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September 8, 2003

VIA HAND DELIVERY

Honorable Eleanor Stein Administrative Law Judge New York State Department of Public Service Three Empire Plaza Albany, New York 12223

Re: <u>Case 03-E-0188 - Proceeding on Motion of the Commission Regarding a</u>

Retail Renewable Portfolio Standard

Dear Judge Stein:

These comments are submitted in the above proceeding to supplement the comments submitted by the New York State Reliability Council ("NYSRC") on August 20, 2003.

In its August 20 comments, the NYSRC stated that the design of a Renewable Portfolio Standard ("RPS") may have significant impacts on the reliability of the New York State bulk power system, and urged the Commission to consider the reliability impacts of potential RPS designs and to ensure that the design adopted is consistent with, and preferably enhances, the continued reliability of the New York State bulk power system. The NYSRC also expressed its continued support for the convening of a meeting as soon as possible to consider the potential reliability impacts related to the design and implementation of an RPS. These supplemental comments provide some suggestions as to the specific reliability issues that could be considered at such a meeting.

Renewable Portfolio Standard Proceeding - Potential Reliability Issues

There are a number of considerations that need to be carefully evaluated in order to reliably interconnect large amounts of renewable resources to the transmission system. Primary among them are:

O Impact on Capacity Reserves - Considering the overall availability of renewable resources, an evaluation is needed of the extent to which the renewable resources can be counted on to contribute to system resource adequacy needs. Due to their comparatively low availability, and the potential correlation of this unavailability with peak demand, the

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capacity value of renewable resources is significantly less than conventional resources. This will result in the need for higher reserve requirements (e.g., increased New York Control Area installed capacity requirements and in-city/Long Island locational capacity requirements). The impact of renewable resources on operating reserve requirements (spinning, non-spinning and standby), as well as methods of accounting for such reserves should be evaluated. The potential impact on regulation service also requires evaluation. Due to the variability of renewable resources, the ability to forecast and schedule renewable generated energy, and current practices and protocols for such forecasting, will have to be developed.

- o Impact on Transmission System Design Given the complexities of designing, operating and maintaining a reliable bulk transmission system, having a significant percentage of resources that are variable and less predictable than more conventional resources could present some difficult design challenges. Renewable resources could have a significant impact on voltage and frequency regulation. Requirements and practices to accommodate the impacts of these resources will have to be developed. Transmission system control and protection standards need review. In addition, there are issues associated with the physical interconnection of renewable resources to the transmission system that need to be addressed, including the potential impact of renewable resources on existing power system equipment.
- O Impact on Transmission System Operations The seasonal and daily variations in renewable resources, and the correlation of these variations with seasonal and daily load variations, will make more challenging the operational scheduling of resources. The potential contribution of renewable resources to the ancillary services needed by the system, or any potential requirement for additional ancillary services made necessary by the renewable resources, require study. The response of renewable resources to momentary voltage dips associated with faults on the transmission or distribution system will have to be evaluated, as well as a review of their impact on restoration practices. In addition, the ability to site transmission facilities needed to deliver the generated energy to the load in a reliable manner should be considered.

It is recognized that NYSERDA has initiated a study of the effects of integrating wind power on the transmission grid and will be looking at many of these issues. However, the NYSRC believes that the Commission should be aware of the reliability issues related to a RPS when it makes its decision in this proceeding. It is recommended that any decision in this proceeding be flexible enough to accommodate changes to the RPS design as we learn more from this research. The NYSRC is prepared to assist in the implementation of a RPS, if adopted by the Commission, in order to maintain the reliability of the New York State bulk power system.

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Your consideration of these supplemental comments is appreciated.

Sincerely,

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cc: Honorable Jaclyn Brilling, Acting Secretary (via hand delivery) Active Party List (via e-mail)