Failure to Pay Generators for Excess Generation

The Commission accepted the Member Systems' proposal not to compensate generators for generation delivered above scheduled generation or above generation requested by the ISO.

Requests for Rehearing

IPPNY argues that this practice will prevent intermittent generators such as wind, photovoltaics, and small hydro from participating in the ISO's energy market since they cannot be dispatched by SCD or automatic generating control signals. In support of its argument, IPPNY states that the LBMP system will itself induce proper behavior, since the LBMP will tend to decrease as a unit generates more power, thereby providing an incentive for a generator to reduce its output. EPMI and IPPNY also claim that paying for excess generation enhances reliability in two ways. First, it provides generators the incentive to provide their best estimate for maximum availability for the next day. If they are not paid for excess generation, IPPNY claims that generators will overstate their next day availability to avoid scheduling less than their real-time output. Second, IPPNY claims that paying for excess generation allows generators to respond to the need for additional generation in the case of a contingency such as loss of a line or a generator.

Commission Response

The Member Systems have proposed to pay nothing for uninstructed overgeneration as a disincentive to overgenerate. They argue that a strong disincentive is necessary for uninstructed overgeneration because overgeneration creates reliability risks. Specifically, they argue that overgeneration (but not undergeneration or unscheduled deviations in load) creates the risk that transmission limits may be violated before the grid operator is able to take corrective action. We have no basis to reject the Member Systems' reliability concerns on this issue and will deny, at this time, the rehearing requests of IPPNY and EPMI.

However, the New York ISO should evaluate whether the circumstances in New York merit the continued different treatment of uninstructed overgeneration once it has

gained operational experience. In this regard, the Member Systems' proposal for New York treats uninstructed overgeneration differently from the ISOs operating real time energy markets in PJM, NEPOOL, and California. In these latter markets, most uninstructed generation faces the applicable real-time energy price.

As part of this evaluation, the ISO should examine whether the same pricing treatment should apply to all uninstructed overgeneration, regardless of the location of the generator or the transmission conditions, as the Member Systems propose. [For example, the ISO should evaluate whether there are reliability risks of overgeneration for generation located on the import side of a transmission constraint, and if not, whether the Member Systems' proposal is appropriate for such overgeneration]. In addition, the Member Systems propose no penalty for uninstructed undergeneration. The ISO should evaluate whether the reliability risks of certain undergeneration (for example, by generators located on the import side of a transmission constraint) are different from the risks of overgeneration, and if not, whether different pricing treatment is appropriate for overgeneration and undergeneration.

SOAS Response:

In the actual operation of the NYS bulk power system, the reliability risks of over and undergeneration cannot be generalized as always being desirable or not. There can be reliability risks and reliability benefits gained from each.

Existing scheduled generation values for dispatchable units include the results of a security evaluation process that considers active security constraints and attempts to solve those constraints given the dispatch status, bid price, response rates, and relative effectiveness of each unit in solving the constraint. Each of these generator characteristics and the selection of dispatch status is provided by or can be updated by the generation operator.

In any case, if an unplanned change in generation capability occurs, there are existing systems in place to reschedule, dispatch, and compensate for generation within the entire NYISO commitment, dispatch, and market structure. Considering recent operating experience within NYISO, as evidenced by NYISO control performance measurement and volume of requests for reserve activation, relaxing the need to follow generation schedules by removing penalties for either overgeneration or undergeneration is undesirable and will not improve these reliability performance indicators.

The ISO should also evaluate whether the LBMP price signals are sufficient to address any overgeneration problems, as intervenors argue. [The LBMP system creates market pricing incentives to signal sellers and buyers

regarding their decisions in the day-ahead market as well as in real time. The Member Systems' proposal removes uninstructed overgeneration from the LBMP signal. Under the LBMP system, uninstructed overgeneration should lead to a lower LBMP which should be enough of an incentive to prevent uninstructed overgeneration]. The ISO should also evaluate whether harsher penalties than those proposed by the Member Systems should apply in limited circumstances where transmission limits are in imminent risk of being violated.

SOAS Response: To the extent that the application of a more appropriate set of incentives/penalties will induce generation operations to schedule generation availability and follow scheduled generation values calculated under existing methods, reliability risks will be reduced. SOAS would be receptive to a progressive incentive/penalty mechanism that is dependent upon system state, with consideration given to the criteria being violated.

In addition, the ISO should consider market rules that accommodate the special operating characteristics of generators (such as wind, photovoltaic and hydro generators) that are unable to precisely forecast and schedule their energy production in advance.

SOAS Response: The special operating characteristics being referred to are generally thought of as relatively small capacity intermittent and uncontrolled renewable generation resources treated as load modifiers or PURPA units. Market rules that accommodate their special operating characteristics may not be applicable to this definition. Eligibility criteria for any special market rules that are established should consider the size of the unit/plant or consider an allowable deviation from schedule allowed before penalties are imposed.

It is possible that generation of this type may become more significant in terms of facility status, concentration, location of interconnection, and potential impact on reliability. These reliability impacts need to be evaluated on a case by case basis to determine if special market accommodation should apply or not.

Any market rules accommodation for special operating characteristics that will diminish or eliminate the need to accurately predict operating parameters and follow generation schedules will have the tendency to reduce the ability of NYISO to operate within reliability criteria. Any off schedule generation can have adverse effects on system reliability.

We direct the ISO to consult with stakeholders on these issues, and file a report on its conclusions and recommendations with the Commission one year after it begins market operations.