



ATC Transmission Briefing Meeting:

MISO Key Projects & Initiatives

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Focus on Summer Performance



- Planning, preparation and coordination resulted in reliable system operation
- Detailed information and modeling with Balancing Authorities
 - Load reduction (e.g. demand-side management, interruptible contracts)
 - Behind-the-Meter generation
- Reconciliation of capacity resources
 - Liquidated damages (LD) contracts
 - Declared versus offered capacity
- Stakeholder meeting held on September 6th to review and discuss Emergency Preparation and areas of focus
 - Increased granularity in emergency implementation (public appeals, load reduction) and better coordination of steps when emergency levels are lessened
 - Communications – improving communication channels, mediums and frequency as well as coordinating with Stakeholders
 - Two (2) surveys – Demand-Side Management (DSM) and capacity analysis “drill down”
- Scarcity pricing and alignment with NERC and Midwest ISO emergency procedures

Ancillary Services Market Project



■ Status Overview

- Nearing completion of conceptual design and in early stages of detailed market and systems design with stakeholders and vendors
- Proof of concept underway to validate the System and Market Applications hardware platforms and the required data communications (ICCP) system enhancements

■ Primary Objectives for 2006

- Finalize ASM and contingency reserve sharing rules
- Complete the Midwest ISO as Balancing Authority Functional Alignment
- File the required Contingency Reserve (CRS) & Ancillary Service (ASM) tariff sheets
- Complete the ASM Detailed design
- Develop and implement the CRS system

Footprint-Wide Contingency Reserve Agreement

- Coordinated contingency reserve sharing deployment system currently managed by three separate entities
- Timeline for completion is January 1, 2007
- Estimated Annual Benefit Range = \$59 to 118 million

Ancillary Services Markets

- Project will result in simultaneous co-optimization of Energy and Ancillary Services Markets
- Timeline for completion is late 2007 to early 2008
- Estimated Annual Benefit Range = \$111 to 218 million

Balancing Authority Functional Alignment

- Midwest ISO will assume Control Performance Standards and Disturbance Control Standard responsibilities to manage Regulation and Contingency Reserves markets
- Timeline for completion is late 2007 to early 2008

Regional Expansion Criteria & Benefits (RECB) II



- FERC's February 2006 order conditionally approved the October 2005 filing
 - 80% of the costs of Baseline Reliability Projects ("BRP") allocated to the zone that benefits; 20% of costs allocated to all zones, for Network Upgrades of a 345 kV and higher voltage class.
 - Costs allocated on a Line Outage Distribution Factor ("LODF") for each existing transmission branch in the Transmission System, after the addition of the required Network Upgrade.
 - Interconnection Customers responsible for 50% of the costs of required Network Resource Upgrades; Interconnection Customers may receive FTRs made feasible by the capability created by the network upgrade.
- FERC ordered the Midwest ISO and its stakeholders to address the issue of cost allocation for Regionally Beneficial Projects ("RBP") and submit a proposal for cost allocations
 - Midwest ISO filed RECB II on November 1st
- FERC conditionally approved the proposed Excluded Projects List based on the planned projects of the MTEP 2005

Midwest ISO Transmission Expansion Plan (MTEP) 2006 Initiative



■ MTEP Principles

- Make the benefits of a competitive energy market available to customers by providing access to the lowest possible electric energy costs
- Provide a transmission infrastructure that safeguards local and regional reliability
- Support state and federal renewable energy objectives by planning for access to all such resources (e.g. wind, biomass, demand side management)
- Creates a mechanism to ensure investment implementation occurs in a timely manner
- Develop a transmission system scenario model and make it available to state & federal energy policy makers to provide context and inform the choices they face

■ Regional Plan

- Identify reliability upgrades and additional upgrades to reduce congestion
- Identify expansions of regional scope to enable remote cost effective generation, and renewable resources
- Identify FTR coverage provided by the proposed Plan
- Monitor progress of prior MTEP plans

■ Scope

- Key projects for planning areas and major project initiatives under study
- Significant constraints to market efficiency (and approach to resolving)
- Process to review projects for RECB I cost allocation and impacts of plan on FTR allocations

Long-Term FTR – FERC Directive



- FERC finalized their guidelines for ISO's to follow in developing proposals to provide LT FTR on July 20th, 2006 (per section 1233(b) of EPAct 2005)
- Guidelines require that (1) LT FTR be made available to all transmission customers and (2) these rights be available to entities that pay for upgrade or build expansions
- Seven (7) Primary FERC Guidelines for LT FTR
 - I. Specify a source, sink and quantity
 - II. Must provide a hedge against day-ahead LMP congestion charges or other direct assignment of congestion costs and, once allocated, should not be modified during its term (exceptions apply)
 - III. Rights made available by upgrades/expansions go to parties that pay for the upgrade/expansion
 - IV. Term lengths that are sufficient to meet the needs of LSE to hedge long-term power supply arrangements (at least a 10-year period)
 - V. LSE must have priority over non-LSE in allocations supported by existing transmission capacity
 - VI. Re-assignable to another entity that acquires service obligation
 - VII. Initial allocation shall not require recipients to participate in an auction
- Midwest ISO is working with Stakeholders via the Transmission Rights Task Force to comply

Resource Adequacy



- FERC directed the Midwest ISO to file a “permanent” plan by June 2006 that:
 - Considers unique characteristics of Midwest ISO Participants and stakeholder views, regional needs and views of state regulators including OMS
 - Provides a consistent platform to achieve short-term reliability & encourage long-term planning and investment
 - Does not directly conflict with PJM Plan
- Creation of a mechanism that provides effective and efficient incentives for capacity investments (existing mechanisms have not proven to be effective or efficient)
- The Midwest ISO’s resource adequacy informational filing (June 4th) serves to enhance short-term reliability and provide for long-run resource adequacy
 - Use ‘shortage-cost’ pricing to clear the markets
 - Induce scarcity pricing for better price signals
 - Improve spot pricing and regional dispatch
 - Create regional operating reserve markets and co-optimize with energy dispatch/procurement and pricing
- The rights of the states within the Midwest ISO footprint must be maintained
- In 2006, the Midwest ISO will file with FERC to implement Tariff (TEMT), Transmission Owner (TO) and Balancing Authority (BA) agreement revisions necessary to address short-term adequacy and reliability
 - Active discussions continuing in applicable Stakeholder forums

FERC Order on Revenue Sufficiency Guarantee (RSG)



- Midwest ISO 10/27/05 proposal to FERC sought to revise Section 40.3.3 of the EMT to address three (3) issues relating to RSG charges:
 - Exclude virtual supply offers from RSG calculation
 - Clarify the allocation of RSG charges among various MP transactions
 - Clarify RSG payments to generators that may not be following dispatch
- Highlights of FERC's 4/25/06 Order:
 - Conditional acceptance in part and rejects in part various proposed changes
 - Requires refunds (with interest) and revised tariff language to be filed
 - Recommends further Stakeholder discussions on certain issues
- The Midwest ISO filed a motion for stay, including a request for rehearing and a technical conference to be scheduled on the issue – granted by FERC
- The Midwest ISO received the final FERC order on October 30th
 - Midwest ISO is currently in the process of analyzing the order
 - Preliminary assessment of the order will be provided at the November 8th Market Subcommittee Meeting

Reliability is always the #1 Priority of the Midwest ISO

Strategy

- **Operations Excellence**
 - Model core values
 - Discipline process and procedure
 - Cost optimization and accountability

- **Market Development**
 - Enhance existing energy market
 - Develop ancillary services
 - Create resource adequacy mechanism

- **Transmission Planning**
 - Incorporate market operations
 - Reliability versus economic; cost allocation
 - Tracking and measurement

- **Stakeholder Outreach**
 - Value demonstration
 - Cost recovery - regulatory alignment
 - Stakeholder process restructuring

Key Takeaways

- **Quantify Benefits and Reliability**
 - IMM 2005 State of the Market Report
 - Dispatch & Reliability studies underway

- **Communicate Midwest ISO Benefits**
 - Federal
 - State
 - Stakeholders
 - Assist State Regulatory Recovery
 - Communication and education
 - Filings and testimony

- **Improve Existing Energy Market**
 - Unit flexibility enhancement
 - RSG charge
 - Settlement statement charge alignment

- **Revise Stakeholder Process**
 - Clear, focused advice
 - Improve stakeholder impacts