MISO's Energy Market from an Operations Perspective

Session 1—November 7-8, 2006
Session 2—November 9-10, 2006

Park Plaza Hotel, Oshkosh, Wisconsin

Overview

Audience: Primarily System Operators from Balancing Authorities and Transmission Operations in the WSO footprint and some Marketing personnel

Instructors: Julie Pierce and Kevin Kelly from the Midwest ISO Technical Staff

NERC CEH Information: 16 hours will be available [16 Operating Topics and 1 hour of Simulation] and will be submitted and tracked by the Midwest ISO as the CE Provider

Day 1

Terminal Objective #1:
Gain Knowledge on the operations of the Midwest ISO Energy Market and the associated tool interactions

Module #1: "Midwest Market Unit Commitment Process"

Transmission and Generation Outage Coordination Process

- Timeframes for Submittal
- Submittal Process
- Midwest ISO Departments Involved
- Reports Visible
  - Op Guide Posting Screen – RA Page
  - Outage Lists – RA Page and OASIS

Day Ahead Reliability Study and Posting

- Process
- Cases Posted – RA Page
- Constraints – RA

Day Ahead Market

- Process
- DA Unit Commitment

Forward Reliability Assessment Commitment (FRAC)

- Process
- Outage inclusion
- Constraints

Intra-Day Reliability Assessment Commitment (IRAC)

- Role and Process
- Load Adjustment Activity
- Loss of Unit Activity
- Constraints
- Daily Operations Conference Call Description

Module #2: "Midwest Market Unit Management and Dispatch Process"

A description of how the Midwest Market Tools interact to run the Midwest Market

- Market Portal
- Physical Scheduling System
- Dispatch Management Tool
- Constraint Logger
- Unit Dispatch System

An overview of the Real Time Market process

- Real Time Energy Market Process
  - NSI
  - Basepoints
  - Reports Available – Midwest Market Site

Midwest ISO Abnormal Operating Procedures

- AOP Overview
- AOP 2 Detail
- AOP 3 Detail
- AOP 7 Detail
- AOP 10 Detail

Review of Day 1
Test on Day 1 Topics

Day 2

Terminal Objective #1:
Become aware of congestion management in the Eastern Interconnection and how the Midwest ISO conducts congestion management activities.

Module #1: "Midwest Market Congestion Management Process"

Congestion Management Introduction

- Eastern Interconnect CM Issues
- Options for Congestion Management
- Regional Coordination – TLR, PJM Joint Operating Agreement/M2M

Market Congestion Management

- Economic Redispatch with LMPs
- OTS or Powerworld Demonstration on how Prices Change with Constraints/Load

NERC Transmission Loading Relief with Market Congestion Management

- Need for TLR with Economic Redispatch
- Identification of how TLR and Economic Redispatch work together

Midwest ISO System Operating Limit Procedure

- Description of the Procedure

Midwest ISO System Operating Limit Procedure (Continued)

- Hands On Activity -Role Play Through SOL Situation
- Table Top Discussions with paper maps and scripts
- Discussion of Procedure to follow

Module #2: "Midwest ISO Emergency Operating Procedure and Contingency Reserve Sharing Group"

Midwest ISO Emergency Operating Procedures

- EOP Overview
- EOP-2 Detail

Midwest ISO Contingency Reserve Sharing Group

- Overview of Group Rules
- Overview of Displays

Review of Day 2

Test on Day 2 Topics and Course Evaluation

(H:/My Documents/WSO Fall06 Agenda-MISO.doc)