

Market to Market -PJM (Update)

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Agenda

- Purpose of the Initiative
- Reminder Overview of M2M
- Review of FERC order and NYISO response
- Overview of NYISO activities
- Next Steps



Purpose of Initiative

 Market to Market (M2M) provides the ability for the NYISO to request a neighboring market to re-dispatch generation to solve a NYISO constraint at a lower cost, thereby reducing the overall cost of congestion



Benefits of M2M

- M2M is an integral element of the BRM initiative
 - Reduces congestion by expanding the pool of assets that are capable of addressing the region's transmission constraints
 - Provides better price convergence at the borders as a collective set of assets are used to resolve system limitations



How It Works

- The ISO experiencing congestion (Monitoring ISO) will request relief of the constraint from another ISO (Non-Monitoring ISO).
- The Monitoring ISO will request a MW relief and a value of congestion not to be exceeded.
- The Non-Monitoring ISO will use this information in its dispatch and attempt to provide the relief requested up to the congestion value.
- Settlements involve an entitlement allocation; how much an ISO is entitled to flow across a facility in another ISO.
- If the Non-Monitoring ISO is below their entitled flow and provides relief, they are compensated by the Monitoring ISO. If they are over their entitlement, the Non-Monitoring ISO provides compensation.
 - Detailed examples can be found in the Appendix to this presentation



FERC order

- On December 30, 2010 FERC issued an order addressing the Broader Regional Markets report submitted by the ISOs and RTOs
- This order touched on many topics related to the various BRM initiatives. Among other things the Commission ordered the NYISO to complete market-to-market by the SECOND quarter of 2011
 - The commission also ordered the NYISO not to wait for the completion of the NERC Parallel Flow Visualization Tool, but for the NYISO to use its own tool to calculate market flows



NYISO's request for Rehearing

- On January 31, 2011 the NYISO submitted a request for rehearing of FERC's December 30 order
- The primary concern expressed with the Commission's order on M2M was the timeline specified
 - NYISO stated it was not possible to complete M2M by the end of the second quarter
 - NYISO proposed to complete M2M with PJM by the end of 2012

Proposed Timeline







NYISO's Activities with PJM

- In person, executive meetings are held monthly
- Full day, in person, technical meetings as needed
- Weekly project calls are held with PJM
- Various other calls are held as needed on specific topics



Next Steps

- Continue design discussions with PJM
- Bring update to MIWG in Q2
- Begin to layout design proposals with stakeholders in Q3



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.

www.nyiso.com



Example Appendix



Market-to-Market Coordination Example





The initial Midwest ISO Market Flow on Flowgate A is 35 MW.





Midwest ISO reduces GEN 1 to provide the relief requested by PJM

With GEN 3 offline, GEN 2 becomes the new marginal unit for the constraint

Constraint shadow price is (58 - 40) / (- 0.3) = - 60

GEN 3 LMP = 40 + (- 0.2 * - 60) = 52; LOAD X LMP = 40 + (0.15 * - 60) = 31