

MEETING AGENDA
Midwest Reliability Organization
Standards Committee
2774 Cleveland Avenue, Roseville, MN 55113
September 6, 2007 – 10:00 AM to 4:00PM

- 1. Welcome**
 - a. Determination of Quorum
 - b. Additions to the Agenda
 - c. Review Policy and Procedure 4

- 2. Consent Agenda**
 - a. Approve Minutes
 - i. Approve May 24, 2007 Meeting Minutes

- 3. Open positions on the MRO Standards Committee**

- 4. Review of MRO Manual on Web Site**
 - a. MAPP/MAIN Retirement Process Status: What is left to retire? – Larry Brusseau
 - b. Update Procedures to the MRO Manual
 - i. Standards Requiring a Procedure and/or Process
 - ii. Guideline for Procedure and/or Process
 - iii. MRO RAC Procedure for PRC-002-1

- 5. Reports and Updates**
 - a. Chairman Report – Lloyd Linke
 - b. NSRS Report – Larry Brusseau
 - c. Standards Manager Report – Larry Brusseau
 - d. Staff Update: Compliance Committee – Shel Berg
 - e. Staff Update: Reliability Assessment Committee – John Seidel

- 6. Standards**
 - a. Standards Process Manual for Organizational Standards- Larry Brusseau
 - b. Timeline for ADT Standards Work – Four in Progress
 - i. 3 for Ballot
 - ii. 1 in Commenting Phase
 - c. Discussion on Fill in the Blank Standards: How are they enforced?

- 7. Disturbance Monitoring Form linked to website**

- 8. Time Horizon definition clarification**

- 9. NERC Representative Reports**
 - a. Interchange Subcommittee –
 - b. Planning Standards Task Force – Greg Pieper
 - c. Resources Subcommittee – Alan Oneal

- d.* Resource Issues Subcommittee – Larry Brusseau
- e.* Standards Committee - Robert Coish
- f.* Compliance and Certification Committee – Terry Bilke
- g.* Regional Reliability Standards Working Group – Larry Brusseau

10. Task List Review – Larry Brusseau

11. Other Business

- a.* Electronic Voting Process
- b.* Committee Appointments 2008
- c.* Standards Committee report to BOD meeting September 27, 2007

12. Next Meeting and Adjourn

September 27, 2007 MRO Board of Directors
November 1, 2007
December 6, 2007 MRO Board of Directors

Tentative meeting dates for 2008

Agenda 1.
Welcome

Agenda 1.a.
Determination of Quorum

Name	Sector	Mailing Address	Phone/Fax	E-mail Address
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Agenda 1.b.
Additions to the Agenda

**Agenda 1.c.
Review of Policy and Procedure 4**

Anti-trust Reminder

Participants in Midwest Reliability Organization meeting activities must refrain from the following when acting in their capacity as participants in Midwest Reliability Organization activities (i.e. meetings, conference calls, and informal discussions):

- Discussions involving pricing information; and
- Discussions of a participant's marketing strategies; and
- Discussions regarding how customers and geographical areas are to be divided among competitors; and
- Discussions concerning the exclusion of competitors from markets; and
- Discussions concerning boycotting or group refusals to deal with competitors, vendors, or suppliers.



Standards of Conduct Reminder

FERC Standards of Conduct prohibit MRO staff, committee, subcommittee and task force members from sharing non-public transmission sensitive information with anyone who is either an affiliate merchant or could be a conduit of information to an affiliate merchant.



Agenda 2.
Consent Agenda

Agenda 2.a.
Consent Agenda
Approve Minutes

Agenda 2.a.i.
Consent Agenda
Approve Minutes
Approve Meeting Minutes of May 24, 2007

DRAFT MINUTES
Midwest Reliability Organization
Standards Committee
2774 Cleveland Avenue, Roseville, MN 55113
May 24, 2007 – 10:00 AM to 4:00PM

1. Welcome

a. Determination of Quorum

Mr. Larson will be presiding over the meeting in the absence of Chair Linke.

Mr. Larson called the meeting of the Midwest Reliability Organization (MRO) Standards Committee (SC) to order at 10:00am CT.

Mr. Larson and Secretary Brusseau determined that a quorum was present. The following members, guests, and staff were in attendance:

Members Present:

Dave Acton, ALT (via phone)
Jason Shaver, ATC (via phone)
Larry Larson, OTP
Gerry Steffens, RPU
Wayne Guttormson, SPC
Tim Noeldner, WPPI

Members Absent:

Lloyd Linke, Chair, WAPA

Guests:

Carol Gerou, MP (via phone)
Paul Roehr, MGE

Staff:

Mari Ann Baden
Larry Brusseau, Secretary
Mike Brytowski
Laura Elsenpeter

b. Additions to the Agenda

An item will be added to the agenda under Item 10 to approve the balloting of four MRO Standards. The discussion of links to NERC standards will also be added

c. Review Policy and Procedure 4

Pursuant to Policy and Procedure 4, Mr. Larson reviewed the Standards of Conduct and Anti-Trust Guidelines.

2. Consent Agenda

a. Approve Minutes

i. Approve March 5, 2007 Meeting Minutes

Upon motion duly made by Mr. Noeldner and seconded by Mr. Steffens, the SC approved the March 5, 2006 minutes as written.

b. Nominations for NERC Interchange Subcommittee

No nominations have been received at this time.

3. Open positions on the MRO Standards Committee

A message will be sent by the MRO staff to the general MRO membership requesting candidates to the Standards Committee. These candidates will be presented to the Board for approval.

4. Review of Rosters on MRO Standards Committee Exploder Lists

Mr. Brusseau reviewed the two exploder lists that are used by the Standards Committee. The exploder list names will be changing to better reflect the difference between membership and the more general list. A request for FERC members to be added will be accepted and added to the general list.

5. Bulk Electric System (BES) Definition Review

Mr. Brusseau reviewed the BES definition comments that have come from the MRO Reliability Assessment Committee and MRO Compliance Committee. This definition will be used to generate a list of BES for the MRO footprint.

Dan Skaar, MRO and Shel Berg, MRO joined the meeting to assist in the discussion.

Mr. Skaar addressed the Committee and thanked them for their participation on the Committee and continuing commitment to the MRO and its members. He reviewed the actions of the mock hearing seminar held in Atlanta, GA and reiterated how tightly the Standards and hearing process are tied together.

Mr. Skaar also asked for continued feedback for improvement from the Registered Entities.

Mr. Skaar reviewed where the Board stands on the BES definition. At this point they are reviewing the suggestions put forth by the standing committees. Mr. Skaar was not sure that the Board would need to approve the final definition. However, this definition will be used to generate a list of companies that will potentially be subject to FERC Standards and penalties.

Mr. Berg presented the MRO Compliance Committee's revision of the draft BES definition. The CC was answering the methodology requested by NERC.

The Standards Committee agreed that they would like to use the definition developed by the MRO CC with the revision that the last paragraph would be Item 3. Planning Coordinators will be added to II.a., b. and c.

Mr. Steffens left the meeting at 11:00am
Mr. Larson recessed the meeting at 11:10.
The meeting was reconvened at 11:15am.

Upon motion duly made by Mr. Noeldner and seconded by Mr. Guttormson, the MRO Standard Committee approved the Bulk Electric System definition as developed by the MRO Compliance Committee with the revision that the last paragraph would be Item 3. Planning Coordinators will be added to II.a., b. and c..

6. Time Horizon Definition Discussion

Mr. Brusseau reviewed the Time Horizon definition as listed in the Agenda book and asked the question as to how this definition effects a violation and the sanctions applied to it. This would be a third factor added to the sanctions matrix along with risk and severity levels.

Time horizons will need to be added to the four MRO Standards.

At the conclusion of the discussion, there was still some confusion as to how these definitions will be applied. Mr. Brusseau will address this question in a letter to the NERC Standards Committee. He will be attending the NERC meeting to be held on June 4-5 and will report back to the Committee on his findings.

7. Review of MRO Manual on Web Site

a. MAPP/MAIN Retirement Process Status – Larry Brusseau

Mr. Brusseau presented the MRO Manual on the website. MRO Staff will review section 5.2 to ensure that procedures are listed for Standards where applicable.

b. Procedures

Mr. Steffens rejoined the meeting at 11:55am.

8. Disturbance Monitoring Report Form

This item was covered when discussing Item 7.a.

9. Reports and Updates

a. Chairman Report – Lloyd Linke

Mr. Larson reviewed the Chair Report that was included in the Agenda book.

b. NSRS Report – Larry Brusseau

Mr. Brusseau gave a report on the Subcommittees activities during the past quarter. Violation Risk Factors was brought to vote. The original vote was “no” but after revisions the vote was changed to “yes”.

Mr. Larson asked about the process used for informing the Committee of the voting results. Mr. Brytowski will send an announcement to the MRO Standards Committee as they are announced.

Mr. Larson recessed the meeting for lunch at 12:10pm.
The meeting resumed at 12:50pm

- c. Standards Manager Report – Larry Brusseau
Mr. Brusseau reviewed the report that was distributed prior to the meeting start.
- d. Staff Update: Compliance Committee – Wayne VanOsdol
No report was given.
- e. Staff Update: Reliability Assessment Committee – John Seidel
No report was given.

10. Standards

- a. Standards Process Manual for Organizational Standards- Larry Brusseau
Mr. Larson outlined steps to move forward. The suggestion was made that the Manual for Regional Standards would be used as a basis for the Organizational Standards Manual.

The current version of the Standards Process Manual for Regional Standards is posted on the website in the MRO Manual. There may be changes required based on the Delegation Agreement to the bus numbering.

11. NERC Representative Reports

- a. Interchange Subcommittee – Open
No report was given.
- b. Resources Subcommittee – Alan Oneal
No report was given.
- c. Resource Issues Subcommittee – Bill Head/ Larry Brusseau
Mr. Brusseau will be replacing Mr. Head as the MRO representative.
- d. Standards Committee - Robert Coish, Canadian Rep.
No report was given.
- e. Compliance and Certification Committee – Terry Bilke
Mr. Bilke’s report is included in the Agenda book.
- f. Regional Reliability Standards Working Group – Larry Brusseau
No report was given.

12. Task List Review – Larry Brusseau

- Identify which MAPP/MAIN procedures have been retired
- Contact members to find replacements for the Standards Committee.
- Update Procedures to the Manual as they are completed
- Disturbance Monitoring Form linked to website
- Time Horizon definition clarification
- After June 11, a decision will need to be made as to balloting of MRO Standards. This will be determined through email vote unless significant changes need to be discussed through conference call.

13. 2008 Budget – Larry Brusseau

An update on the 2008 Budget was reviewed by Mr. Brusseau. Dollars have been allocated for the Standards Committee meetings and additional Drafting Teams as well as MRO Representatives to NERC Committees and Readiness Evaluations.

14. Other Business

- a. Committee Appointments 2007
 - i. *Generator and/or Power Marketer Sector*
 - ii. *Cooperative Sector (2)*
- b. MRO Reliability Standards and Compliance Program Seminar – May 31, 2007
- c. Standards Committee report to BOD meeting June 19, 2007
Mr. Brusseau

Mr. Larson suggested a change in the linkage from the NERC website to the MRO Standards website. He would like to see it linked to RSVP.

Mr. Brytowski commented that MRO member comments are not getting weighed as heavily with NERC because the names are not listed. Mr. Brytowski will investigate a work-around to the restricted number of entries.

15. Next Meeting and Adjourn

June 19, 2007	MRO Board of Directors
September 6, 2007	
September 27, 2007	MRO Board of Directors
November 1, 2007	
December 6, 2007	MRO Board of Directors

Mr. Larson adjourned the MRO Standards Committee 2:45pm.

Prepared by: Mari Ann Baden

Reviewed by: Larry Larson, Larry Brusseau

Agenda 3.
Open Positions on the MRO Standards Committee

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Agenda 4.
Review of MRO Manual on Web Site

<http://www.midwestreliability.org/MROmanual.html>

Agenda 4.a.
Review of MRO Manual on Web Site
MAPP/MAIN Retirement Process Status

Agenda 4.b.
Review of MRO Manual on Web Site
Update Procedures to the Manual

Agenda 4.b.i.
Review of MRO Manual on Web Site
Standards Requiring a Procedure and/or Process

Agenda 4.b.ii.
Review of MRO Manual on Web Site
Guideline for Procedure and/or Process

Agenda 4.b.iii.
Review of MRO Manual on Web Site
MRO RAC Procedure for PRC-002-1

MRO Reliability Assessment Committee
Process for Approving MRO Regional Procedures for Supporting NERC Standards

1. A Subcommittee, Working Group or Task Force reporting to the Reliability Assessment Committee (RAC) develops a procedure to support NERC Standards relative to their group.
2. The Subcommittee, Working Group or Task Force approves the draft document within their membership.
3. The draft document is sent to the RAC members and the entire MRO membership for comments. The comment period must be at least 30 days. For this purpose, the originating group may use the RSVP software that is currently used by the MRO Standards Committee for commenting on draft standards.
4. The originating group considers all received comments, revises the draft document as needed, and approves the final document – the proposed procedure.
5. The proposed procedure is sent to the RAC members for review and additional comments. The RAC review and comment period will be at least ten days.
 - If there are no RAC additional comments, the proposed procedure will be considered approved for distribution to MRO members and posting in the MRO Procedure Manual.
 - If there are RAC additional comments, repeat Step 4.
6. The RAC Chairman will update the MRO Board of Directors on development and approval as needed.

1 June 2007
HVN

Midwest Reliability Organization Procedure for Disturbance Monitoring and Reporting Requirements

A. Introduction

- 1. Title: Define Regional Disturbance Monitoring and Reporting Requirements**
- 2. Number: NERC Standard PRC-002-1**
- 3. Purpose:** Ensure that Midwest Reliability Organization (MRO) establishes requirements for installation of Disturbance Monitoring Equipment (DME) and reporting of Disturbance data to facilitate analyses of events and verify system models. For the purposes of this PRC, DME includes Sequence of Events Recorder (SER), Digital Fault Recorder (DFR) and Dynamic Disturbance Recorder (DDR).
- 4. Applicability:** Midwest Reliability Organization, Generation and Transmission Owners.
- 5. Effective Date:** Effective immediately upon MRO approval

B. Requirements

- R1.** The Midwest Reliability Organization establishes the following installation requirements for sequence of event recording:

Sequence of events recorders are devices capable of monitoring and recording system data pertaining to a “disturbance”. They record equipment response to the event. Sequence of events recorders shall be any device capable of recording each “change of state” of its “on/off” inputs and tagging each change of state with a “precise time” and have “local data retention” as specified in the latest revision of PRC-018 or its successor.

Acceptable equipment includes stand alone sequence of event recorders; fault recorders capable of being triggered, recording and retaining sequence of event data, micro-processor based relays capable of being triggered, recording and retaining sequence of event data; data loggers with the required capabilities; some SCADA RTUs or other equipment that includes the required capabilities.

Sequence of Event recorders shall be equipped with a GPS synchronized time source for time and date stamping.

R1.1. Location, monitoring and recording requirements including the following:

R1.1.1. Criteria for equipment location (e.g., by voltage, geographic area, station size, etc.)

The following are MRO regional locations where sequence of event data shall be recorded:

1. HVDC transmission facilities
2. Generation facilities with an aggregate nameplate rating equal to or above 300 MW regardless of voltage level
3. Facilities 200kV and above, and operationally critical facilities between 100 and 200 kV ^{note 1} which are:
 - a. Locations where out of step tripping is initiated
 - b. Intertie lines between Load Control Areas
 - c. All 345 kV and above substations
 - d. Locations with a combined total of four (4) or more transmission lines or transformers. Include transmission lines of 200 kV and above. Include transformers having secondary voltage ratings of 100kV and above.
 - e. Special Protection Systems
 - f. Specialized power system devices such as dynamically switched capacitors, phase shifting transformers and Flexible AC Transmission (FACTS) devices

R1.1.2. Devices to be monitored

1. Where monitoring in R1.1.1 is required, the following shall be monitored:
 - a. Transmission lines operated at 200kV or above
 - b. Transmission buses operated at 200kV or above
 - c. Transformers having primary and secondary voltage rating of 200kV or above
 - d. Critical facilities between 100 and 200kV ^{note 1}.
 - e. Generation delivery point to the transmission system
2. As a minimum, the following specific functions to be monitored include:
 - a. Circuit Breaker Position
 - b. Sending and/or Receiving of Communications in aid to protective relaying
 - c. Breaker Failure Trip
 - d. Initiation of a Special Protection System Action
 - e. Sending and/or Receiving of Communications in aid to Special Protection Systems

- f. Special Protection System Functions that may be considered “key” to forensic analysis of the event

R2. The Midwest Reliability Organization shall establish the following installation requirements for fault recording:

Fault recorders are devices capable of monitoring and recording system data pertaining to a “disturbance”. Fault recorders record actual waveform data replicating the system primary voltages and currents. These event recordings are short duration, high sample rate recordings required for power system fault disturbance analysis. Fault recorders shall tag each event record with a “precise time”, and shall have “local data retention” as specified in the latest revision of PRC-018 or its successor.

Acceptable equipment includes stand alone fault recorders, and micro-processor based relays that comply with the recording length and minimum sampling rates specified below.

Fault recorders shall be equipped with a GPS synchronized time source, for time and date stamping.

R2.1. Location, monitoring and recording requirements including the following:

R2.1.1. Criteria for equipment location (e.g., by voltage, geographic area, station size, etc.)

The following are MRO regional locations where fault data shall be recorded:

1. HVDC transmission facilities
2. Generation facilities with an aggregate nameplate rating equal to or above 300 MW regardless of voltage level
3. Facilities 200kV and above, and operationally critical facilities between 100 and 200 kV ^{note 1} which are:
 - a. Locations where out of step tripping is initiated
 - b. Intertie lines between Load Control Areas
 - c. All 345 kV and above substations
 - d. Locations with a combined total of four (4) or more transmission lines or transformers. Include transmission lines of 200 kV and above. Include transformers having secondary voltage ratings of 100kV and above.
 - e. Special Protection Systems
 - f. Specialized power system devices such as dynamically switched capacitors, phase shifting

transformers and Flexible AC Transmission
(FACTS) devices

R2.1.2. Elements to be monitored at each location

Where monitoring in R2.1.1 is required, the following shall be monitored:

1. Transmission lines operated at 200kV or above
2. Transmission buses operated at 200kV or above
3. Transformers having primary and secondary voltage rating of 200kV or above
4. Critical facilities between 100 and 200kV ^{note 1}
5. Generation delivery point to the transmission system

R2.1.3. Electrical quantities to be recorded for each monitored element shall be sufficient to determine the following:

R2.1.3.1. Three phase to neutral voltages

R2.1.3.2. Three phase currents and neutral currents

R2.1.3.3. Polarizing currents and voltages, if used

R2.1.3.4. Frequency

R2.1.3.5. Megawatts and megavars

Recommended monitored or calculated data:

Transmission Lines

- Three phase to neutral voltages. Use as many line side phase voltages available.
- Three phase and residual current on all lines
- Relay polarizing currents and voltages

Substation Equipment

- Transformer phase and neutral currents
- Three phase to neutral voltages. Use as many bus side phase voltages available.
- Capacitor bank and Static Var System (SVS) currents

Generators

- Terminal voltages
- Phase and neutral currents
- Field voltage
- Field current

R2.2. Technical requirements, including the following:

R2.2.1. Recording duration requirements

A minimum fault record length of 11 cycles is recommended, including a minimum of 2 cycles of pre-disturbance information.

R2.2.2. Minimum sampling rate of 16 samples per cycle**R2.2.3.** Event triggering requirements

Event triggering may be selected from the following list and utilized as appropriate:

- Overcurrent
- Apparent Impedance
- MW Flow
- Change of State of circuit breakers
- Relay Operation
- Under or Over Frequency
- Under or Over Voltage
- Rate of Change
- Sending and/or Receiving of Communications in aid to protective relaying
- Breaker Failure Trip
- Initiation of a Special Protection System Action
- Sending and Receiving of Communications in aid to Special Protection Systems
- Other Special Protection System Functions that may be considered “key” to forensic analysis of the event
- Other trigger options that may be available in the fault recorder for use

R3. The Midwest Reliability Organization shall establish the following installation requirements for dynamic disturbance recording:

Dynamic Disturbance Recorders (DDRs) are devices capable of monitoring and recording system data pertaining to a “disturbance”. DDRs record incidents that portray power system behavior during dynamic events such as low frequency (0.1 Hz – 3 Hz) oscillations and abnormal frequency or voltage excursions. They are capable of recording the long term, slow response information required for power system stability analysis. DDRs shall tag records with a “precise time”, and shall have “local data retention” as specified in the latest revision of PRC-018 or its successor.

Acceptable equipment includes any device capable of recording the specified data for the long term recording duration and at the sample specified below. They may be “triggered” devices (See R3.2.1 below) or

“continuous record” devices. DDR capability is often included with some stand alone DFR equipment. DDR capability is also included with a few particular micro-processor based relays. (Check capability requirements below before applying.)

Dynamic Disturbance Recorders shall be equipped with a GPS synchronized time source, for time and date stamping.

R3.1. Location, monitoring and recording requirements including the following:

R3.1.1. Criteria for equipment location giving consideration to the following:

- Site(s) in or near major load centers
- Site(s) in or near major generation clusters
- Site(s) in or near major voltage sensitive areas
- Site(s) on both sides of major transmission interfaces
- A major transmission junction
- Elements associated with Interconnection Reliability Operating Limits
- Major EHV interconnections between Balancing Authorities
- Coordination with neighboring regions within the interconnection

The following are MRO regional locations where dynamic data shall be recorded. However, a DDR which is required at a transmission substation per requirements R3.1 shall be considered optional if a DDR (meeting all requirements of R3.2) is found to be located one or two transmission substations away at a common voltage.

1. HVDC transmission facilities
2. Generation facilities with an aggregate nameplate rating equal to or above 850 MW regardless of voltage level
3. Major Metro areas having a total maximum load of 2500 MW or higher (at least one DDR)
4. Facilities 200kV and above, and operationally critical facilities between 100 and 200 kV ^{note 1} which are:
 - a. Locations where out of step tripping is initiated
 - b. At one end of transmission lines having Interconnection Reliability Operation Limits (IROL) [See NERC glossary of terms for definition of “IROL”]

- c. Locations with a total of four (4) or more transmission lines of 345 kV and above
- d. Locations with a total of six (6) or more transmission lines of 200 kV or above
- e. Special Protection Systems
- f. Specialized power system devices such as dynamically switched capacitors, phase shifting transformers and Flexible AC Transmission (FACTS) devices.
- g. Dynamic study, system protection and generation working groups within MRO may identify other specific locations where DDRs shall be required.

R3.1.2. Elements and number of phases to be monitored at each location

Where monitoring in R3.1.1 is required, DDRs shall record at minimum one phase of voltage and the same phase of current of the following system elements:

1. Transmission lines operated at 200kV or above
2. Transmission buses operated at 200kV or above
3. Transformers having primary and secondary voltage rating of 200kV or above
4. Critical facilities between 100 and 200kV ^{note 1}
5. Generation delivery point to the transmission system

R3.1.3. Electrical quantities to be recorded for each monitored element shall be sufficient to determine the following:

R3.1.3.1. Voltage, current and frequency

R3.1.3.2. Megawatts and megavars.

R3.2. Technical requirements, including the following:

R3.2.1. All devices installed after January 1, 2009 shall have the capability for continuous recording.

R3.2.2. Each device shall sample data at a rate of at least 960 samples per second and shall record the RMS value of electrical quantities at a rate of at least 6 records per second.

Specific requirement for new installation:

Time Duration	A minimum record duration of 30 seconds shall be used for recorders configured with single event recording capability.
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R4. The Midwest Reliability Organization shall establish requirements for facility owners to report disturbance data recorded by their DME installations. The disturbance data reporting requirements shall include the following:

R4.1. Criteria for events that require the collection of data from DMEs:

Data shall be collected for power system events that cause a regional network Disturbance, or if requested by the MRO or any other affected regional entity, the DME owner shall collect recorded data which directly affected the power systems.

R4.2. List of entities that must be provided with recorded Disturbance data.

Disturbance data shall be provided to affected regional entities requesting the available data.

It shall be the MRO's responsibility to distribute the Disturbance data further as needed.

R4.3. Timetable for response to data request shall be thirty (30) calendar days of the day it was requested.

R4.4. Provision for reporting Disturbance data:

The data shall be in a format which is capable of being viewed, read and analyzed with a generic COMTRADE (IEEE C37.111-1999 IEEE Standard Common Format for Transient Data Exchange for Power Systems or its successor standard) analysis tool.

R4.5. Naming of data files shall be in conformance with the IEEE C37.232 Recommended Practice for Naming Time Sequence Data Files.

R4.6. Data content requirements and guidelines shall be in accordance with R4.4 and R4.5 or other formats deemed acceptable by the MRO.

- R5.** The Midwest Reliability Organization shall provide its requirements and any reporting to the affected Transmission Owners and Generator Owners within thirty (30) calendar days of approval of those requirements.
- R6.** The Midwest Reliability Organization shall periodically (at least every five years) review, update and approve its Regional requirements for Disturbance monitoring and reporting.

As part of the regional plan, the MRO Transmission Assessment Subcommittee shall maintain a list of existing dynamic disturbance and critical fault recorder locations.

C. Measures

- M1.** The Midwest Reliability Organization's requirements for the installation of Disturbance Monitoring Equipment shall address Requirements 1 through 3.
- M2.** The Midwest Reliability Organization's Disturbance monitoring data reporting requirements shall include all elements identified in Requirements 4.
- M3.** The Midwest Reliability Organization shall have evidence it provided its Regional Disturbance monitoring and reporting requirements as required in Requirement 5.
- M4.** The Midwest Reliability Organization shall have evidence it conducted a review at least once every five years of its regional requirements for Disturbance monitoring and reporting as required in Requirement 6.

D. Compliance

- 1.** NERC PRC-018 requires that an entity complies with regional requirements established per NERC PRC-002-1 and monitors compliance relative to those regional requirements
- 2.** Violation Severity Levels Refer to NERC PRC-018 for both Violation Severity Levels and Levels of Non-Compliance

Version History

Version	Date	Action	Change Tracking
1.0	5-11-2007		
2.0	6-12-2007		
3.0	8-03-2007		

Note 1: The NERC suggested guidelines for Critical Circuit definition are as follows:

- a. All circuits that are elements of the NERC Book of Flowgates unless the Transmission Owner excludes them. This includes both the monitored and outage element for OTDF ^{note 2} sets.
- b. All circuits that are directly related to off-site power supply to nuclear plants. Any circuit whose outage causes unacceptable voltages on the off-site power bus at a nuclear plant must be included, regardless of its proximity to the plant.
- c. Other circuits determined and agreed to by the transmission owners, reliability authority/coordinator and the RROs.

Note 2: Outage Transfer Distribution Factor (OTDF) Flowgates are Flowgates that take into account a predefined contingency during curtailment evaluation. With OTDF Flowgates the monitored branches are considered with a specific facility removed from service during curtailment evaluation

Agenda 5.
Reports and Updates

**Agenda 5.a.
Reports and Updates
Chairman Report**



June 27, 2007

Midwest Reliability Organization Members

Subject: June 19, 2007 Midwest Reliability Organization Board of Directors Meeting Highlights

Dear Midwest Reliability Organization Members:

Below are the meeting highlights from the June 19, 2007 meeting of the board:

- Approved the meeting minutes of March 29, 2007 and May 18, 2007. For further details please visit http://www.midwestreliability.org/bod_docs.html.
- Approved the appointment of Neil Lindgren, OTP, as the MRO representative on the NERC Personnel Committee. Midwest Reliability Organization will request an additional Canadian seat on the committee and will continue with its plan for Xcel Energy to replace the seat vacated by Scott McCoy.
- Approved the Dispute Resolution Procedures. These procedures will be used for disputes between Members, or between a Member and the Midwest Reliability Organization arising under the bylaws.
- Approved the hearing procedures. These procedures apply and govern practice and procedure before each Regional Entity in hearings in the United States conducted into (i) whether Registered Entities within the area of responsibility have violated Reliability Standards and (ii) if so, to determine the appropriate mitigation plans as well as any remedial actions, penalties, or sanctions in accordance with applicable penalty guidelines approved by FERC pursuant to 18 C.F.R. Section 39.7(g)(2).
- Accepted the auditor report on the 2006 financial statements.
- Approved the 2008 Business Plan and Budget. The budget and business plan fulfills Midwest Reliability Organization's commitments related to the delegated functions from NERC, consistent with the FERC and Canadian authorities.

For further details, please refer to <http://www.midwestreliability.org>.

Sincerely,

Daniel P. Skaar, President
Midwest Reliability Organization, Inc.

DPS:slh

C: MRO Board of Directors

**Agenda 5.b.
Reports and Updates
NSRS Report**

**Agenda 5.c.
Reports and Updates
Standards Manager Report**

Agenda 5.d.
Reports and Updates
Staff Update: Compliance Committee

Agenda 5.e.
Reports and Updates
Staff Update: Reliability Assessment Committee

**Agenda 6.
Standards**

**Agenda 6.a.
Standards**

Standards Process manual for Organizational Standards

- 3 for Ballot
- 1 in Commenting Phase

**Agenda 6.b.
Standards**

Timeline for ADT Standards Work – Four in Progress

- 3 for ballot

**Agenda 6.c.
Standards**

Discussion on Fill in the Blank Standards: How are they enforced?

Agenda 7.
Disturbance Monitoring Report Form

Agenda 8.
Time Horizon Definition Clarification

Agenda 9.
NERC Representative Reports

Agenda 9.a.
NERC Representative Reports
Interchange Subcommittee

Agenda 9.b.
NERC Representative Reports
Planning Standards Task Force

Agenda 9.c.
NERC Representative Reports
Resources Subcommittee

Agenda 9.d.
NERC Representative Reports
Resource Issues Subcommittee

Agenda 9.e.
NERC Representative Reports
Standards Committee

Agenda 9.f.
NERC Representative Reports
Compliance and Certification Committee

CCC Conference Call July 11 2007

CCC Nominating Committee Report - John Blazekovich

- 3 candidates (including current chair and vice chair)
- Committee felt momentum-continuity-engagement was important. Ted Hobson and Tom Abrams were asked to stay on as chair and vice chair through the current term (next turnover is expected to occur June 2008).

CCC Subcommittees - Ted Hobson

The CCC reviewed the following to be presented to the upcoming BOT meeting. I captured this during the discussion. Wording may vary from the official final product.

Action 1 As required by Section 7.3 of the CCC charter the CCC requests that the Board approve the formation by the CCC of four subcommittees to the committee that the CCC deems necessary, as follows:

1. Standards Interface Subcommittee
2. ERO Monitoring Subcommittee
3. Organization Registration and Certification Subcommittee
4. Procedures Subcommittee

Action 2 (b) Approve that each of the four subcommittees proposed above will have as officers a Chair and Vice Chair who will be appointed by the CCC Chair and serve two year terms as articulated in Section 7.3 of the CCC charter, and whose Chairs will serve as part of the Executive of the CCC pursuant to Section 5.1(c) of the charter.

Background: As provided for and pursuant to applicable parts of Section 7 of the CCC Charter the committee wishes to establish and operate the four subcommittees listed above to assist the committee in fulfilling its mission and functions¹ in a thorough and efficient manner. Further details of what the CCC proposes each subcommittee would undertake on behalf of and under the supervision of the CCC are as follows:

The Standards Interface Subcommittee would:

- Review and recommend changes to Reliability Standards to address compliance-related issues.
- Coordinate development of compliance administration elements (CAEs) for (i) proposed reliability standards under development or for (ii) proposed revisions to existing reliability standards, as requested and authorized by the NERC Standards Committee.
- Identify and establish CAE drafting teams as needed
- Promote consistency of CAE between standards

The ERO Monitoring Subcommittee would:

- Establish and implement programs to monitor NERC's compliance with the reliability standards that apply to NERC.
- Establish and implement programs to monitor the Compliance program's adherence to NERC's Rules of Procedure as specified in Section 405 of NERC's Rules of Procedure.
- Establish and implement programs to monitor NERC's adherence to the Section 306 of the Rules of Procedure regarding the Reliability Standards development process with the exception of appeals of substantive or procedural action or inaction associated with a reliability standard or the standards process as defined in the appeals section of the Reliability Standards Development Procedure.

The Organization Registration and Certification Subcommittee would:

- Provide support and advice to NERC and the Regional Entities on organization registration and certification processes.
- Provide support and advice to NERC and the Regional Entities with documenting organization registrations and certifications.
- Establish and implement programs to monitor the implementation of organization registration and certification processes.

The Procedures Subcommittee would:

- Perform document review and analysis of the multiple documents (procedures, policies, orders, etc.) that comprise the overall NERC compliance, monitoring and enforcement program (CMEP) to assure that the documents when working together are clear, unambiguous and complementary. This review and analysis will be performed at the NERC and the RE level.
- Advise the CCC of any such unclear and ambiguous portions of the CMEP documents and propose changes to the documents that it believes will clarify an unclear, ambiguous or inconsistent situation.

The overall committee meeting in general caucus would continue to address the following elements of the CCC's scope:

- Provide comments to NERC with respect to stakeholders' perception of the policies, practices and effectiveness of the Compliance program, Registration program, and Certification program.
- Recommend revisions of the ERO Rules of Procedure related to the Compliance program, Registration program, and Certification program to the NERC Board.
- Establish Hearing Bodies, as directed by the NERC Board, for any contest regarding findings of or penalties or sanctions for violation(s) of reliability standard(s) where NERC is directly monitoring the entity for compliance with those standards (Registered Entity by agreement with an Regional Entity or absent a delegation agreement; the Region itself where approved standards are applicable to the region) as described in the NERC Rules of Procedure (ROP) Section 409.
- Serve as a Mediator, as directed by the NERC Board, for any disagreements between NERC and the REs concerning NERC performance audits of REs' compliance programs.
- Participate in and provide team leadership for regional entity compliance program audits that are conducted at least once every three years.

As directed in CCC Charter Section 7.2 the committee will keep the Board informed of these subordinate groups of the committee. Full scope documents for each of the four subcommittees will be developed and will be approved by the CCC pursuant to Section 7.3 of the CCC charter.

Because the Chairs of the proposed subcommittees would also serve as members of the CCC Executive the scope of each subcommittee will require that the Chair of each subcommittee be a CCC member; otherwise, membership on the subcommittees will be governed by Section 7.6 of the CCC charter which allows, with appropriate limitations, the participation of non-CCC members.

Agenda 9.g.
NERC Representative Reports
Regional Reliability Standards Working Group

Agenda 10.
Task List

Agenda 11.
Other Business

Agenda 11.a.
Other Business
Electronic Voting Process

Agenda 11.b.
Other Business
Committee Appointments 2008

Agenda 11.c.
Other Business

Standards Committee Report to BOD Meeting – September 27, 2007

Agenda 12.
Next Meeting and Adjourn

September 27, 2007	MRO Board of Directors
November 1, 2007	Standards Committee
December 6, 2007	MRO Board of Directors

Tentative meeting dates for 2008