

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Niagara Mohawk Energy Marketing, Inc.,)	
)	
Complainant,)	
)	Docket No. EL00-82-000
v.)	
)	
New York Independent System Operator, Inc.,)	
)	
Respondent.)	

**AFFIDAVIT
OF
RICARDO GONZALES
IN
SUPPORT OF NYISO’S ANSWER TO NMEM’S COMPLAINT**

Town of Schenectady :
: ss:
County of Schenectady :

1. I am Manager of Scheduling & Commitment for the New York Independent System Operator, Inc. (“NYISO”). My responsibilities include operation of the NYISO Day-Ahead Location Based Marginal Pricing (“LBMP”) Market and the scheduling of NYISO controlled transmission and generation maintenance outages.

2. The NYISO is a not-for-profit entity formed in 1998 as the central coordinator of New York State’s restructured bulk electric power industry. The NYISO’s primary functions are to coordinate the operation of the State’s bulk power network and to administer an open and competitive wholesale power markets in New York.

BACKGROUND

3. The NYISO has replaced the New York Power Pool (“NYPP”) as the central coordinator of New York’s bulk power network. Many of the functions now performed by the NYISO were previously performed by the NYPP. However, the day ahead scheduling and commitment function performed by the NYISO using Security Constrained Unit Commitment (“SCUC”) is a new responsibility that was not previously performed by the NYPP. Under the operation of the NYPP, the process of unit commitment was conducted by the individual Member Systems within their own service territories. Since the NYISO began operations in November 1999, some adjustments to the SCUC and other key software have been required as we have gained experience in operations.

SCUC PROCESS

4. The SCUC design features about which NMEM’s complaint is concerned were designed conservatively in consideration of reliability concerns. This design recognized the fact that the NYISO was simultaneously implementing a number of highly sophisticated processes, some of which had not been previously implemented in any market.

5. The core functions performed by the NYISO include administration of the Day Ahead Market (“DAM”) and the scheduling of generation and transmission by committing various resources on a day-ahead basis using the day-ahead scheduling commitments calculated by the SCUC software. SCUC economically selects internal New York generators and external resources (transactions) in the DAM to meet the committed bid load and forecast New York load requirements, external loads (exports) based on available resources, and ancillary market requirements. Economics and security are evaluated concurrently and resources may be adjusted in order to meet NYISO security limitations, including net interchange ramp limitations.

6. In the SCUC multi-pass evaluation, there are a number of different passes for security evaluations, as well as commitment and dispatch of generation to meet the bid and forecast loads. The evaluations performed in each of the passes are summarized in New York Independent System Operator Technical Bulletin #49, a copy of which is attached to my affidavit. External transaction schedules can be affected at several points in this process.

7. In SCUC Pass 1, the “Bid Load Commitment” pass, the SCUC schedules generation for the New York load and external load (exports) for which bids have been submitted.

8. In Pass 2, the “Bulk Power System Forecast Load Commitment” pass, the SCUC determines whether additional capacity may be needed to meet the NYISO’s load forecast, as compared to the load resulting from the sum of the bid loads. In some instances, the NYISO load forecast has exceeded the bid load by 10% or more. In the forecast load pass, the NYISO is required to ensure that additional capacity sufficient to meet the NYISO forecast load requirements has been committed, and may commit additional capacity beyond the capacity required to meet the bid loads. Since Pass 2 focuses on the availability of sufficient capacity to meet forecast load, this pass evaluates generation resources on the basis of the cost of having capacity available (start-up and minimum generation costs) rather than simply energy bids.

9. SCUC Pass 3, the “Local Reliability Rules Forecast Load Commitment” pass, extends the analysis in Pass 2 to include any adjustments necessary to accommodate local reliability rules. These are rules that ensure the security of facilities monitored at the local level rather than by the NYISO.

10. In SCUC Pass 4, the “Forecast Load Redispatch” pass, the energy bids of committed internal New York generators are used to construct a dispatch of the capacity selected

in the prior passes to meet the forecast load requirements. This is the SCUC pass in which the external proxy strike prices are determined. Proxy strike prices, when compared with a transaction's Sink Price Cap Bid, determine the export transaction schedule in this pass.

11. SCUC Pass 5, or the "Bid Load Redispatch" pass, is the final SCUC pass. This pass sets the final DAM LBMPs and internal New York generator schedules.

12. In summary, the SCUC multi-pass evaluation results in a set of internal New York and external resources sufficient to meet the New York forecast load requirements, which are then dispatched to meet the bid load requirements. In each pass, the SCUC considers the effects of constraints and other system limits, and adjusts the resource selection and commitment from prior passes accordingly. In some instances, the commitment of units on the basis of the costs of capacity availability (start-up and minimum generation costs) in Passes 2 and 3 may result in the selection of units with relatively high energy bids. This can result in some external transactions not being scheduled if the LBMP at the relevant external proxy bus exceeds the Sink Price Cap Bid for that export transaction. The LBMPs resulting from Pass 5, however, may be lower than those resulting from Pass 4, because this final SCUC pass for the Day-Ahead Market is based on the bid load.

NMEM'S COMPLAINT / NYISO'S RESPONSE

13. On May 5, NMEM submitted a request for 50MW in the DAM to export power from the NYISO into PJM for hours 0700 through 2300 for May 8. NMEM entered a Sink Price Cap Bid of \$9999, indicating that NMEM did not want this transaction curtailed for economic reasons. Although this transaction appeared economic in the final SCUC pass where the PJM clearing price settled at approximately \$50, this transaction was not scheduled for four hours in the DAM because, in the forecast load reliability passes of SCUC, the PJM proxy strike price

exceeded the Sink Price Cap Bid of \$9999. The reliability assumption inherent to SCUC was that if DAM external transactions were scheduled in the forecast load passes of SCUC, it was likely that those external transactions could be supported in the Real-Time Market.

14. In response to concerns raised by NMEM and other Market Participants about apparently economic export transactions not being scheduled, as they were in NMEM's case, the NYISO agreed to reexamine certain aspects of the operation of the SCUC. Ultimately, with the benefit of experience in implementing SCUC, the NYISO determined that a Day-Ahead Market external transaction scheduling modification could be made without sacrificing reliability in a manner that addresses the undesirable consequences cited by NMEM. The changes to SCUC proposed by the NYISO would result in the Scheduling of NYISO Exports based on the final Bid Load Re-Dispatch pass of SCUC to provide consistency between export transaction bids and the final DAM LBMPs. This proposed software modification will ensure that NYISO DAM Exports will be scheduled in a manner consistent with their strike price bids and the final DAM LBMPs. NYISO imports will continue to be scheduled as required to ensure that the NYISO will be able to meet the New York forecast load requirements. A Bid Production Cost Guarantee will continue to be provided for those internal and external resources selected to meet the New York forecast load requirements to the extent that their schedules at the DAM LBMPs would not cover the bid-in price of those resources. The Bid Production Cost Guarantee for internal and external resources may be subject to review and audit as warranted by the NYISO.

15. Subject to input from the Scheduling and Pricing Working Group and the approval of the Committees, the NYISO's implementation of the Day-Ahead Market external transaction scheduling modification is estimated to be completed by mid-July, 2000.

16. A manual override approach is not feasible in the meantime. The SCUC

simultaneously solves for a number of parameters, all of which have an interactive impact on the calculation of schedules and prices for the Day-Ahead Market by the SCUC. Consequently, a manual input into the end of this process is not possible. It is not feasible to correctly reflect the impact of after-the-fact external schedule changes on the Day Ahead Market LBMPs and internal New York generator schedules with a manual process. The outcome of the manual override suggested by NMEM would be the scheduling of more load than generation in the Day-Ahead Market. The day-ahead prices, however, could not be changed manually, since in order to be determined correctly those prices need to be the product of the SCUC interactive and iterative processes described above. Thus, the manual override urged by NMEM would result in prices that do not match generation to load.

17. There is no manual method that would result in correct DAM prices. Any manual process for correcting prices or schedules will necessarily result in software changes, such as the very software changes that the NYISO is presently designing and implementing.

18. The NYISO is already in the process of designing modifications to the SCUC that will address the concerns raised in NMEM's complaint. The NYISO has circulated a document which outlines these proposed modifications to members of the Scheduling and Pricing Working Group of the Business Issues Committee for their review, and estimates that design modifications will be implemented by mid-July. Given that an interim, manual solution is not feasible, there is no action that the NYISO can undertake to address NMEM's Complaint that the NYISO is not already in the process of preparing to implement.

Ricardo Gonzales
Manager of Scheduling & Commitment
New York Independent System Operator, Inc.

Subscribed and sworn to before me this ____ day of June, 2000.

Notary Public

My Commission expires: