MISO Black Start Tariff

Network Customer Meeting August 23, 2007

MISO Reliability Sub-Committee



Black Start Tariff

Technical White Paper

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Tariff Technical Issues Task Team

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NERC Standards Enforceable June 2007

- EOP-005-1
 - System Restoration Plans
- EOP-006-1
 - Reliability Coordination System Restoration
- EOP-009-0
 - Documentation of Black Start Unit Test Results
- (EOP-005 & 006 Revisions in process)



Proposed Basic Framework for MISO Black Start Tariff Developed by the Joint RSC/MSC Black Start Task Team July 2, 2007

- Motion for the July 10, 2007 MISO Market Subcommittee Meeting:
 - "The Market Subcommittee approves of the concepts embodied in the Basic Framework for a MISO Black Start Service Tariff filing as proposed by the Joint RSC/MSC Task Team. This approval only relates to concepts and does not indicate approval of any MISO Black Start Tariff filing."



Proposed Basic Framework for MISO Black Start Tariff

- MISO Transmission Operators will continue to be responsible for meeting NERC requirements for system restoration.
- It is assumed that existing black start capability under existing Transmission Operator restoration plans is presently sufficient for system restoration in MISO.
- All Transmission Operators within MISO will be required to arrange for black start capability to restore their systems.
- Existing black start units under existing restoration plans will be required to give at least 3 years notice before retiring the black start capability of that unit and to meet MISO developed standards for black start capability (e.g. testing, training, coordination, etc.)



Proposed Basic Framework for MISO Black Start Tariff (Cont')

- Existing black start units will be paid under a cost based rate, similar to PJM.
- When a Transmission Operator gives MISO notice that new black start capability is required to meet NERC standards, MISO and the Transmission Operators, within a restoration zone, will select potential generators that can provide the new black start capability.
- MISO will solicit offers or hold a reverse auction among the selected potential generators to determine lowest cost generator capable of supplying black start service. The winning generator will be paid based on its offer.
- If less than three generators from independent Asset
 Owners are capable of supplying the black start service, the
 offers for new black start units will be capped based on
 cost.



Proposed Basic Framework for MISO Black Start Tariff (Cont')

- New black start units will be required to commit to 3 years of service and meet MISO developed standards that apply to existing black start capability.
- The cost of the new black start units will be assigned to the transmission zone of the Transmission Operator that requested the new black start capability regardless of where the black start unit is located.
- Costs for black start capability will be assigned to a Transmission Zone based on the black start capability assigned to that zone and charged to all load with the transmission zone on a load ratio share.

Next Steps

- MISO Market Subcommittee
 - Drafting Tariff language guided by the Basic Framework

 Expect to see drafts in the 4th Quarter 2007

