NYSRC DELIVERABILITY ISSUES STUDY
SCOPE OF WORK

(Draft – 9/10/01)

PURPOSE

The proposed interconnection of new generators behind severely limited transmission facilities may create capacity pockets, which could provide only a fraction of total rated capacity to the New York electric system. Concerns have been raised about the ability of aggregate generation within capacity pockets to deliver certified or claimed Installed Capacity (ICAP) to the transmission grid.

The New York State Reliability Council Reliability Rules Subcommittee (NYSRC RRS) has requested the NYSRC ICAP Working Group (ICAP WG) to conduct a Loss of Load Expectation (LOLE) analysis to address ICAP deliverability issues. This LOLE study will: (1) Demonstrate the reliability impact of bottled generation on statewide and locational LOLE; (2) Develop the specific methods and procedures for recognizing, representing, and accounting for bottled generation in Installed Reserve Margin (IRM) and Locational Capacity requirement studies; and (3) Determine the need to develop a reliability rule on generation deliverability.

A demonstration study including a representation of intra-zonal transmission limits will be conducted to assess the reliability impact of bottled generation.

ANALYSIS

TASK 1 *- Demonstrate the reliability impact of bottled generation on statewide and locational LOLE*

The study will assume the final 2002 IRM study base case as the starting point. This base case will show the required statewide capacity that results in 0.1 day/year customer disconnects, or loss of load expectation (LOLE), due to a capacity related deficiency. In this base case the New York City (NYC) and Long Island (LI) zones will have been calibrated to meet their locational capacity requirements.

Two additional cases will assess the reliability impact of bottled generation behind a known transmission limitation within the Long Island zone. For these cases the Long Island zone, which is represented by a single load area in the base case, will be divided into three sub-zones: Newbridge-West, Central, and Holbrook-East. These cases will evaluate the statewide, NYC, and Long Island LOLE impacts of "shifting" generation that is actually located in the Central sub-zone, to the transmission constrained Holbrook-East sub-zone on eastern Long Island.

CASE DEFINITIONS

CASE 1 - The reference case, which is the 2002 IRM study final base case. No sub-zones or inter-zone transmission limits are represented in this case. Therefore, this case is equivalent to

modeling Long Island as one load area .

CASE 2 - In this case, the actual inter-zone transmission limits between three sub-zones on Long Island will be modeled. Long Island generation will be modeled within three sub-zones as presently located electrically.

CASE 3 – The actual transmission limits between the three Long Island sub-zones will be modeled as in Case 2; however, 750 MW of generation located in Case 2 in the Central sub-zone will be "shifted" to the Holbrook-East sub-zone, which is transmission constrained.

A comparison of the results of the various cases will demonstrate to what extent the NYSRC can account for aggregate generation installed in a capacity pocket in an IRM study.

TASK 2 *- Develop the specific methods and procedures for recognizing, representing, and accounting for bottled generation in IRM and locational capacity requirement studies*

Based on the results of TASK 1 (defined above) an evaluation will be performed of the adequacy of present NYSRC ICAP WG and New York Independent System Operator (NYISO) procedures to recognize and account for bottled ICAP in determining the statewide and locational capacity requirements.

A recommended solution to account for bottled ICAP in future statewide and locational capacity studies will be provided.

TASK 3 *- Determine the need to develop a reliability rule on generation deliverability.*

In addition to developing any changes to Methods and Procedures for bottled capacity based on the results of TASKS 1 and 2 (defined above) a determination will be made on the need to establish a reliability rule on generation deliverability.

If the need for a reliability rule on generation deliverability is established, a reliability rules template will be developed.

RESULTS

A report will be prepared summarizing the results of this study.

SCHEDULE

NYISO will begin the study in 1st Quarter 2002. The study will be completed by the end of the 2nd Quarter 2002.