



MISO Resource Adequacy Overview

● November 16th, 2006

○ **MISO Resource Adequacy**

- Resource Adequacy is addressed in Module E of the MISO tariff.
- Requirements of Module E:
 - LSE's must continue to meet all RRO and State requirements for resource adequacy
 - Report Demand forecasts and Network Resource designations to MISO
 - Network Resources Must Offer their designated MW into the MISO Day Ahead market and Forward RAC.

○ When/How Often?

- MISO gathers Demand and DNR data typically during the months of November and December.
- Demand and DNR data is gathered annually for the coming planning year (June – May)
- Updates can be made to DNR data up to 30 days prior to the change taking effect.

○ Where is the data used?

- Demand and DNR data is used in the annual FTR allocation process.
- MISO Summer and Winter generation adequacy assessments.
- MISO Planning studies

○ Objectives of Midwest Planned Reserve Sharing Group

- Form a group of Load Serving Entities in the Midwest ISO Reliability Authority footprint that agree to share planned reserves
- Perform LOLE analysis annually and establish minimum reserve margin requirements.
- Develop criteria for qualifying resources
- Perform all necessary data gathering and reporting.

○ Comparison of RRO Standards

- Planned Reserves standards for MRO and RFC are very similar.
- Both standards have four major steps:
 - Perform short and long term LOLE analysis
 - Determine minimum reserve margins for the coming planning year based on LOLE results
 - LSE's report that they have secured enough resources to meet reserve margin requirements
 - Compliance is reported to the RRO's

○ Where we are now.

- A Memorandum of Understanding has been signed by participating members for the purpose of developing a PRSG agreement.
 - 89% of MISO Market Load
 - 84% of MISO Reliability Authority Load
- Held monthly development meetings starting in April
- Agreement is currently under review
- The goal is to have a final agreement developed by the end of 2006.

○ PRSG Impact on Module E

- Module E says that LSE's must meet their RRO or State Requirement for reserve margin.
- When the PRSG completes its analysis and establishes a reserve margin that same margin will be the Module E requirement for those members.