ISO new england

memo

To: Reliability Committee

From: Marc Lyons, Secretary – Reliability Committee

Date: September 2, 2009

Subject: **RESULTS OF STRAW POLL VOTE ON LSR/TSA/ZONES RELIABILITY REVIEW RELATED ISSUES**

This memo is to notify the Reliability Committee ("RC") of the action taken by the Reliability Committee at its August 28, 2009 meeting pertaining to the LSR/TSA/Zones Straw Poll Vote on Reliability Review Related Issues. All sectors had a quorum.

(Agenda Item 2) Reliability Review Related Issues

Reliability Reviews[1] Related Issues:

a. What input assumptions should go into ISO-NE reliability reviews? Why?

ISO-NE Proposal
Input assumptions related to all elements of the power system (load, resources, transmission topology, transmission transfer capability and operating/emergency actions) need to be defined for ISO-NE to perform its reliability reviews.

Should the same assumptions be used for qualifying new capacity for the FCAs and for calculating ICR, LSR and MCL (as currently described in section III.12 of Market Rule 1) as are used for reliability reviews?

ISO-NE Proposal
ISO-NE does not recommend using the same assumptions for qualifying new capacity for the FCAs, for calculating ICR, LSR and MCL (as currently described in section III.12 of Market Rule 1) and for performing annual reliability reviews (in the context of this answer, LSR refers to the probabilistic one day in ten zonal resource adequacy requirement and not necessarily to the local sourcing requirement to be purchased in FCM). **The purpose of the qualification process for new capacity is to ensure that all new capacity purchased in the capacity market is incrementally useful to the system. The purpose of the reliability reviews is to ensure that basic reliability requirements as specified by NERC or NPCC are preserved. The ISO believes that because the purpose of the qualification process**

[1] The term "reliability reviews" as used in this document means ISO annual reliability reviews of resources done in the context of the FCM (i.e., for requests to de-list, Annual Bilateral Transactions and Annual Reconfiguration Auctions).

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for new capacity and reliability reviews are different, the assumptions used for qualifying new capacity and for performing reliability reviews do not need to be the same.

The calculation of ICR, LSR and MCL (as currently described in section III.12 of Market Rule 1) is purely based on resource adequacy requirements. The performance of reliability reviews is purely based on transmission security requirements. Resource adequacy and transmission security requirements are both necessary to meet basic reliability requirements. Since they meet different purposes, one being to ensure resource adequacy, the other being to ensure transmission security, the ISO believes that the assumptions used for the calculation of ICR, LSR and MCL (as currently described in section III.12 of Market Rule 1) and for performing reliability reviews do not need to be the same.

Some of the assumptions that should be discussed include:

- **Which load forecast (90/10?)**
- **Quick start thermal unit discount factor (33%?)**
- **Unit availability assumptions**
- **DR Assumptions regarding availability and dispatch**
- **RTEG assumptions (currently ignored)**
- **Willingness to go into OP-4 to resolve overloads**
- **N-1 vs. N-1-1**
- **Adjustments for non-deliverable capacity in export constrained areas**

ISO-NE Proposal

ISO-NE's proposal is described in Attachment A.

b. What methodology should be used to establish each assumption?

ISO-NE Proposal

Reference ISO-NE's proposal is described in Attachment A. Discussed below are some of the assumptions:

Load forecast data will be determined pursuant to section III.12 of Market Rule 1.

Resources that will be included are a direct output of the existing qualification and clearing process of the Forward Capacity Market, and will be determined pursuant to section III.13 of Market Rule 1. In addition, the determination of which qualified New Capacity Resources will be included pursuant to the Attachment K certification process (i.e. resources with contractual commitments in ISO-NE's planning process) is further described in Planning Procedure No. 10, "Planning Procedure to Support the Forward Capacity Market".

Resource forced outage assumptions for non-peaking generating resources and Demand Resources will be determined pursuant to section III.12 of Market Rule 1.

Generating resources will be classified as peaking generation resources, if either

1. **They are in-service and are non-hydro resources that satisfy the definition of a Fast Start Generator, pursuant to Market Rule 1,**

Or,

2. **They are not yet in-service but are diesel, gas turbine or jet engine resources.**

Resource forced outage assumptions for peaking generation resources will be determined

using a deterministic adjustment factor based on the anecdotal operational experience of ISO-NE. Until further assessment, this deterministic factor will be set at 20%.Transfer limits will be determined pursuant to section III.12 of Market Rule 1.

c. What should be the level of risk associated with each assumption?

ISO-NE Proposal
The level of risk associated with each assumption should be closely related to the study timeframe and potential for alternative operating or market measures.

d. How frequently should these assumptions be determined?

ISO-NE Proposal
ISO-NE recommends updating input assumptions that are the result of calculations based on the FCA cycle, which will be annually beginning with the seventh FCA.

e. How/where should these assumptions be documented?

ISO-NE Proposal
ISO-NE recommends documenting the methodology used for the determination of these assumptions in Planning Procedure No. 10, "Planning Procedure to Support the Forward Capacity Market".

Attachment A - ISO-NE Proposal for Reliability Reviews Related Issues

Assumptions	**Annual Reliability Reviews for FCA**	**Annual Reliability Reviews for all Annual Reconfiguration Auctions & Annual CSO Bilaterals**
Scope of Analysis	**System & Local**	**System & Local**
Load Forecast Data	Most recent draft or final CELT forecast 90/10 Seasonal Peak Load	Most recent draft or final CELT forecast 90/10 Seasonal Peak Load
Resource Data	Expected Existing Capacity Resources as of FERC Informational Filing and qualified New Capacity Resources with RFP-contractual obligations (Some new resources accounted for)	Cleared Capacity Supply Obligations at time of analysis (based on the outcome of latest auction and/or bilateral window) (New resources generically accounted for)
1) Generating Capacity	Qualified Existing Capacity	Lesser of Qualified Capacity or Capacity Supply Obligation
2) Active Demand Resources (including RT-EG)	Qualified Existing Capacity	Lesser of Qualified Capacity or Capacity Supply Obligation
3) Passive Demand Resources	Qualified Existing Capacity	Lesser of Qualified Capacity or Capacity Supply Obligation

4) Exports	Qualified Existing Administrative Exports (Transfers to External Control Areas will be modeled to reflect various conditions ranging from 0 MW transfer up-to the total of qualified existing Administrative Exports)	Administrative Exports cleared in FCA (Transfers to External Control Areas will be modeled to reflect various conditions ranging from 0 MW transfer up-to the total of cleared Administrative Exports)
5) Imports[2]	Qualified Existing Imports (Transfers from External Control Areas will be modeled to reflect various conditions ranging from 0 MW transfer up-to the total of ICR Tie Benefits plus qualified existing imports)	Lesser of Qualified Capacity or Capacity Supply Obligation for cleared Imports from the FCA, last Annual RA and/or latest bilateral window (Transfers from External Control Areas will be modeled to reflect various conditions ranging from 0 MW transfer up-to the total of ICR Tie Benefits plus cleared imports from the FCA, last Annual RA and/or latest bilateral window)
Resource Forced Outage Assumptions[1]		
1) Regular Generation Resources (non Peaking, non Intermittent, non DR)	EFORd	EFORd
2) Peaking Generation Resources	Deterministic Adjustment Factor of 20%	Deterministic Adjustment Factor of 20%
3) Intermittent Generation Resources	No additional availability adjustment	No additional availability adjustment
4) Passive Demand Resources	Availability based on performance factor	Availability based on performance factor
5) Active Demand Resources (including RT-EG)	Availability based on performance factor	Availability based on performance factor
Resource Additions and Subtractions		
	Subtraction of accepted Non Price Retirements submitted after the FERC Informational Filing	Subtraction of known outages
Transfer Limits		
1) Internal Transmission Transfer Capability	N-1 and N-1-1 limits as projected for study year	N-1 and N-1-1 limits as projected for study year
2) External Transmission Transfer Capability	N-1 limits, as projected for study year	N-1 limits, as projected for study year
3) Tie Reliability Benefits	See Imports	See Imports
Additional Load Relief from OP4 Actions		
1) Control Area-to-Control Area Emergency Transactions	No	No
2) Load Relief from 5% Voltage Reduction	No	No

[1]Depending on the type of analysis, these will be applied by either modeling the Resource's Capacity at a reduced amount or by modeling equivalent discreet outage scenarios.
[2]The issue listed under question 1.a.iv. above, specifically the application of the overlap standard to internal generators and import interfaces remains to be addressed.

Results of the Straw Vote are as follows:

Generation: 15.021% in favor, 2.15% Opposed, Abstentions 0

Transmission: 17.166% in favor, 0.00% Opposed, Abstentions 0
Supplier: 12.016% in favor, 5.15% Opposed, Abstentions 0
Alternative Resource: 0.00% in favor, 14.17% Opposed, Abstentions 0
Publicly Owned: 1.471% in favor, 15.70% Opposed, Abstentions 2
End User: 17.166% in favor, 0.00% Opposed, Abstentions 1

Totals

62.841% In Favor
37.159% Opposed
3 Abstentions