Midwest ISO Training 2006 Highlights 2007 Glimpses

ATC Quarterly Customer Meeting

February 22, 2007
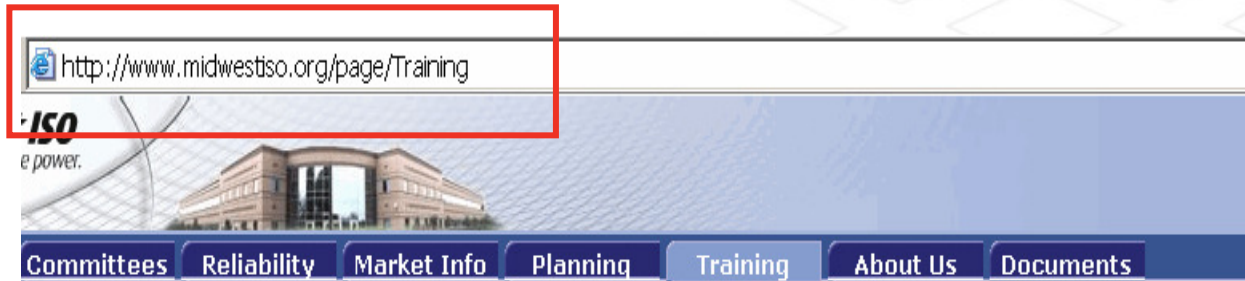
Contents

- 2006/2007 Midwest ISO Training Overview

- NERC PER-005 System Personnel Training Standard Overview

2006 Midwest ISO Training

- Midwest ISO System Operator Training Working Group (SOTWG)

- NERC CEH Provider

- Power System Operator Short Course

- Partnered with WSO for Fall Seminar

- Power System Restoration Wide Area Drills

- Implemented Midwest ISO Learning Management System

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Access Midwest ISO Training

http://www.midwestiso.org/page/Training

Committees | **Reliability** | **Market Info** | **Planning** | **Training** | **About Us** | **Documents**

Training Information

Welcome to Midwest ISO Training! The Midwest ISO uses a Learning Management System (LMS) to improve the ability to find session location, start dates and times, and NERC CE information for Midwest ISO-sponsored training events. A user account is required to sea the Midwest ISO course catalog, to register for courses, and to track participation in Midwest ISO courses.

For those who have already established an account in the LMS, please remember that the requeste user name will be your e-mail address.

Those who are new to the system, should click on the "New User" link found on the LMS home pag and follow the instructions on the screen to complete the registration process. While registering fo account, users will be requested to enter a code. When prompted, please enter **Midwest ISO**. The NERC certification fields are not required for those users who do not wish to receive NERC Continu Education Hour credit for courses. Users who are NERC certified are requested to provide their certification information.

Additional information regarding use of the site can be found in the Learning Management System User Guide. Please contact the Midwest ISO Customer Training Tear for more information. Thank you for your interest in Midwest ISO training!

2007 Training

2007 Training Events

Ancillary Services Concepts for Operators
- Offered in May, October
- 21 NERC CEH

Electric Industry Fundamentals for Business Professionals
- Offered in January, June, August
- No NERC CEH

Emergency Operations - Thinking Our Way Through
- Offered in March
- 16 NERC CEH

Emergency Operations - Identification and Mitigation
- Offered in March
- 16 NERC CEH

Fundamentals of Electric Power Systems I and II
- Offered in February, November
- Part I = 15 NERC CEH; Part II = 17 NERC CEH

NERC Reliability Standards
- Offered in January, May, October
- 30 NERC CEH

Power System Disturbances
- Offered in March, September
- 21 NERC CEH

Power System Dynamics I and II
- Offered in April, December
- Part I = 17 NERC CEH; Part II = 19.5 NERC CEH

Power System Operator Short Course
- Offered in April
- Approx. 32 NERC CEH; exact number to be determined by the agenda.

Power System Restoration (PSR) Seminar
- Offered in September
- Approx. 10 NERC CEH; exact number to be determined by the agenda.

Switching and Clearances
- Offered in May
- 16 NERC CEH

System Operator Training (SOT) Workshop
- Offered in April, September
- Approx. 10 NERC CEH; exact number to be determined by the agenda.

Transition to Supervisor
- Offered in October
- 22 NERC CEH (Professional)

Transmission Operations
- Offered in August
- 16 NERC CEH

Other Initiatives

■ Next Step Program

- Creating pipeline for new system operators into the industry

■ Ancillary Services Market

- Training Plan being finalized

- Communication via LMS in Second Quarter

■ Partnering with WSO Group for Fall Seminar

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NERC Training Standard

PER-005 Draft 2

Status Update

- Comments for Draft One Received and Responses Created

- Standard Drafting Team created Draft 2 and is ready to post for next round of comments – target for March 1, 2007:

  - Response to Comments

  - Draft 2 of PER-005

  - Updated Implementation Timeline

  - Associated Reference Documents

Standard Applicability

■ This standard applies to all system operator positions of a **Reliability Coordinator, Balancing Authority and Transmission Operator** entity that have the authority and responsibility either directly or through communications with others, to perform independent actions that impact reliability by producing a response from the interconnected electrical system that is real-time and concurrent with the causative action. This includes contract System Operators or System Operators performing such tasks under delegation agreements.

Response to Comments

■ High Level Changes Made To Standard

- Applicability Clarified

- Violation Severity Factors Reduced

- Requirements Simplified for additional clarity

- Training programs and plans identified as a need for applicable positions, not each individual

- Trainer Qualification Requirement Expanded

Requirements and SAT

- R1: Define Positions

- R2: JTA

- R3 and R4: Needs Analysis

- R5: Training Program

- R6: Training Plan

- R7: Trainer's Qualifications

- R8: Implement the Plan

Requirements and SAT

- R9: Emergency Operation Preparedness Hours

- R10: Reliability Coordinator Specific

  - Restoration Drill

  - Topics for Program

- R11: Document

- R12: Evaluate

- R13: Keep Up to Date

Implementation Plan

- Timeline Extended to Three Years

- Requirement Compliance identified in three phases.

- Drafting Team Recommends to ERO that Standard PER-002 and PER-004 be retired.

Implementation Plan –cont.

■ Phase One: 0-18 Months

- Identify Positions affected (R1)

- Conduct JTA for All Positions (R2)

- Conduct Needs Analysis (R3, R4)

  - New Hires

  - Existing Positions

Implementation Plan –cont.

- **Phase Two: 0-30 Months**
  - Create Training Program (R5)
  - Create Training Plan (R6)
    - New Hires
    - Existing Positions
  - Ensure Trainers are qualified (R7)
  - Implement Training in Plan (R8)
  - Include Reliability Coordinator Topics in program (R10)

Implementation Plan –cont.

■ **Phase Three: 0-36 Months**

- Document Training (R11)

- Evaluate Training Program (R12)

- Ensure Training is up to date (R13)

■ **Requirement 9 --Effectively Immediately**

- 32 Hour of EOP Training for each position

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Questions?