

New England States Committee on Electricity
Preliminary View on Reliability Review-Related Issues
August 28, 2009

The New England States Committee on Electricity (NESCOE) offers this preliminary statement of views on certain Reliability Review-related issues under consideration by the Reliability Committee (RC). The Reliability Review-related issues are one in a series of Installed Capacity Requirements (ICR)-related matters before the RC. Further, these ICR issues are a subset of myriad related issues under consideration by the Forward Capacity Market Work Group (FCM WG). Accordingly, NESCOE's views expressed herein may evolve based on further analysis as well as consideration of additional issues central to reliability reviews.

As of the time of NESCOE's consideration of ISO-NE's proposals related to Reliability Review, no alternative proposals had been set forth. Accordingly, NESCOE expresses a view on ISO-NE's proposals and does not offer a view on any alternative proposal that may be set forth in the few days before the RC meeting at which a straw vote will be taken on these issues, or August 28, 2009. NESCOE's silence on any such proposals should not be read as consent or opposition to them. NESCOE's deliberative process requires time for the six New England States to examine and discuss such proposals.

- 1. Issue Statement: "Should the same assumptions be used for qualifying capacity for the FCAs and for calculating ICR, LSR and MCL as are used for reliability reviews?"** (See, Issues List for Reliability Committee Project Regarding Potential Changes to: Tie Benefits, Local Sourcing Requirements, Reliability Reviews and Capacity Zones dated August 6, 2009)

ISO Proposal: "ISO-NE does not recommend using the same assumptions for qualifying capacity for the FCAs and calculating ICR, LSR and MCL.

Two different analyses are performed to qualify capacity for participation in a FCA, specifically interconnection analyses for new resources and reliability review for resources seeking to de-list. The purpose of the interconnection analyses 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 and NPCC are preserved. The ISO believes that because the purpose of the qualification process and reliability reviews are different, the assumptions used for qualifying capacity and for performing reliability reviews do not need to be the same.

The calculation of ICR, LSR and MCL 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 have different purposes, one being to ensure resource adequacy, the other being to ensure transmission security, the ISO believes that the assumptions used for calculating ICR, LSR and MCL and for performing reliability reviews do not need to be the same.” (See, Issue List with ISO Proposals, page 5)

NESCOE Viewpoint: NESCOE is still considering this issue. At this time, however, NESCOE is generally inclined toward ISO-NE’s proposal to use distinct ICR and delisting methods and data for the reasons ISO-NE sets forth.

In connection with the presentation of analysis on this issue, ISO-NE should make clear that it undertakes an assessment related to system reliability at three points in time, including:

- Prior to the FCA, to set the quantity of capacity to be procured (ICR) as well as regional limits on the amount that must be procured (LSR) and can be supplied (MCL);
- During the FCA, to evaluate delist offers and determine whether particular combinations of offers create reliability concerns (beyond those reflected in the LSR and MCL); and,
- After the FCA, when evaluating bi-lateral transactions or periodic reconfiguration auctions for maintenance of reliability standards.

2. Issue Statement: “What methodology should be used to establish each assumption?” (See, Issues List for Reliability Committee Project Regarding Potential Changes to: Tie Benefits, Local Sourcing Requirements, Reliability Reviews and Capacity Zones dated August 6, 2009)

ISO Proposal on Peaking Generation Resources: “Resource forced outage assumptions for peaking generation resources will be determined using the following formula:

$$\begin{aligned} & \text{Peaking Generator Forced Outage Factor for Year N} \\ & = (\text{Peaking Generator EFORD for Year N} + 33\%) / 2 \end{aligned}$$

In which:

The peaking generator EFORD for Year N is determined pursuant to section III.12 of Market Rule 1.” (See, Issue List with ISO Proposal, page 6)

NESCOE Viewpoint: In short, ISO-NE currently assumes a 33% forced outage rate and proposes to use the average of 33% and the EFORD, which is currently 6.55% and is based on a 5-year average of actual outage rates.

NESCOE generally supports ISO-NE’s movement toward reliance on a new statistical method to calculate peaking forced outage rates. The proposed approach for derating peaking units moves in the right direction as it would increase reliance on actual unit performance rather than engineering heuristics. As a general matter, this may provide a more reliable foundation upon which to determine the appropriate quantities of reliability to be procuring within the region. The use of an average between assumed and actual experience data would inform a discussion concerning a transition toward a method more reliant on actual data. However, the methodology could be enhanced by substituting an industry average data for specific generating resource technologies for the assumed 33% forced outage factor.

- Issue Statement:** Assumptions Used in Reliability Reviews (See, Issues List for Reliability Committee Project Regarding Potential Changes to: Tie Benefits, Local Sourcing Requirements, Reliability Reviews and Capacity Zones dated August 6, 2009 Attachment A)

ISO Recommendation: See Attachment A, Issue List with ISO Proposal)

NESCOE Viewpoint on OP4 and Emergency Generation: In the context of the conservative 90/10 load forecast used in the TSA, it is reasonable to rely on additional load relief from implementing OP4 actions. In general, ISO-NE argues against reliance on additional load relief from implementing OP4 because it prefers to leave some “tools in the tool box”. This preference for retaining incremental tools is rational in an absolute sense. However, in context of ISO-NE’s conservative 90/10 load forecast, it is reasonable to rely on load relief available through OP4 for the purpose of reliability reviews.

Similarly, ISO should consider emergency generation to be available for the purpose of conducting reliability reviews.

4. **Issue Statement:** “**How/where should these assumptions be documented?**” (Issues List for Reliability Committee Project Regarding Potential Changes to: Tie Benefits, Local Sourcing Requirements, Reliability Reviews and Capacity Zones dated August 6, 2009)

ISO Recommendation: “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”. (See, Issue List with ISO Proposals page 7)

NESCOE Viewpoint: ISO-NE should continue to clearly document its methodological approaches and strive to provide complete documentation of the actual data assumptions used in each ICR and in all reliability reviews.