Friday, May 20th 2005

Best Western Hotel

200 Wolf Road Albany, N.Y.

1. Welcome & Meeting Objectives

Jim Scheiderich, Chair of the Business Issues Committee (BIC), called the meeting to order at 10:09 AM and welcomed the members of BIC. Attendees introduced themselves and named the organizations they represent.

2. Chair's Report

No report

5. Market Operations Report

Mr. Charles King, NYISO Vice President of Market Services, introduced the Market Operations Report. Mr. King noted increased average costs for April, increased fuel prices relative to March, and reduced uplift following the implementation of SMD2. In response to a question regarding uplift from Matt Picardi of Coral Energy, LLC., Mr. King referred to exhibit 4c of the April Market Operations Report and noted that overall uplift was less negative than before. In response to a question from Bill Heinrich of the Public Service Commission regarding volatility, Mr. King observed that higher volatility for individual days affected the standard deviations for the month of April.

6. Regional Market Enhancements

Mr. King presented the Regional Markets Enhancement Report. Mr. King remarked upon the excellent attendance for the May 11th -12th 2005 Eastern RTO/ISO Conference and acknowledged the efforts taken by the Public Service Commission staff. With respect to Intra-hour Transaction Scheduling, Mr. King stated that the first set of pilot tests were conducted on April 20-21 and that any additional tests would be scheduled based upon evaluation of the April tests. Bob Thompson of the NYISO added that because the second test was contingent upon ISO-NE Market Participant approval, it could potentially occur during the summer. Mr. Bill Palazzo of the New York Power Authority requested that in the event the second test was delayed that the NYISO would distribute the results of the first test. Mr. Thompson replied that this was possible and that the NYISO would also report on whether there were price corrections during the test. Mr. King noted that full market deployment of the Cross-Sound Scheduled Line was targeted for June 1, 2005. and e-tagging deployment was scheduled for June 28th. Mr. King stated that the NYISO was currently in discussion with New York State Transmission Owners regarding rate pancaking and was in the process of coordinating a meeting with PJM. In response to a question from Michael Mager representing Multiple Interveners regarding potential PJM Transmission Owner resistance to the collaboration scheme, Mr. King described a provision in the NYISO's seams agreement with PJM that allowed the NYISO to alleviate such issues. In response to a question from Ms. Doreen Saia of Mirant regarding the status of the real-time mechanism permitting more flow from HQ to PJM, Rick Gonzales of the NYISO responded that because the issue resembled another form of forecasting uncertainty and that the NYISO had decided that it could not address the issue until after it moved ahead with its Proposal for Modified Treatment of 10-Minute Gas Turbines by RTS.

3. Working Group Updates

A. Billing and Accounting

The BAWG met May 19th to discuss the status of the final bill closeout and station power. Additionally, the review status of the Technical Billing and Accounting Manual was discussed. The BAWG is still looking for volunteers to review the Technical Manual, particularly from the Suppliers' community. Topics also included the development of a Billing and Accounting Process Manual and the NYISO testing bed in the context of the DSS.

B. Scheduling & Pricing

No report

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C. ESPWG

During its May 9th meeting, the ESPWG discussed reliability planning process implementation issues including CRRP implementation and scenarios, implementation criteria for halting a regulated project, cost allocation, and the PSC dispute resolution process. On April 6, 2005 FERC approved the NYISO CRPP Compliance Filing. No comments were submitted regarding implementation issues on the economic planning status and the ESPWG is renewing the request for Market Participant input.

D. ICAP Working Group

No report

E. IITF meeting

The IITF met May 17th and discussed additional analysis for 2005 and coordination for the IRM study.

F. Price Responsive Load

No report

G. Market Structures Working Group

The modified treatment of 10-minute gas turbines by RTS was discussed during the May 18th meeting of the MSWG.

4. Proposal for Modified Treatment of 10-Minute Gas Turbines by RTS

Rick Gonzales of the NYISO led the discussion on the proposed NYISO treatment of 10-minute resources in the real-time market place. Mr. Gonzales noted the number of MSWG meetings dedicated to the issue and stated that the revised Concept of Operations, included in the meeting materials, clarified the economic test in the operating procedure and provided an example for the operator display showing 10-minute gas turbines. Mr. Gonzales also noted that the pricing analysis provided by LECG was provided as reference material.

Mr. Gonzales opined that the increased price volatility occurring regularly in the Real-Time Market (RTM) was indicated by unpredictable and significant positive and negative RTM price spikes. The ISO RTM scheduling objective is to meet RTD demand by minimizing bid production cost through the efficient use of available resources. The SMD software was designed to achieve this objective through the optimal commitment of available resources. In practice, the SMD software may result in the suboptimal commitment of available resources due to forecasting uncertainties between the commitment (RTC) and dispatch (RTD) scheduling horizons. Mr. Tim Foxen of NRG Power Marketing asked whether the NYISO had a sense of the magnitude of the price spikes and whether the NYISO anticipated intervention to occur only during hot days with unpredictable load or on a more infrequent basis. Mr. Gonzales replied that Andrew Hartshorn of LECG had identified thirty pricing events, representing a sample, since March 1st and that the point of the review was that 10% of the events actually warranted the physical commitment of a resource and consequently there would probably be few gas turbines starts as the results of the proposed enhancements. Mr. Scheidrich noted that the revised motion included language indicating that the NYISO would inform the market place as these events occurred.

In response to a question from Tariq Niazi of the New York State Consumers Protection Board, Mr. Gonzalez replied that the impact of uncertainties under SMD2 was different than under legacy. In the legacy system, NYISO operators had the ability to account for uncertainty in the set-up of BME, which committed resources in ham for real-time dispatch. Mr. Gonzales noted that the availability of 10-minute gas turbines for dispatch by SCD in legacy formed the substance of the proposal under discussion. In response to a question from Mr. Palazzo, Mr. Gonzales replied that the Tariff represented the current state of NYISO software. Mr. Gonzales stated that the proposal constituted a

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conceptual design issue, not intended to be addressed by SMD, and mitigated the consequences of operational uncertainties. Mr. Ray Kinney of NYSEG noted that although the Tariff mandated a least cost dispatch, the software bypassed units whose start would result in a more economic dispatch. In response to a question from Mr. Mager regarding the cause of negative price spikes, Mr. Gonzales replied that negative prices could be observed when trying to solve transmission constraints. For example, with high LBMPs on the east side of a constraint and low LBMPs on the west side of a constraint, the volatility would affect Market Participants upstream of constraints. Mr. Kinney noted that the combination of negative price spikes and generators receiving day-ahead margin assurance payments could result in prices contributing to uplift for load and that therefore negative prices did affect loads. Mr. Gonzales answered that LECG addressed scenarios where negative prices result in day-ahead BPCG resulting in uplift payments and therefore whether prices were positive or negative affected market efficiencies.

Mr. Gonzales described three areas of forecasting uncertainty affecting real-time market outcomes: load forecast uncertainties, phase angle regulator schedules, and other system events occurring after commitment horizon. Mr. Gonzales suggested that based on these findings, it was determined that additional resources need to be made available for RTD to address the consequences of suboptimal commitment decisions by RTC due to forecasting uncertainty. Specifically, Mr. Gonzales recommended providing RTD with the additional resource availability of eligible 10-minute units, thereby mitigating the impact of suboptimal commitment decisions that result in inefficient market outcomes. Eligible 10-minute units are those units that are offline and have met their minimum down time requirements, subject to reliability considerations associated with unit minimum generation levels. RTD would be capable of scheduling of eligible 10-minute units, only when economic and necessary to meet load, in both the RTM physical and pricing dispatches. ISO Operations, however, would make the final determination whether to actually commit the 10-minute unit(s) scheduled by RTD.

Mr. Gonzales proposed the following corrective measure. A key element identified in the Concept of Operations document is the application of a zero downward ramp rate for the eligible 10-minute units. This means that if an eligible unit is dispatched up in a particular time step of the RTD run it cannot be reduced below that level in later time steps. The effect of this change is that RTD will honor the minimum run time of the resource. The resulting impact on unit schedules and RTM clearing prices is that the eligible unit(s) will only be dispatched in the first time step if it is a lower cost option over the remainder of the optimization horizon. Power System Operations staff will only commit eligible unit(s) if they are fully scheduled for all RTD intervals (of a RTD run) and are economic to meet load for the first three intervals of the RTD run.

Mr. Foxen wondered whether instances where gas turbines received signals to come off and then the NYISO entered fast start management mode - where operators would not be able to see these units running and available in next hour - would result in uneconomic start-ups of units. Mr. Gonzales replied that there was a question raised in the May 18th MSWG of whether to extend run time of available units to address volatility and that the real-time market timeline did not allows this to occur. Mr. Gonzales stated that a binding decommitment is made 15 minutes in advance of decomitment time and if RTC determines a unit will be shut down, a flag goes out to the unit to shut down. Because there is only one 5 minute window, after that flag for the operator to respond in, it appears not to be a good decision relative to the timeline. Mr. Tim Bush of Navigant asked since the decision to start a unit is made by the NYISO operator, why the decision to override the RTC shutdown of units can't be reversed by the operator. Mr. Gonzales responded that this was a timeline issue. The binding decommitment is made 15 minutes in advance of decommitment time and RTD takes 10 minutes to run. Consequently, this only leaves a 5 minute period where on-line resources could appear on the display. Mr. Gonzales noted the potential exasperation of market place concerns with short times

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concerning shut downs. Mr. Scheidrich suggested that the motion clause addressing reporting should include how many gas turbines were on during instances of price spikes.

Mr. Gonzales summarized his presentation by stating that the proposal had been reviewed by the MSWG and modified according to stakeholder input. He noted that providing RTD with the proposed changes would involve Tariff revisions and software modifications. He suggested that the proposed measure be implemented as soon as possible.

In response to a question from Ms. Saia, Ms. Mollie Lampi of the NYISO replied that the NYISO Board of Directors would schedule a meeting ten days after the Management Committee vote and although the NYISO would ask FERC to use an expedited process, FERC had not indicated how soon approval would occur. In response to a question from Ms. Saia, Mr. Richard Dewey of the NYISO responded that design discussions and meetings had been transpiring between the NYISO and ABB. Mr. Dewey indicated that ABB had development capacity and that the software, ready for testing by June and then QA and integration tests, would deploy as prudently as possible. Mr. Foxen asked what the new responsibilities were for operators, either manually intervening or looking at whether a gas turbine were scheduled for three RTD runs. Mr. Gonzales indicated that these responsibilities were defined by the two economic tests described in the presentation. Mr. Robert Ricketts of Brascan Energy Marketing asked if committing a 10 minute unit for 1st three intervals would depress prices for the rest of the hour. Mr. Gonzales opined that according to the second economic test prices would not be depressed and that the unit would be committed as a least cost resource and economic for the majority of its run time. In response to a question from Eric Abend of Epic Merchant Energy, Mr. Gonzales answered that development and testing of the software would be going on concurrently with revised Tariff approval actions.

Mr. Mark Younger of Slater Consulting stated that during instances where the NYISO operators violate economic tests, units become uneconomic, and the units are turned on anyway that entire marketplace be notified. Mr. Gonzales replied that this would be covered by procedures, but could occur as result of telemetry errors. Mr. Norman Mah of Consolidated Edison asked whether the NYISO had considered parallel operations or reserving prices for first few days of deployment. Mr. Gonzales suggested that this was not practical and that it was not feasible to run two systems in parallel with two sets of clearing prices. Mr. King noted the NYISO's rigorous price validation process. Mr. Scheidrich noted that based on the NYISO operator's decision, if information was wrong, the NYISO can tell its operators not to commit gas turbines and impose corrections. Mr. Younger observed that by nature of RTC running every 15 minutes there will always be uncertainties, and that since RTC is doing an unbiased commitment, this proposal gives it more resources when it is looking out

Mr. Kinney suggested that the Market Operations report indicate how many times gas turbines set prices and how many times they were committed. Mr. King stated that the NYISO would report on this request at the June BIC meeting. Mr. Bush asked that the BIC request that NYISO staff provide tariff language prior to the Management Committee meeting on May 27th be added to motion.

Motion #1:

The Business Issues Committee (BIC) recommends that the Management Committee approve revisions to the tariff to allow for modified treatment of 10-Minute Resources in RTS, as outlined in the presentation and Concept of Operations document presented to the BIC at the May 20th meeting. The BIC also requests that NYISO staff provide draft Tariff language prior to the Management Committee meeting on May 27th. This would allow 10-Minute Resources not yet committed, which have met their minimum downtime requirement, to be scheduled and participate in real-time price setting when needed and economic to meet load, subject to reliability considerations associated with unit minimum generation levels. The NYISO will report on the operation of this functionality, discuss

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with MSWG the nature of the information to be provided, and discuss opportunities to reduce uncertainties between RTC and RTD.

(Motion passed unanimously by show of hands with abstentions)

7. New Business

None

8. Administrative Matters

Action item report included with meeting material

9. Adjournment

Meeting adjourned at 12:09 PM.

Respectfully Submitted, Caleb Derven Recording BIC Secretary