

Day Ahead Market Issue ISO-NE Transaction Scheduling

New York Independent System Operator

MIWG
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Overview

- ◆ Facility outages at the Niagara Interface consisting of the BP76 Beck-Packard 230 kV in combination with either PA301 or PA302 Beck-Niagara 345 kV were managed with reductions in several interfaces to maintain reliability
 - *IESO-NYISO import and export capability reduced to 0 MW*
 - *PJM-NYISO import and export capability reduced by about 50%*
 - *HQ-NYISO export capability reduced*
 - *Western NY Export (Zone A) capability reduced by about 50%*
- ◆ These simultaneous transfer capability reductions resulted in high levels of ISONE imports
- ◆ During the twenty five day 301/302 outage period, a software error resulted in the inefficient scheduling of transactions of the ISONE interface in the DAM for a limited number of hours

Software Issue

- ◆ The Security Constrained Unit Commitment evaluation uses an iterative process to identify transmission constraints to achieve its optimal solution.
- ◆ During this iterative process, a transmission constraint for the ISONE-NYISO Interface Limit was developed that limited ISONE import transactions.
- ◆ The ISONE-NYISO Interface Limit constraint failed to be automatically adjusted in subsequent iterations.
- ◆ As a result, ISONE imports that would have been otherwise economically scheduled were not for the affected hours of the DAM.

Effects of Software Issue

- ◆ The software error affected only the Day Ahead Market outcomes and not Real Time Market outcomes.

- ◆ The software error only affected the SCH-NE-NY (Northern AC) interface and not the NPX-CSC or NPX-1385 or any other interface.

- ◆ The affected hours during the outage period were:
 - *04/01 – HB06, HB15*
 - *04/02 – HB19*
 - *04/06 – HB06, HB07*
 - *04/07 – HB00, HB06 , HB07 , HB08 , HB09 , HB10 , HB11 , HB13, HB14 , HB23*

Timeline

- ◆ 4/07 – NYISO corrected software error for DAM market day of 04/08
- ◆ 4/08 – NYISO notified Market Advisor
- ◆ 4/14 – NYISO notified FERC
- ◆ 4/14 – NYISO notified MPs at BIC Meeting
- ◆ 4/14 – NYISO notifies all MPs via email
- ◆ 5/11 – Market Advisor provided market impact to ISO

Market Advisor Analysis

- ◆ ISO provided Market Advisor with DAM simulations with corrected ISONE-NYISO Import limitations
 - *Eastern NY Generation schedules increased by an average of 950MW for the hours affected*
 - *Capital Zone LBMPs increased by \$4.70/MWhr on average for the four days affected*
 - *Central and Western NY Zones minimally impacted because the Central-East Interface was fully utilized in simulations*
 - *ISONE Import constraints led to DAM congestion revenue shortfalls (\$905K) which were offset by payments from TCC holders (\$170k) which resulted in net impact of \$735K.*

Market Advisor Analysis

DA Congestion Revenue Shortfall

Date/Time	DA Shadow Price (SCH - NE - NY)	DA Interface Flow (SCH - NE - NY)	Net TCC Exports from ISONE	DA Cong Shortfall (Accounting for surplus from TCCs)
4/1/2009 6:00	\$20.39	-796	221	11,725
4/1/2009 15:00	\$29.99	-802	221	17,427
4/2/2009 19:00	\$47.07	-1156	221	44,008
4/6/2009 6:00	\$46.45	-1010	221	36,651
4/6/2009 7:00	\$106.09	-989	221	81,473
4/7/2009 0:00	\$16.31	-1148	221	15,122
4/7/2009 6:00	\$41.48	-1191	221	40,237
4/7/2009 7:00	\$44.01	-1212	221	43,614
4/7/2009 8:00	\$43.58	-1230	221	43,972
4/7/2009 9:00	\$38.13	-1408	221	45,262
4/7/2009 10:00	\$71.06	-1354	221	80,507
4/7/2009 11:00	\$95.17	-1408	221	112,967
4/7/2009 13:00	\$52.53	-1222	221	52,579
4/7/2009 14:00	\$67.97	-1184	221	65,452
4/7/2009 23:00	\$47.26	-1155	221	44,138
				\$ 735,133

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The New York Independent System Operator (NYISO) is a not-for-profit corporation that began operations in 1999. The NYISO operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.

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