Market Problem: Loss Penalty Factor at the PJM Proxy Bus

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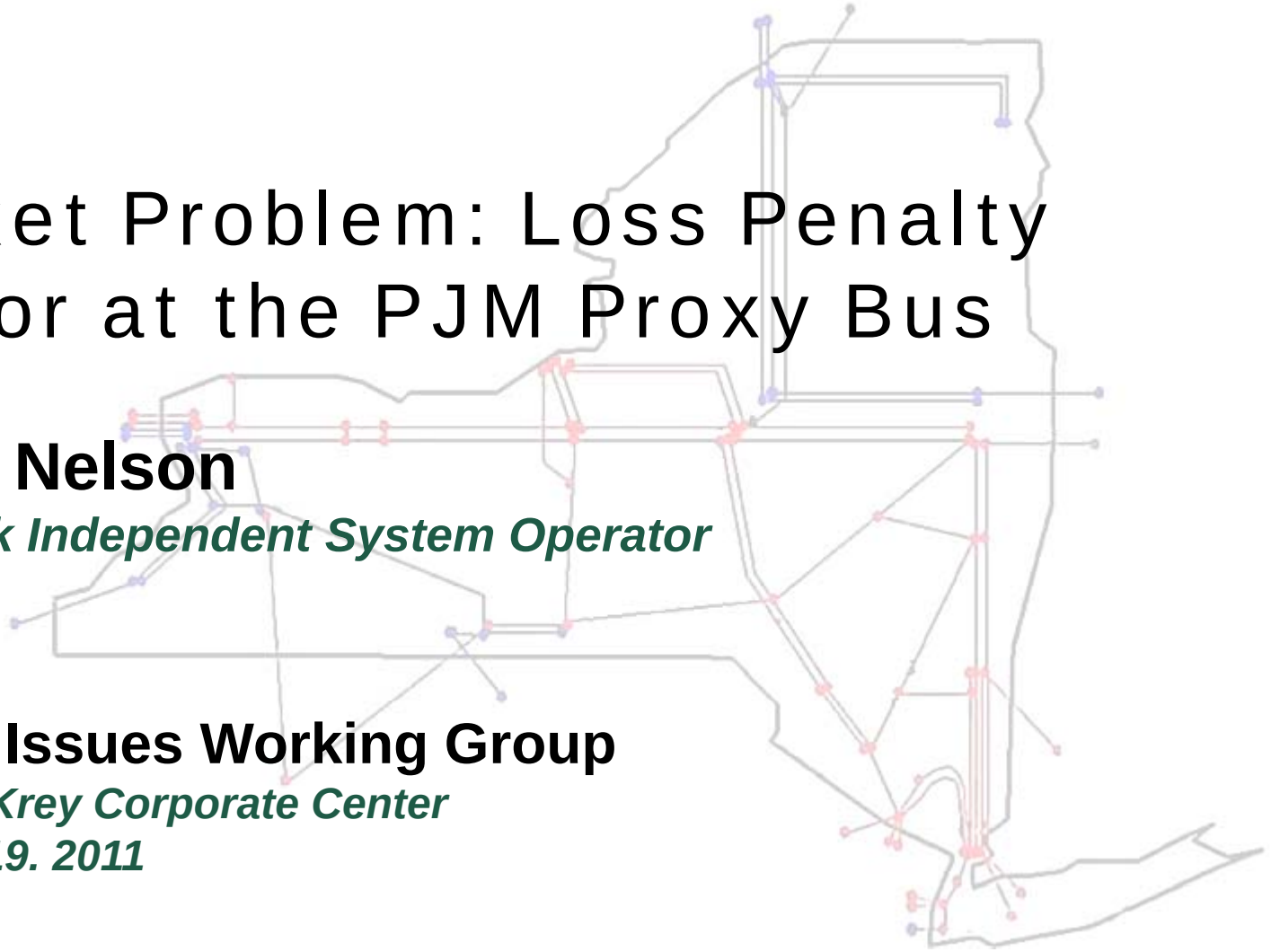
October 19. 2011



Description of the Issue

- **The NYISO has discovered a software anomaly in the calculation of the loss penalty factor at the PJM Proxy Generator Bus which has impacted Day-Ahead and Real-Time market outcomes at that external proxy bus.**

Description of the Issue: Background

- **The Day-Ahead and Real-Time scheduling systems calculate loss penalty factors for each pricing point or bus.**
- **Loss penalty factors are used to efficiently schedule supply resources by accounting for their impact on transmission grid losses.**
- **Loss penalty factors are also used in the determination of LBMP to ensure consistency between scheduling and pricing market outcomes.**

Description of the Issue: Background

- **At the PJM proxy bus, loss penalty factors are uniquely affected by the assumptions included in the scheduling and pricing power flow that are described in NYISO Technical Bulletin 152 ("TB 152").**
- **TB 152 describes the expected transmission grid power flows on the ABC, JK and 5018 interconnections that are represented at the PJM proxy bus in the NYISO's scheduling and pricing processes.**

Description of the Issue: Underlying Cause and Time Frame Involved

- **TB 152 assumptions have been included in the scheduling and pricing grid model since June 6, 2007.**
- **However, because of a software anomaly, the loss penalty factor at the PJM proxy bus did not consistently reflect the expected power flow assumptions described in TB 152.**
- **This software anomaly is a market problem that has been present since the concepts included in TB 152 were first incorporated in 2007.**

Description of the Impacts

- **The software anomaly impacted the penalty factors used for the Real-Time market PJM proxy bus scheduling and pricing.**
- **The Day-Ahead Market PJM proxy bus scheduling and pricing outcomes were impacted by the software anomaly only during HB0 and those hours when a transmission grid line status change occurred.**
- **The NYISO believes that market outcomes at the PJM proxy bus were not as efficient as they would have been had the anomaly not been present.**

Description of the Impacts Cont.

Pricing

- **The Day-Ahead and Real-Time LBMPs that were established at the PJM proxy bus, even those established for the intervals impacted by the software anomaly, were consistent with the established schedules and do not need to be corrected.**

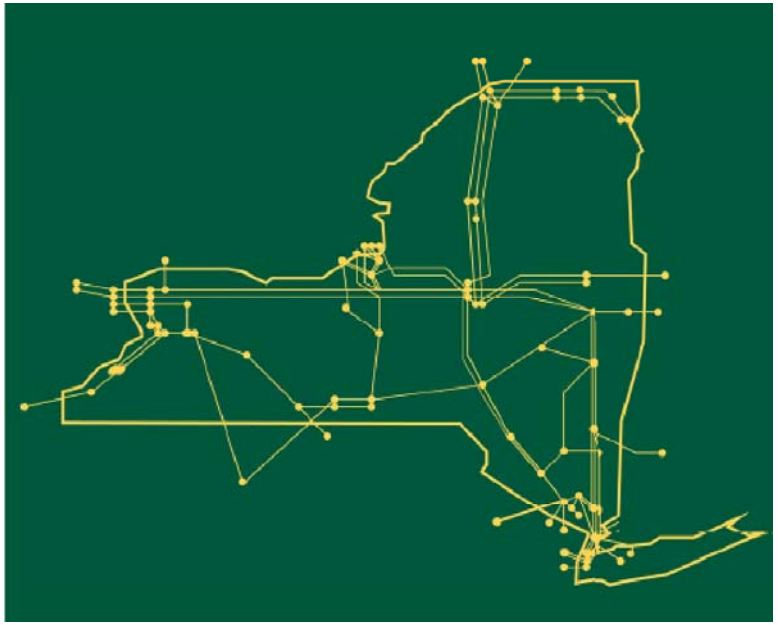
Economics

- **The NYISO is working with its MMU to evaluate the impacts of this issue for future presentation.**

Description of the Steps Taken to Address the Issue

- **The NYISO initiated its review of this software anomaly and deployed a software fix on October 11, 2011.**
- **Pursuant to the Market Problem processes outlined in the Services tariff at Section 3.5.1, the NYISO made the following notifications:**
  - ***MMU on October 12, 2011***
  - ***FERC on October 14, 2011***
  - ***Market Participants October 14, 2011***

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 conducts comprehensive planning for the state's bulk electricity system.



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