Draft Technical Bulletin 213

Interface Pricing - Method for Modeling Unscheduled Power

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DRAFT – FOR DISCUSSION PURPOSES ONLY

Background – Timeline

- On January 12, 2010, the NYISO filed a report with FERC describing the Broader Regional Markets suite of solutions, including Interface Pricing, to address loop flows
- On June 2, 2010, the NYISO described what Interface Pricing entailed at the BIC
- On September 16, 2011, the NYISO provided an overview of concepts, examples and an implementation timeline for Interface Pricing at MIWG

Background – Timeline Cont.

- The NYISO completed its software implementation of Interface Pricing in Q4 2011
- The NYISO submitted a Compliance Notice to FERC to confirm its timely development of new interface pricing software on December 22, 2011 in Docket No. ER08-1281
- The FERC order requires NYISO to implement Interface Pricing by the end of January 2012

Background – Concept Overview

- **Interface Pricing provides the NYISO the capability to implement two distinct methods of pricing and scheduling called "Scheduling Modes".**
  - ***If actual power flows through the New York Control Area ("NYCA") are expected to closely conform to scheduled power flows, the NYISO's pricing and scheduling will incorporate that expectation.***
  - ***If the NYISO expects significant unscheduled power flows, the NYISO's pricing and scheduling will anticipate and account for those unscheduled power flows.***

Draft Technical Bulletin 213

- **The intent of Draft Technical Bulletin 213 is to describe the following:**
  - ***NYISO's method to determine the appropriate Scheduling Mode***
  - ***NYISO's process to determine the expected Unscheduled Power Flow (UPF) value to be used in the Day-Ahead Market, and***
  - ***Explain how the Scheduling Mode impacts the Day-Ahead and Real-Time Markets.***

Walk Through:
Draft Technical Bulletin 213

Expected Scheduling Mode for Feb. 2012 – April 2012

Draft TB 213 describes the following analysis to determine the Scheduling Mode:

- **"Approximately thirty days prior to the beginning of each quarter, the NYISO will evaluate operating history to determine if actual power flows ordinarily conformed to scheduled power flows for the prior 12 months.**
  - ***If the operating history demonstrates that actual average hourly power flows at the NYISO/IESO Interface were within +/-200 MWs of scheduled power flows in at least 65% of hours, then the Scheduling Mode will be set to "Conforming" for the upcoming quarter. Otherwise, the Scheduling Mode will be set to "Non-Conforming" for the upcoming quarter.***
- **The ISO retains the discretion to make adjustments to the Scheduling Mode when historic operation is not expected to provide an accurate prediction of future performance."**
  - ***The NYISO now has the capability to modify the Scheduling Mode to provide a more accurate representation of the power system for the purposes of scheduling and pricing. For example, if the Ontario-Michigan PARs were to enter service and they were effective in conforming actual power flows to schedule flows, the NYISO would be able to change the Scheduling Mode to Conforming.***

Expected Scheduling Mode for Feb. 2012 – April 2012

- **For the upcoming quarter, February 2012 – April 2012, the historical period from January 1, 2011 through December 31, 2011 was reviewed.**
  - ***During this period, 4249 of the 8760 hours have an average loop flow value within the +/-200MW threshold, or 48.5%.***
  - ***Given that 48.5% is less than the 65% threshold described in Draft TB213, the Scheduling Mode for February 2012 – April 2012 will be set to Non-Conforming.***

UPF Value

Draft TB 213 describes the following analysis to determine the UPF:

- **"The treatment of the NYISO/PJM and NYISO/IESO scheduled interchange in the calculation of the expected UPF will be based on the Scheduling Mode.**
  - ***When the Scheduling Mode is set to "Conforming", the expected UPF will be calculated based on all observed differences between NYISO/IESO scheduled interchange and actual power flows, i.e. "Lake Erie Circulation".***
  - ***When the Scheduling Mode is set to "Non-Conforming", the expected UPF will be calculated based on observed Lake Erie Circulation less the estimated power flow contribution associated with NYISO/PJM and NYISO/IESO scheduled interchange."***

UPF Value

- **To provide an idea of the differences in the UPF value based on Conforming and Non-Conforming Scheduling Modes, please consider the following average 30-Day MW Values:**

	Conforming		Non-Conforming	
Date Range	On Peak	Off Peak	On Peak	Off Peak
11/19/2011 - 12/18/2011	-18	180	-66	148
11/26/2011 - 12/25/2011	52	194	14	184
12/3/2011 - 1/1/2012	108	235	78	240
12/10/2011 - 1/8/2012	65	242	44	258

- The small differences between the Conforming and Non-Conforming values imply that NYISO/PJM and NYISO/IESO scheduled interchange have a small impact on unscheduled power flows.

Draft Communication to MPs

- **The NYISO intends to replace the historical weekly TIE list announcement of the Lake Erie circulation assumption for the Day-Ahead Market for the upcoming week, with an announcement that communicates the following:**
  - ***Scheduling Mode for the upcoming week***
  - ***On and Off Peak UPF values based on both Conforming and Non-Conforming modes***
  - ***The Scheduling Mode anticipated for the upcoming quarter based on the 12-month historical review that is completed approximately 30 days in advance of the quarter. The NYISO plans to include this update in the first TIE list announcement after performing the calculation.***
  - ***Links to Lake Erie Circulation data available at www.nyiso.com***

Draft Communication to MPs

The Unscheduled Power Flow (UPF) value used in the Day-Ahead Market (DAM) evaluation is updated weekly, based on the average hourly loop flows observed over the past 30 days.

For purposes of determining the UPF value for use in the Day-Ahead Market, "On Peak" includes Monday -Saturday HB07 - HB22 and "Off Peak" includes Monday - Saturday HB23 - HB06 & Sunday HB00 - HB23.

As requested by ISO stakeholders, the ISO retains the discretion to make ad-hoc adjustments when the 30 day past average is not an accurate prediction of Lake Erie circulation for use in the Day-Ahead Market.

UPF (MW) updates in the DAM for the past 12 weeks:

Date	Scheduling Mode	Conforming		Non-Conforming	
		On Peak	Off Peak	On Peak	Off Peak
10/26/11	Conforming	0	-50	N/A	N/A
11/02/11	Conforming	-50	-50	N/A	N/A
11/09/11	Conforming	-50	-50	N/A	N/A
11/16/11	Conforming	-50	-50	N/A	N/A
11/23/11	Conforming	0	-100	N/A	N/A
11/30/11	Conforming	50	-150	N/A	N/A
12/07/11	Conforming	100	-100	N/A	N/A
12/14/11	Conforming	100	-150	N/A	N/A
12/21/11	Conforming	0	-200	N/A	N/A
12/29/11	Conforming	-50	-200	N/A	N/A
01/05/12	Conforming	-150	-250	N/A	N/A
01/11/12	Conforming	-50	-250	-50	-250

Note: Positive values of UPF indicate counter-clockwise loop flows around Lake Erie.

The Scheduling Mode for the next quarter, February 2012 – April 2012, will be Non-Conforming based on historical observation.

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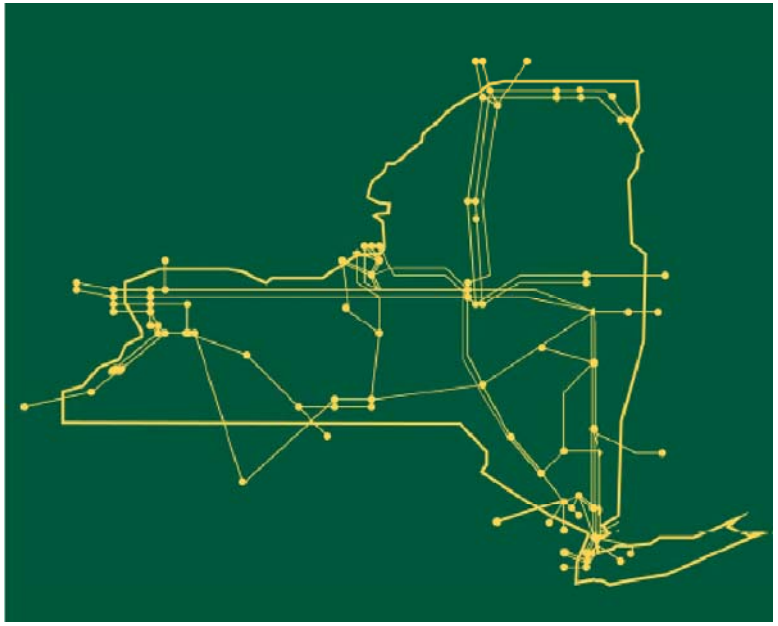

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