost-based construct to an offer-based construct.
- What has been missing is consideration of how these objectives have led to the situation we are in today.
- We need to consider whether new objectives might be necessary to achieve the outcomes anticipated desired by consumers and state policymakers.

### Focus & Overarching Assumption

- Our focus is on developing an analytical framework that can be applied no matter what assumptions and resource mix scenarios are assumed.
- Overarching assumption is that resources to meet regional energy and environmental policies will be developed irrespective of how they participate in the wholesale markets.
- Leave it to the Committees figure out how to identify the mix of resources & other assumptions to meet these objectives.

### Proposed Analytical Framework

- Under the current Market Rules there are 2 ways that resources can interconnect and participate in the wholesale markets.
  - Resources with capacity network interconnections (CNRIS) can participate in the Capacity, Energy & Ancillary Service markets.
  - Resources with minimum interconnection service (NRIS) can only participate in the Energy & Ancillary Service markets

# Proposed Analytical Framework (cont.)

- The Grid Transition Analysis should consider the two options that policy resources have for interconnecting and participating in the wholesale markets across all scenarios and cases
  - All policy resources would be CNRIS and participate in Capacity, Energy, and Ancillary Service markets.
  - All policy resources would be NRIS and only participate in the Energy & Ancillary Service markets.

# Proposed Analytical Framework (cont.)

- If the policy resource cannot get a CSO through the FCA (either due to the MOPR or the CASPR test price) or if the cost of a CNRIS is too high, NRIS may well become the preferred outcome.
- Resources participating as CNRIS and NRIS can have different implications for consumer costs, payments to resources, system operations, resource adequacy, and other metrics.

# Proposed Analytical Framework (cont.)

- It appears that most have assumed all resources would be CNRIS and participate in all wholesale markets.
- While NRIS resources may need additional non-wholesale market support, understanding the broader implications will be helpful in evaluating potential "gaps" in the market.
- This approach is consistent with the ESI
   Condition Cases (Frequently, Infrequently, and
   Extended Stress Cases).

#### Analytical Tools

- ISO does not currently have a tool to develop estimated Forward Capacity Market prices in its planning studies.
  - This has been an issue in interpreting the results from previous Economic Studies.
- To help evaluate the implications of various resource mixes, a capacity "optimization" tool should be developed to help evaluate both competitive entry and exit from the markets under the future policy resource scenarios.

### Questions?

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