

## **PROCESS FOR PRODUCING ENERGY AND ANCILLARY MARKET SETTLEMENTS IN THE EVENT OF SMD2 SYSTEM ERRORS**

### **INTRODUCTION**

The NYISO is preparing to cutover to the SMD2 system February 1, 2005. The NYISO will actually cut-over on that date if it is confident in the integrity and readiness of its systems and personnel. As part of its groundwork for this go-live date, the NYISO is preparing contingency plans should unforeseen events, following cut-over, interrupt satisfactory operation of the new SMD2 system.

The NYISO is including market settlement guidelines in its contingency planning should the NYISO need them either because:

The SMD2 system is not producing solutions that are consistent with SMD2 market rules in the Day-Ahead Market (“DAM”) the Real Time Market (“RTM”) or both (“Scenario One”); or

The NYISO cannot sustain operations under SMD2 and must fall back to operate the system under the market rules in effect just prior to Cut-Over (“the legacy system”) (“Scenario Two”).

This memo describes the settlement guidelines that will be used to settle the energy and ancillary services markets for the period that: (i) the SMD2 system is not producing valid solutions; or (ii) the NYISO has fallen back to the legacy system and needs to establish prices for the period between cut-over and fall-back (“correction period”).

NYISO intends to provide this description of settlement guidelines for the correction period to the FERC when it provides its two-week notice of an intention to go live.

### **BACKGROUND**

The settlement guidelines that would apply to the correction period in either Scenario One or Two, above, should reflect as reasonably as is practical, actual system conditions and competitive bids, using SMD2 tariff settlement rules if at all possible. The matrix attached to this memo provides the options available and the principles that the NYISO would use to establish prices during the correction period for either Scenario One or Two.

The NYISO will continue to rely on the LBMP-verification process to determine whether LBMPs for the correction period need to be “corrected.” The NYISO will rely on its judgment to determine if a fall-back to the legacy system is required. In either case, market participants will be kept fully informed throughout the process.

Security Constrained Unit Commitment (SCUC), which essentially implements the Day-Ahead Market (“DAM”), has been changed very little in the transition to SMD2 while the real-time software has undergone a substantial redesign. The DAM results are therefore

far less likely to exhibit problems than Real-Time Market (“RTM”) results. This assumption is incorporated in the guidelines described in the Attachment.

Valid settlement options depend on good participation by market participants in both SMD2 and legacy systems through the parallel bidding period. Parallel bidding begins January 24. Parallel operations begin January 26 and continue through February 7 unless continued by the NYISO. From January 24 through January 31, HB 2300, the market will settle on legacy LBMPs and schedules. For this period, only legacy LBMPs will be posted to the public OASIS web site. Market Participants will be able to access their schedules for both legacy and SMD2 systems through the respective bidding and scheduling web pages, or through upload / download applications, for each system.

### **NYISO AUTHORITY TO ESTABLISH PRICES**

Pursuant to Temporary Extraordinary Procedures (“TEPs”) the NYISO may recalculate LBMPs, and other prices and payments, if, because of an “Emergency System Condition” or “Market Implementation Error” the NYISO could not calculate LBMPs (prices or payments) or the LBMPs (prices or payments) that were calculated deviated from the LBMPs (prices or payments) that would have been produced absent the emergency or implementation error.

An Emergency System Condition is defined as:

[A] situation in which a systemic equipment malfunction, including telecommunications, hardware, or software failures, prevents the ISO from operating the ISO-Administered Markets in accordance with the Market Rules, or (ii) widespread electric transmission or generation equipment outages prevent the ISO from dispatching the system in accordance with the Market Rules.

A Market Implementation Error is defined as:

[A] flaw in the design or implementation of software that results in LBMPs or other calculated prices that do not accurately reflect the application of the Market Rules.

“Market Rules” are defined as

[T]he rules and procedures for operation of the ISO Administered Markets, including but not limited to calculation of LBMPs, Market Clearing Prices, and Lost Opportunity Costs, in accordance with the ISO’s Open Access Transmission Tariff and Market Administration and Control Area Services Tariff.

Recalculated LBMPs (prices or payments) are to:

[R]eflect, as closely as reasonably practicable, the LBMPs or other prices or payments that would have resulted but for the . . . Emergency System Condition or Implementation Error.

### **NYISO PROCESS FOR RECALCULATING SETTLEMENTS**

The NYISO will establish a team of people, whose positions do not require their participation in the fall back to the legacy system or SMD2 restoration effort (if any), to develop and implement settlement guidelines for the correction period, as necessary. These will include many of the team members charged with developing settlement guidelines following the August 14, 2003 black out.

The team will consult and cooperate with its market participants and regulatory agencies through out this process.

In the event that the NYISO must rely on its TEP authority to produce LBMPs, prices or payments, the NYISO is committed to produce them in time for the February 2005 invoice due out in March 2005. This is the time frame that the NYISO successfully followed for the blackout period from 8/14 HB 1600 to 8/17 HB 2300.

## ATTACHMENT

### GUIDELINES FOR SETTING PRICES FOR PERIOD FOLLOWING CUT-OVER AND PRIOR TO FALL-BACK (IF ANY) (“CORRECTION PERIOD”)

These contingency settlement guidelines cover the two scenarios described in the memo: (i) some readily correctible errors occur in the SMD2 system calculations (Scenarios 1a -1c); and (ii) the unlikely condition in which the ISO determines that errors have occurred or are occurring that require a temporary fall-back to the legacy system (Scenario 2a – 2c). For Scenarios 1a-1c, the errors are presumed to be correctible and the NYISO will continue with SMD2 operation during and beyond the 6 day parallel operation. Scenarios 2a-2c presumes the errors are not correctible using SMD2 tariff settlement rules and the NYISO will invoke legacy operations and legacy settlements. The NYISO does not envision falling back to the legacy operating system while still employing SMD2 settlement rules.

Valid settlements depend on consistent and accurate bidding in both systems through out the parallel bidding period from January 24, 2005 through February 7, 2005.

Scenario	Status of Day-Ahead Market (DAM)	Status of Real-Time Market (RTM)	Fall Back?	Prices for Correction Period prior to Fallback Based on---
Baseline	Valid SMD2 DAM Solution	Valid SMD2 RTM Solution	No	As Run System --No Corrections
1 a	Valid SMD2 DAM Solution	SMD2 RT Solution Capable of being Corrected	No	RT Prices Corrected to SMD2 Rules
1 b	SMD2 DAM Solution Capable of being Corrected	Valid SMD2 RT Solution	No	DA Prices Corrected to SMD2 Rules
1c	SMD2 DAM Solution Capable of being Corrected	SMD2 RT Solution Capable of being Corrected	No	DA and RT prices Corrected to SMD2 Rules
Fall Back	<b><u>Fall-back to legacy req'd.</u></b>	<b><u>Fall-back to legacy req'd.</u></b>	Yes	
2a	Valid SMD2 DAM Solution	No SMD2 RT Solution	Yes	RT Prices Set to SMD2 DA Prices
2b	Corrected SMD2 DAM Solution	No SMD2 RT Solution	Yes	RT Prices Set to Corrected DA SMD2 Prices
2c	No SMD2 DAM Solution	No SMD2 RT Solution	Yes	DA and RT Prices Set to Legacy Solutions