

# NYISO PRICE CORRECTION PRACTICES

## Billing and Price Correction Task Force September 19, 2005

This document describes the NYISO's current and historic price correction practices. It has been prepared to give Market Participants a better understanding of those practices and to facilitate discussion by the Billing and Price Correction Task Force about potential changes or improvements.

### **I. Nature of Price Errors**

Energy and Ancillary Services clearing prices are to be determined in accordance with the NYISO tariffs. To be determined in accordance with the NYISO tariffs, a price must be correctly calculated and must be based on the appropriate price-setting resource (*i.e.*, in most cases, the marginal resource). Prices that the NYISO concludes are not determined in accordance with the NYISO tariffs are deemed to be in error and corrected by the NYISO. Specific examples of price errors are provided below.

Settlement errors are distinct from price errors and are addressed separately by the NYISO through its settlement correction process (*i.e.*, bill corrections). For example, metering errors, errors in the calculation of uplift charges, and errors in the calculation of Bid Production Cost Guaranty or other supplemental payments are handled through the settlement correction process.

In accordance with its tariffs, the NYISO does not correct clearing prices that result from the incorrect mitigation of a supplier's bid. A supplier is paid for energy produced by an incorrectly mitigated unit as provided in the Services Tariff, Attachment H, Section 4.2.2(c). The NYISO does not correct clearing prices that result from an incorrect failure to mitigate a supplier's bid, except as may be authorized by the Commission.

### **II. Causes of Price Errors**

The causes of price errors can be grouped into three broad categories: (i) data input errors, (ii) process errors, and (iii) calculation errors.

#### **Data Input Errors**

Data input errors are those errors that result when a price is computed correctly, but based on erroneous data inputs. This includes most data transfer errors, modeling errors, telecommunications errors, and operator data input errors. Such errors can cause the system to be dispatched in a sub-optimum manner and to deviate from the intended least-cost dispatch. The NYISO has corrected prices in these circumstances to reflect the true marginal resource, even when the system was actually dispatched differently.

*Example:*

Erroneous generator metering data can cause an online generating unit to appear as if it has tripped offline when, in fact, it has not. This causes the NYISO software systems to move erroneously to subsequent bids in the bid stack when setting the price and dispatching the system. Depending upon the price difference between the true marginal bid and the incorrectly chosen bid, the price implications of this error can be significant. The NYISO has corrected prices under these circumstances to ensure that they are set by the true marginal unit.

**Process Errors**

Process errors are those errors that result when a failure of one or more processes involved in the determination of prices results in a failure to produce or post correct prices. This includes most failures of software systems and supporting infrastructure as well as major electric system emergencies.

*Examples:*

Process errors include various failures in the price calculation and posting processes. This includes instances when the prices posted on OASIS do not match the prices calculated by the NYISO software and instances when prices are missing from OASIS. When possible, the NYISO has corrected this kind of price error by simply reposting the correct prices on OASIS. If a missing price is not recoverable, the NYISO has supplied a price using the most recent valid price for that point in time evaluated by a prior solution.

A major failure of the NYISO Energy Management System (“EMS”) is another example of a process failure. In the event of a major EMS failure, the NYISO cannot calculate prices. In response to a past EMS failure, the NYISO substituted prices from the Day-Ahead Market for Real-Time Market prices that could not be calculated.

**Calculation Errors**

Calculation errors are those errors that result when a price is computed incorrectly, notwithstanding correct data inputs. This includes most software errors.

*Example:*

Incorrect treatment by the NYISO software of the Out of Merit (“OOM”) classification of a resource can cause the software to calculate prices incorrectly. When this occurs, an OOM unit that should be setting the price may not, or conversely an OOM unit that should not set the price may do so. The NYISO has corrected prices in these circumstances to reflect the correct classification of Out of Merit units.

### **III. Price Error Correction Process**

In the event that the NYISO determines a price to have been calculated in error, it recalculates the correct price after addressing the cause of the error or supplied a corrected price using (i) electrically-similar points in the same interval; (ii) surrounding (adjacent) intervals; (iii) “look-ahead” prices (forward price estimates calculated for the problem period in prior periods in which the causal condition was not present); and (iv) Day-Ahead prices to replace incorrect Real-Time prices.

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