

# **Under-Generation Penalties**

**for**

**Period**

**August 2001 – May 2002**

**Scheduling and Pricing Working Group  
July 7, 2005**

# History

- **Tariff modification in July 2001 changed the calculation and application of under and over generation settlements. The revised calculation of undergeneration penalties provided a window within which a unit could operate and receive payments for over generation and not be penalized for under generation (3% rule) and a 'Smoothing' function to avoid penalizing units that were moving but behind their ramp (15 minute rule).**
- **Undergeneration penalties from August 2001 to May 2004 were overstated**
- **The 2001 modification to the calculation of the under-generation penalty was not correctly implemented:**
  - *The original code did not correctly transfer the Payment Limit for Under Generation (PLU) value from the Performance Tracking System ("PTS") to the Billing System*
    - ▶ Without a correct PLU, units that fell behind their ramps and units that were price chasing would be inappropriately penalized.
    - ▶ The PLU value could be recalculated for the period May 2002 – May 2004 but not prior to June 2002
- **NYISO reported this issue at the July 14, 2004 SPWG meeting**

# History, continued

- **Undergeneration penalties for May 2002 to May 2004 have been corrected in true-up and final bill processes using archived historic data**
- **Undergeneration penalties for August 2001 to May 2002 could not be corrected as NYISO did not archive necessary data prior to May 2002.**
  - *A primary element of the 15 minute rule (**Economic Base Point**) was not archived, resulting in the inability to recalculate PLU for the period August 2001 – May 2002.*
- **NYISO informed S&P that it would evaluate alternatives for adjusting the under-generation penalties for that period and report back.**

# Market Effects of Error on Settlements

- **Reducing penalties will reduce the regulation penalty billing line item for non-regulating units, increasing payments to non-regulating generators. (Regulation units are not charged an undergeneration penalty)**
- **Reducing penalties will increase the cost of regulation service to the Loads**
  - *Penalties offset the cost of Regulation Service*

# Estimation of Penalties for Period August 2001 to May 2002: Investigation Process

- **NYISO calculated the change in penalties for a representative sampling of re-billed historical months**
  - *Months chosen were August 2002 – May 2003.*
  - *Change in penalties examined was by Unit and by Organization by Month.*
- **NYISO examined the percent change from incorrect to correct penalties by Unit and by Organization by month for the existence of a pattern which could be used for correcting August 2001 – May 2002 (“the subject months”).**
  - *A patterned reduction could serve as a proxy for reducing penalties for the subject months*

# Results of Analysis

- **No statistically pattern emerged**
  - *There was no correlation between the magnitude of the penalties and the percent reduction, nor was there any consistency in reduction by unit or by Organization over the months observed.*
  - *Reductions in penalties over all units and organizations varied from 10% to 70% with some varying from a 20% reduction in penalties one month to an 80% reduction the following month.*
- **NYISO then examined three alternatives for estimating penalties for the subject months**

# Results of Analysis

- **Option 1: Use the percent reduction for like-months across all organizations as a proxy percentage reduction for the subject months**
  - *Results – In the absence of a statistical basis to correlate month to month comparisons, this did not appear to be a viable option*
- **Option 2: Use the average percent reduction over all months and billing organizations as a proxy percentage reduction for the subject months**
  - *Results – Straight averaging of the percent reduction across all organizations, regardless of the magnitude of the penalties or of the change, introduced an arbitrary skewing which did not appear appropriate*
- **Option 3: Use the percent reduction in penalties (re-billed penalties / total penalties) by organization for the period August 2002 – May 2003 and apply it to the subject months**
  - *Results – Provides a methodology that correlates penalties that can be recalculated to those that cannot be, by Billing Organization*

# NYISO Proposed Settlement Process

- **Use the percent reduction from Option 3 as a proxy for recalculating undergeneration penalties for the subject months for each billing organization**
  - *Will require a FERC filing*
  - *This approach is a better alternative than either:*
    - ▶ re-billing affected generators by zeroing out all undergeneration penalties for the subject months or
    - ▶ leaving the penalties as billed
  - *Both alternative approaches would also require a FERC filing*



# Settlement Impact

- **Total penalties originally applied, August 2001 – May 2002**
  - *\$2.88 M*
- **Total reductions in undergeneration penalties for subject months using Option 3**
  - *\$1.75 M*
- **Following FERC approval, NYISO will enter the reduction as a credit to Suppliers, using the invoice level manual adjustment process, monthly -- as the final invoice for the subject months gets posted**
  - *NYISO will also enter the reduced amount as a charge to NYCA loads using the invoice level manual adjustment process.*