Guiding Principles of Congestion Management Process and Market-to-Market Coordination Process

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Overview

- Objective

- History

  - Congestion Management Process

  - Market-to-Market Coordination Process

- Guiding Principles

- Next Steps

Objective

- Reference date of April 1, 2004, known as "Freeze date", is used as mechanism to determine firm rights on flowgates based on pre-market firm flows

- As we move further away from the current Freeze date (9 years), issues with the current freeze date become prominent

  - Generation Retirements causing insufficient DNRs to serve load in historic control area

  - No specific criteria to add post freeze date (new) DNRs to the freeze date DNR list

- RTOs and their stakeholders have agreed to work on identifying potential alternatives to current Freeze date for entitlement calculations

History

- As PJM and MISO considered the impacts of wide-area tariff and market dispatch, they agreed to work together to address the limitations of existing systems, and unanticipated effects of wide-area market operation

- The "Flowgate Allocation" and "Market Flow" concepts which formed the basis of Congestion Management Process (CMP) for the seam with a Market were set up in 2004 between MISO and PJM

- In 2005, MISO and PJM further enhanced the Congestion Management Process between two entities with a Market-to-Market (M2M) Coordination Process

Congestion Management Process

- Different congestion management methodologies (market-based and traditional TLR) can interact to ensure parallel flows and impacts are recognized and controlled in a manner that consistently ensures system reliability and equitability

- **Flowgate Allocations** are equivalent to firm rights that historic BAs participating in the markets would have on flowgates had the markets never started/expanded and the BAs continued to serve their own load

- **Market Flows** represent impacts of Market Generation serving load in the Market
  - Market Flows are equivalent to the Network Native Load (NNL) flows of the individual BAs in the market plus impact of tagged transaction between the individual BAs before the Market start

M2M Coordination Process*

- M2M Coordination Process builds upon the CMP process and provides a mechanism for PJM and MISO to economically dispatch their systems respecting transmission constraints in each other's footprints

- Re-dispatch by each RTO for reciprocal constraints will be based on the most economic solution for the combined system
  - Provides consistent price signals to incent market behavior that augments reliable system operations
  - More effective interregional control of transmission congestion
  - Less reliance on individual transaction curtailments

- Compensation between RTOs based on usage over entitlement
  - Provides equity through preservation of entitlements on M2M Flowgates

*Described in Inter-regional Coordination Process (ICP) document, Attachment 3 in the MISO-PJM JOA

Guiding Principles of CMP and M2M Process

Coordination

Equity

CMP and M2M

Reliability

Market Efficiency
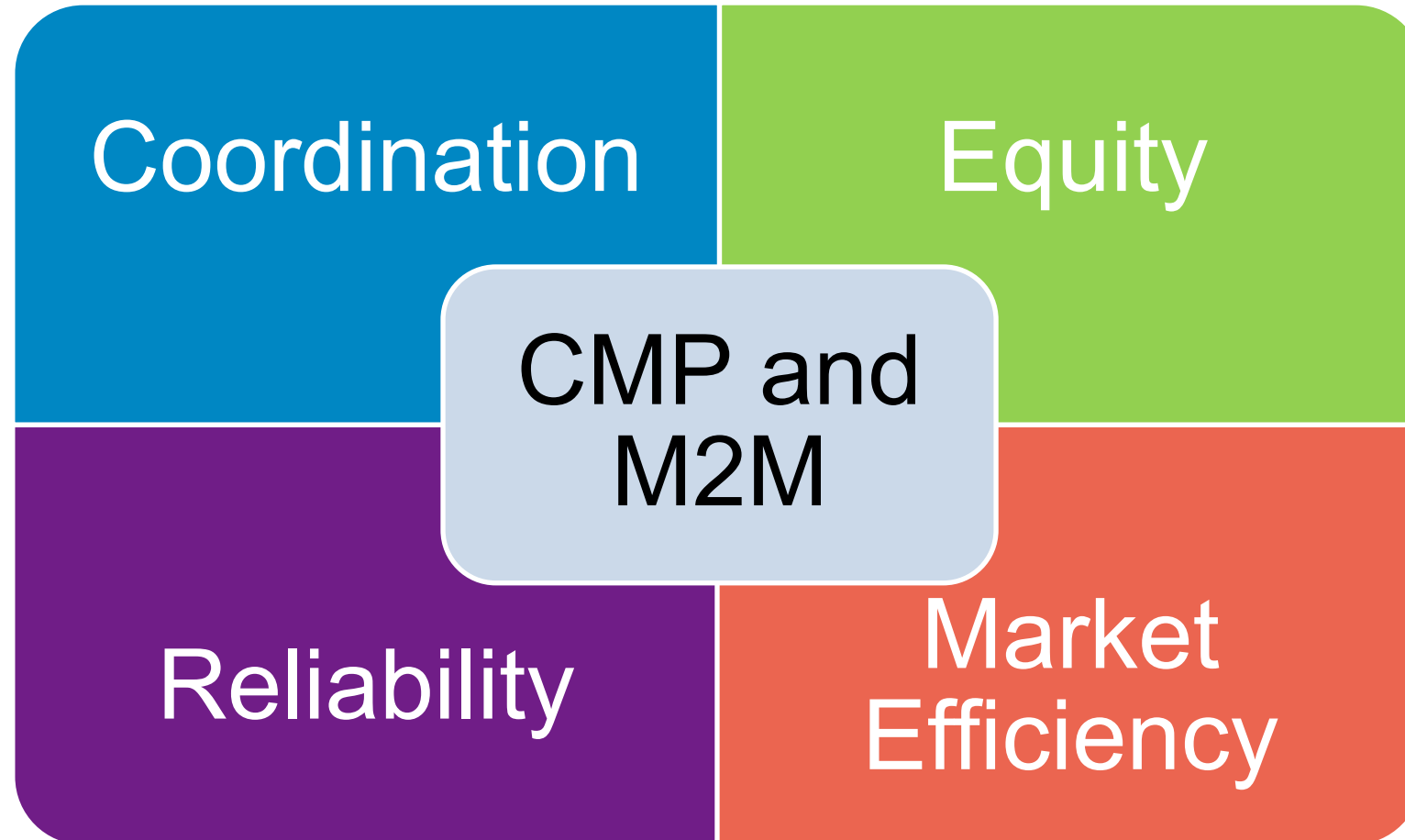
- Coordination
  - Optimal utilization of the Transmission system
  - Coordinate utilization of the Reciprocally Coordinated Flowgates (RCFs)
- Equity
  - Preserve pre-market historical investments of ratepayers through Entitlements
  - Recognize incremental transmission upgrades and investments
    - Rights should be allocated to the entity which funded the upgrades
  - Assign congestion costs where Seams partners have high impacts – Cost causation/Cost allocation
- Reliability
  - Ensure reliable operation of the Transmission system
  - Market flow calculations and curtailments must align with market operation
- Market Efficiency
  - Maximize economic and operational efficiencies on the Seam with a larger pool of resources
  - Provide transparent and consistent price signals across the Seam
  - Align market results for Seams partners

Next Steps

- With inputs from stakeholders, RTOs (MISO, PJM and SPP) will work with Congestion Management Process Working Group (CMPWG) on potential alternatives to the current Freeze date

- Periodic updates will be provided at the future JCM meetings as progress is being made

    - Next update in 1st Quarter of 2014

MARKET FLOW CALCULATIONS
(FOR M2M AND TLR PURPOSES)

Market Flows and Transactions

- Current Definition of Market Flows: Impact of Market Generation serving Market Load. Transactions are accounted for in Interchange Distribution Calculator (IDC).

- Similarly, Entitlements (FFEs) capture each entity's entitled firm usage during congestion, net of any scheduled Transactions (i.e., firm rights for its Market Flows)

- To avoid double counting of Transaction impacts, it is important to remove the impacts of Market/RTO Transactions from market flow calculations

Background on MISO-PJM-SPP Discussions

- During summer 2013, MISO and SPP discussions focused on how their respective RTOs were utilizing different methodologies for accounting Transaction impacts for FFE, Market Flow, and IDC calculations

- In October 2013, MISO, PJM and SPP had a 3 party meeting wherein RTOs agreed that they need to be consistent in accounting for Transaction impacts in their own calculation processes (FFE, Market Flows and IDC)
  - RTOs also determined that it is not necessary to use identical methodologies to capture Transaction impacts

Current Modeling of Transactions

RTO	FFE	Market Flows	IDC
MISO	POR/POD	Slice of System	Marginal Zones
PJM	Marginal Zones	Slice of System	Marginal Zones
SPP	POR/POD	POR/POD	POR/POD

Additional Principles

- PJM Proposal on Market Flows

  - Important to align M2M Market Flow calculations with (Market) Flow calculations used in actual LMP settlements of each RTO
  - M2M Market Flow calculation needs to be more nodal calculation (similar to Market settlements in each RTO)
  - M2M Market Flow calculation needs to include transaction impacts using interface definition (similar to Market settlements in each RTO)

- PJM and MISO agrees that:

  - M2M Market Flow and FFE calculations also need to be aligned