

September 25, 2009

John Sabiston, Chairman NPCC TFCP

Curt Dahl, P.E., Chairman NYSRC ICS

ISONE request of NPCC TFCP for Assessment whether Assumption of 3415 MW Emergency Assistance and 4.3% ICR violates Criteria or Standards

This letter is in response to ISONE's letter to NPCC TFCP dated September 21, 2009 requesting an assessment whether 3415 MW of emergency assistance violates any criteria/standards (see attachment below).¹

In the past the New York State Reliability Council has voiced reliability concerns about potential overreliance on emergency assistance by neighboring Control Areas. Our understanding is the 3415 MW of tie benefits relates to the assumption of "As Is" versus "At Criteria" modeling of neighboring Control Areas, and ISO-NE models near term Resource Requirements on the assumption that neighboring Control Areas (NYCA, IMO, HQ, PJM, etc) are at "As-Is" capacity levels as opposed to "At-Criteria".

Modeling of "As-Is" capacity levels assumes, for example, the NYCA is at approximately 130% actual Installed Reserve Margin level as opposed to the 116.5% design level and that all emergency assistance is available and deliverable. This creates a large imbalance in LOLE when ISONE is "At-Criteria" (LOLE of 0.1) while all the neighboring Control Areas are at LOLE \ll 0.1. This could produce unrealistically large transfers of outside emergency assistance and reduce ISO-NE ICR as low as possible.

While "As-Is" is sometimes considered for NPCC adequacy assessments it is important to differentiate between Control Area capacity design studies and NPCC adequacy assessment(s). The purpose of NPCC assessments is to "evaluate on a consistent basis the long range adequacy of NPCC and neighboring regional plans proposed to meet LOLE planning criteria through multi-area probabilistic assessments". The most important element of this description is "on a consistent basis". In contrast, resource adequacy capacity design studies establish the reserve margin requirement for a Control Area such that the probability of disconnecting any firm loads due shall be not more than once in ten years. This necessarily involves simulating the capacity requirements at system design levels of LOLE = 0.1.

A severe incompatibility is introduced when considering a target area (e.g. ISONE) at LOLE= 0.1 design levels while simultaneous modeling of "As-Is" capacity levels for neighboring Control Areas which have "As-Is" LOLE approaching zero. A basic functionality of the MARS program is for areas with excess reserves will provide assistance to deficient areas in proportion to their shortfalls. The disparate LOLEs resulting from the "As-Is" assumption will produce unrealistically large transfers of

¹ National Grid, a member of the New York State Reliability Council (NYSRC), did not join in these comments.

outside emergency assistance from neighboring regions and potentially reduce ISO-NE's ICR and LCR to as low as possible level. This is how the MARS program works. Clearly using inconsistent assumptions of "As-Is" for neighboring control areas and "At-Criteria" for ISONE could result in ISO-NE's resource adequacy design (ICR and LCR) being artificially low at the expense of neighboring control areas.

Specific reliability concerns include:

- 1) In the aggregate potentially over-reliance on imports from NY beyond design level of capacity requirements and capabilities.
- 2) Potentially unrealistic emergency assistance from neighboring Control Areas without consideration to deliverability.
- 3) Lack of external transmission detail and failure to properly model critical locational aspects of this support.
- 4) Recognition if other Control Areas were to make the same assumption would result in double or triple counting on the same resources.
- 5) Overreliance on support from NY resources which goes beyond what NY itself considers in its own resource adequacy design.
- 6) Concerns about robustness of resource adequacy of Area relying "by design" on voltage reductions, SCRs etc from an outside external neighboring control area.
- 7) Coordination between neighboring control areas

We believe use of 3415 MW coupled with "As-Is" Methodology for Neighboring Control Areas may produce artificially low resource adequacy requirements for New England and may consequentially jeopardize the reliability of neighboring Control Areas. For this reason and those stated above, NPCC should direct ISO-NE to reconsider its proposal to model 3415 MW of assistance from neighboring control areas as basis for the purpose of determining resource adequacy for the New England Control Area.

In the past the NYSRC has recommended NY and NE contract with General Electric to perform a joint tie benefits calculation applicable for use in resource adequacy studies.

Lastly we commend ISONE for bringing this important reliability issue to NPCC TFCP for resolution.

Attachment

-----Original Message-----

From: Wong, Peter [<mailto:pwong@iso-ne.com>]

Sent: Monday, September 21, 2009 2:29 PM

To: tfcp

Cc: NEPOOL Reliability Committee; Dahl, Curt J.;

fjvitale@mindspring.com; Philip A. Fedora; cp8; Schwerdt, Edward

Subject: Request for discussion time at the TFCP meeting regarding tie benefits assumptions

Dear TFCP Members,

Enclosed please find a Power Point presentation summarizing the hypothetical system for discussion purposes regarding tie benefits assumptions used in resource adequacy calculations.

Thank you.

Peter

Sent: Tuesday, September 15, 2009 12:19 PM

To: Jack Alvarez

Cc: tfcp; Wong, Peter

Subject: RE: Central Maine Power issue

Jack,

If time permits I would also like to add a discussion item to the agenda. ISO New England would like to ask TFCP whether NE would be violating any criterion/standard (or anything) if New England would assume 3,415 MW of tie benefits to meet the 1 day in 10 years LOLE resource adequacy criterion. Assuming this amount would result in NE having 4.3% resulting reserves. We will put a case together (with representative numbers) for distribution to the TFCP.

If time does not permit (and it hope it does!) to address this item next week, can this be discussed at our next TFCP meeting?

Thanks,

Mike