

DRAFT AGENDA
MIDWEST RELIABILITY ORGANIZATION
Transmission Assessment Subcommittee
Holiday Inn, Bloomington, MN
August 21, 2007 – 9:00 AM to 4:00 PM

1. **Call to Order**
2. **Determination of Quorum**
3. **Standards of Conduct and Anti-Trust Guidelines**
4. **Consent Agenda**
 - a. Approve Meeting Minutes from May 8, 2007
 - b. Approve Meeting Minutes from July 9, 2007
5. **TAS Membership Issues**
 - a. Dakotas Rep: Possibly Jason Weiers, OTP
6. **MRO Procedures for NERC Standards- TAS Ownership and Assignments**
7. **SPS Review Team Status**
8. **ERAG 2007/08 Winter Assessment Update – Adam Flink**
9. **Upcoming MRO Winter Assessment – Adam Flink**
10. **MMWG Database Update - John Seidel**
11. **Other Business**
12. **Next Meeting**
 - a. TAS: 10/16/07 Location TBD
13. **Adjourn**

Agenda 1.
Call to Order

Agenda 2.
Determination of Quorum

**Agenda 3.
Standards of Conduct and Anti-Trust Guidelines**

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 4.
Consent Agenda

Agenda 4.a.
Consent Agenda
Approve Meeting Minutes of May 8, 2007

DRAFT MEETING MINUTES
MIDWEST RELIABILITY ORGANIZATION
Transmission Assessment Subcommittee
Holiday Inn, Bloomington, MN
May 8, 2007 – 10:00 AM to 4:00 PM

1. **Call to Order**

Chairman Belk called the TAS to order at 10:20 AM

2. **Determination of Quorum**

TAS Members Present:	
Dan Belk, WAPA, TAS Chair	Wayne Guttormson, SPC
Adam Flink, TAS Secretary	David Kempf, GRE
John Seidel, Alternate Secretary	Lingling Fan, MISO Liaison
Dale Catherall, ALT	Brian Brownlow, NPPD
Terry Torgerson, DPC	George Sweezy, MP
David Diakiw, MH	Jeff Smedley, OPPD
Members on the Phone:	
Terry Harbour, MEC	
Members Not Present:	
Pete Koegel, PAC Liaison	Dennis Kimm, PAC Liaison
Jay Caspary, SPP Liaison	Ray Mason, RFC Liaison
Jay Porter, ATC, TAS Vice Chair	
Guests:	
Wenchun Zhu, ATC (phone)	Salva Andiappan, MAPPCOR
Andrew Lucero, MRO (new TAS Secretary) (phone)	Pete Schommer, MP

3. **Standards of Conduct and Anti-Trust Guidelines**

The TAS reviewed the Standards of Conduct and Anti-Trust Guidelines

4. **Consent Agenda**

a. Approve Meeting Minutes from February 21, 2007

Upon motion duly made by David Diakiw and seconded by George Sweezy, the TAS approved the minutes as amended.

b. Approve Conference Call Minutes from March 15, 2007

Upon motion duly made by Terry Torgerson and seconded by David Diakiw, the TAS approved the minutes as amended.

5. TAS Membership Issues

- a. Dan Belk, WAPA, resigned as Chair person, remains as Dakotas rep
RAC Chairman Nguyen to seek replacement TAS Chair
- b. Jay Porter, Vice Chair resigned from TAS
- c. Wenchun Zhu, ATC, to replace Jay Porter as Wisconsin rep
- d. Peter Schommer, MP, to replace George Sweezy as MN rep
- e. Dave Kempf, GRE, to replace Mike Steckelberg as MN rep
- f. Andrew Lucero (dba MRO) to be primary Secretary, John Seidel to be alt
Secretary
- g. Adam Flink to be a second alt secretary and attend mtgs as available
- h. Jason Weiers, OTP, is considering being a TAS member as Dakotas rep, (2-3
months away)

Action Item: *The MRO RAC to ratify Wenchun Zhu, Peter Schommer, and Dave Kempf as members of the TAS in their next meeting on May 16, 2007.*

6. Long Term Assessment – Transmission Portion

The group worked on producing the Transmission Portion of the MRO Long Term Reliability Assessment. This document will be reviewed by the RAC during their conference call on May 11, 2007 and during their next meeting on May 16, 2007.

7. Review NERC Standards for TAS Ownership

The TAS will have ownership of a number of NERC and potential Regional standards that fall under the MRO Reliability Assessment Committee. The TAS will create and maintain regional procedures for these NERC and Regional standards as necessary. The TAS needs to identify all standards that they will have ownership of and prioritize the work associated with them.

This agenda item was not discussed, it will be carried forward to the next TAS meeting.

8. Other Business

9. Next Meeting

- a. TAS: 8/21/07 Location TBD
- b. TAS: 10/16/07 Location TBD

10. Adjourn

The meeting was adjourned at 4:00pm

Minutes prepared by:

Adam Flink, TAS Secretary

Agenda 4.a.
Consent Agenda
Approve Meeting Minutes of July 9, 2007

DRAFT MINUTES
MIDWEST RELIABILITY ORGANIZATION
Meeting of Transmission Assessment Subcommittee
Conference Call
July 9, 2007 – 9:00 AM – 12:00 PM

1. **Welcome** – Wenchun Zhu
Chairman Zhu called the meeting of the Midwest Reliability Organization (MRO) Transmission Assessment Subcommittee (TAS) to order at 9:05 am.

a. Determination of Quorum

The following members and guests were present:

TAS Members Present:	
Wenchun Zhu, ATC, TAS Chairperson	Terry Torgerson, DPC, TAS Vice Chair
Andrew Lucero, TAS Secretary	John Seidel, Alternate TAS Secretary
David Diakiw, MHEB	Terry Harbour, MEC
Dave Kempf, GRE	Peter Schommer, MP
Wayne Guttormson, SPC	Dan Belk, WAPA
Jeff Smedley, OPPD	Dale Catherall, ALT
TAS Members Not Present:	
Lingling Fan, MISO Liaison	Dennis Kimm, PAC Liaison
Pete Koegel, PAC Liaison	Ray Mason, RFC Liaison
Jay Caspary, SPP Liaison	Brian Brownlow, NPPD
Guests:	
Brenda Johnson, Xcel	Pam Oreschnick, Xcel
Harry Singh, ATC	Warren Haas, Xcel
Srinivas Vemuri, Xcel	

2. **Discussion of the newly formed Special Protection Scheme Review Team (SPSRT) by Alt. Sec. Seidel.**

A brief explanation of the SPSRT ensued regarding the PRTF requirements to review all existing, proposed and changed SPS's and the need to have input from transmission planners. It was agreed that TAS participation would be provided during an ad hoc meeting of MRO staff and several PRTF and TAS subcommittee members held in Pewaukee, WI, on June 22, 2007. It was agreed that three representatives from each group would be appropriate as well as one representative from MISO.

There was additional discussion regarding whether the Planning Authority vs. the RRO vs. the TAS/PRTF vs. the SPSRT has the authority to "approve" an SPS. The group concluded that the NERC standards give the MRO the authority to approve SPS's in accordance with PRC-012.

MISO has stated that it does not approve SPS's for MISO members, but the MAPP DRS does for MAPP members. Therefore, SPS owners who are MAPP members are expected to coordinate with the MAPP DRS and TOS in addition to the MRO SPSRT. It was further decided that the SPSRT can use the term "no objection" as their vote. The SPSRT will then recommend to the PRTF and TAS subcommittees that the SPS be approved, if appropriate. MRO staff will provide final notification to the SPS owner. The RAC will be notified upon completion.

3. Discussion of Stone Lake SPS for approval:

Srinivas Vemuri, Xcel, gave a brief description and explanation of the present construction phase of the Arrowhead/Arpin 345kV project and the need for the Stone Lake SPS. A good discussion took place with all questions being satisfactorily answered and culminated with the following motion.

Motion:

The following motion was proposed to the group:

The TAS has reviewed the Stone Lake SPS scheme and has agreed that it meets the requirements of PRC-012 R1.1, R1.2, R1.4, R1.5 and PRC-015 R.2 from a planning and operations perspective. The SPS Scheme may remain in service until the completion of the Arrowhead-Stone Lake 345kV construction and shall be removed when appropriate construction is completed and upon approval by the SPS owner. In the event a new SPS scheme (either similar or modified) is required after completion of the Arrowhead-Stone Lake project, it will be brought to the MRO SPS Review Team at least 90 days prior to its expected service date as detailed in the MRO procedure for PRC-012.

A move to approve this motion was made by Terry Torgerson and seconded by Dale Catherall. The TAS approved this motion. One member was not in agreement with including Requirement 1.4 in the motion.

4. TAS-SPSRT Members

As the meeting was coming to a close Wayne Guttormson, SPC volunteered to be the third and final member of the SPSRT representing the TAS. The other two TAS members are Terry Torgerson, DPC and David Diakiw, MH. We thank them for volunteering.

5. Adjourned

There being no further business, Terry Torgerson, DPC made a motion to adjourn the meeting, it was seconded by Dale Catherdall, ALT and unanimously approved. The TAS adjourned at 11:58 am.

Next Meeting: August 21, 2007, 9:00 am to 4:00 pm, Holiday Inn Select, Bloomington, MN

Prepared and submitted by:
Andrew Lucero, TAS Secretary
John Seidel, TAS Alternate Secretary

Agenda 5.
TAS Membership Issues

Agenda 6.

MRO Procedures for NERC Standards – TAS Ownership and Assignments

NERC RELIABILITY STANDARDS - MRO OWNERSHIP INDEX

Standard #:

Title:

RAC Group Responsibility:

Other:

Comments:

Red: Regulatory
Approved

		GTRTF	PRTF	TAS	RAS	MBS		
Resource and Demand Balancing								
BAL-001-0	Real Power Balancing Control Performance						TBD	
BAL-002-0	Disturbance Control Performance						TBD	
BAL-003-0	Frequency Response and Bias				X			
BAL-004-0	Time Error Correction				X			
BAL-005-1	Automatic Generation Control				X			
BAL-006-1	Inadvertent Interchange				X			
Critical Infrastructure Protection								
CIP-001-1	Sabotage Reporting						TBD	
CIP-002-1	Critical Cyber Asset Identification							
CIP-003-1	Security Management Controls							
CIP-004-1	Personnel & Training							
CIP-005-1	Electronic Security Perimeter(s)							
CIP-006-1	Physical Security of Critical Cyber Assets							
CIP-007-1	Systems Security Management							
CIP-008-1	Incident Reporting and Response Planning							
CIP-009-1	Recovery Plans for Critical Cyber Assets							
Communications								
COM-001-1	Telecommunications (Future Effective Date)						TBD	
COM-002-2	Communications and Coordination (Future Effective Date)						TBD	
Emergency Preparedness and Operations								
EOP-001-0	Emergency Operations Planning			X				
EOP-002-2	Capacity and Energy Emergencies						Compl	
EOP-003-1	Load Shedding Plans			X				
EOP-004-1	Disturbance Reporting		X	X				
EOP-005-1	System Restoration Plans		X	X				
EOP-006-1	Reliability Coordination – System Restoration						RAC?	
EOP-007-0	Establish, Maintain, and Document a Regional Blackstart Capability Plan	X		X				
EOP-008-0	Plans for Loss of Control Center Functionality			X				
EOP-009-0	Documentation of Blackstart Generating Unit Test Results	X			X?			
Facilities Design, Connections and Maintenance								
FAC-001-0	Facility Connection Requirements			X				
FAC-002-0	Coordination of Plans for New Facilities			X				
FAC-003-1	Vegetation Management Program						Compl	
FAC-008-1	Facility Ratings Methodology			X				
FAC-009-1	Establish and Communicate Facility Ratings			X				
FAC-010-1	System Operating Limits Methodology for the Planning Horizon (Future Effective Date)						TBD	
FAC-011-1	System Operating Limits Methodology for the Operations Horizon (Future Effective Date)						TBD	
FAC-012-1	Transfer Capabilities Methodology						TBD	
FAC-013-1	Establish and Communicate Transfer Capabilities			X				
FAC-014-1	Establish and Communicate System Operating Limits (Future Effective Date)						TBD	
Interchange Scheduling and Coordination								
INT-001-2	Interchange Transaction Tagging						TBD	Compl?
INT-003-2	Interchange Transaction Implementation						TBD	Compl?
INT-004-1	Interchange Transaction Modifications						TBD	Compl?
INT-005-2	Interchange Authority Distributes Arranged Interchange						TBD	Compl?
INT-006-2	Response to Interchange Authority						TBD	Compl?
INT-007-1	Interchange Confirmation						TBD	Compl?
INT-008-2	Interchange Authority Distributes Status						TBD	Compl?
INT-009-1	Implementation of Interchange						TBD	Compl?
INT-010-1	Interchange Coordination Exemptions						TBD	Compl?
Interconnection Reliability Operations and Coordination								
IRO-001-1	Reliability Coordination – Responsibilities and Authorities						MISO	Compl?
IRO-002-1	Reliability Coordination – Facilities						MISO	Compl?
IRO-003-2	Reliability Coordination – Wide Area View						MISO	Compl?
IRO-004-1	Reliability Coordination – Operations Planning						MISO	Compl?
IRO-005-1	Reliability Coordination – Current-Day Operations						MISO	Compl?
IRO-006-3	Reliability Coordination – Transmission Loading Relief						MISO-RC	Compl?
IRO-014-1	Procedures to Support Coordination Between Reliability Coordinators						MISO-RC	Compl?
IRO-015-1	Notifications and Information Exchange Between Reliability Coordinators						MISO-RC	Compl?
IRO-016-1	Coordination of Real-time Activities Between Reliability Coordinators						MISO-RC	Compl?
Modeling, Data, and Analysis								
MOD-001-0	Documentation of TTC and ATC Calculation Methodologies			X				
MOD-002-0	Review of TTC and ATC Calculations and Results			X				
MOD-003-0	Procedure for Input on TTC and ATC Methodologies and Values			X				
MOD-004-0	Documentation of Regional CBM Methodologies			X				
MOD-005-0	Procedure for Verifying CBM Values			X				
MOD-006-0	Procedures for Use of CBM Values			X				
MOD-007-0	Documentation of the Use of CBM			X				
MOD-008-0	Documentation and Content of Each Regional TRM Methodology			X				

NERC RELIABILITY STANDARDS - MRO OWNERSHIP INDEX

Standard #: _____ Title: _____ RAC Group Responsibility: _____ Other: _____ Comments: _____

Red: Regulatory

Approved

		GTRTF	PRTF	TAS	RAS	MBS		
MOD-009-0	Procedure for Verifying TRM Values			X				
MOD-010-0	Steady-State Data for Transmission System Modeling and Simulation					X		
MOD-011-0	Regional Steady-State Data Requirements and Reporting Procedures					X		
MOD-012-0	Dynamics Data for Transmission System Modeling and Simulation					X		
MOD-013-1	RRO Dynamics Data Requirements and Reporting Procedures					X		
MOD-014-0	Development of Interconnection-Specific Steady State System Models					X		
MOD-015-0	Development of Interconnection-Specific Dynamics System Models					X		
MOD-016-0	Documentation of Data Reporting Requirements for Actual and Forecast Demands, Net Energy for Load, and Controllable Demand-Side Management				X			
MOD-017-0	Aggregated Actual and Forecast Demands and Net Energy for Load				X			
MOD-018-0	Reports of Actual and Forecast Demand Data				X			
MOD-019-0	Forecasts of Interruptible Demands and DCLM Data				X			
MOD-020-0	Providing Interruptible Demands and DCLM Data				X			
MOD-021-0	Accounting Methodology for Effects of Controllable DSM in Forecasts				X			
MOD-024-1	Verification of Generator Gross and Net Real Power Capability (Future Effective Date)	X						
MOD-025-1	Verification of Reactive Power Capability (Future Effective Date)	X						
	Personnel Performance, Training, and Qualifications							
PER-001-0	Operating Personnel Responsibility and Authority						TBD	
PER-002-0	Operating Personnel Training						TBD	
PER-003-0	Operating Personnel Credentials						TBD	
PER-004-0	Reliability Coordination – Staffing						TBD	
PER-004-1	Reliability Coordination – Staffing (Future Effective Date)						TBD	
	Protection and Control							
PRC-001-1	System Protection Coordination		X					
PRC-002-1	Define Regional Disturbance Monitoring and Reporting Requirements	X	X	X				
PRC-003-1	Regional Requirements for Transmission and Generation Protection System Misoperations		X					
PRC-004-1	Analysis and Mitigation of Transmission and Generation Protection System Misoperations		X					
PRC-005-1	Transmission and Generation Protection System Maintenance and Testing		X					
PRC-006-0	Development and Documentation of Regional UFLS Programs	X	X	X				
PRC-007-0	Assuring Consistency with Regional UFLS Programs		X	X				
PRC-008-0	Underfrequency Load Shedding Equipment Maintenance Programs		X					
PRC-009-0	UFLS Performance Following an Underfrequency Event						RAC TF	
PRC-010-0	Assessment of the Design and Effectiveness of UVLS Program		X	X				
PRC-011-0	UVLS System Maintenance and Testing		X					
PRC-012-0	Special Protection System Review Procedure		X	X				
PRC-013-0	Special Protection System Database		X				MRO staff	
PRC-014-0	Special Protection System Assessment		X	X				
PRC-015-0	Special Protection System Data and Documentation		X	X				
PRC-016-0	Special Protection System Misoperations		X					
PRC-017-0	Special Protection System Maintenance and Testing		X					
PRC-018-1	Disturbance Monitoring Equipment Installation and Data Reporting		X					
PRC-020-1	Under-Voltage Load Shedding Program Database		X					
PRC-021-1	Under-Voltage Load Shedding Program Data		X					
PRC-022-1	Under-Voltage Load Shedding Program Performance		X	X				
	Transmission Operations							
TOP-001-1	Reliability Responsibilities and Authorities			X			Compl?	New Ops Grp?
TOP-002-2	Normal Operations Planning (Future Effective Date)						Compl?	"
TOP-003-0	Planned Outage Coordination						Compl?	"
TOP-004-1	Transmission Operations (Future Effective Date)						TBD	"
TOP-005-1	Operational Reliability Information						Compl?	"
TOP-006-1	Monitoring System Conditions						TBD	"
TOP-007-0	Reporting SOL and IROL Violations						Compl?	"
TOP-008-1	Response to Transmission Limit Violations						TBD	"
	Transmission Planning							
TPL-001-0	System Performance Under Normal Conditions						Compl	
TPL-002-0	System Performance Following Loss of a Single BES Element						Compl	
TPL-003-0	System Performance Following Loss of Two or More BES Elements						Compl	
TPL-004-0	System Performance Following Extreme BES Events						Compl	
TPL-005-0	Regional and Interregional Self-Assessment Reliability Reports			X				
TPL-006-0	Assessment Data from Regional Reliability Organizations			X				
	Voltage and Reactive							
VAR-001-1	Voltage and Reactive Control						Compl?	New Ops Grp?
VAR-002-1	Generator Operation for Maintaining Network voltage Schedules (Future Effective Date)	X					Compl?	"

Agenda 7.
SPS Review Team Status

MRO Procedure for PRC-012-0
Special Protection System Review Procedure

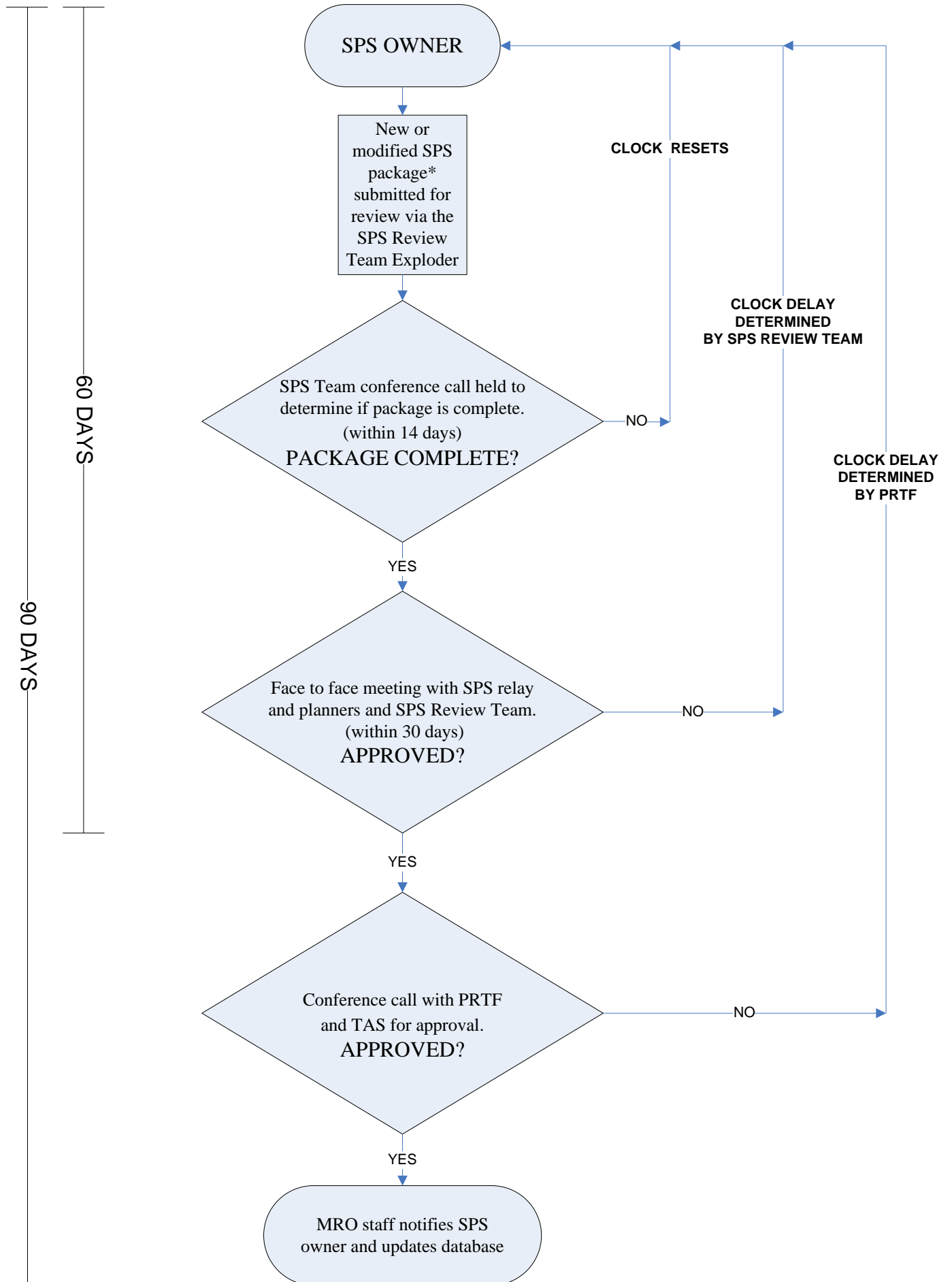
Appendix A

SPS Review Team Process:

- The SPS Owner prepares the SPS package of information per the requirements in R.1.1 through R1.6 above.
- The SPS owner submits the information package to:
spsreview@midwestreliability.org.
- This SPS review team exploder consists of the SPS review team (3-TAS members, 3-PRTF members, one MISO engineer, MRO staff).
- The SPS package must be submitted at least 90 days prior to the expected in-service date.
- The SPS review team holds a conf call (within 14 days) to review the material.
- If the SPS package is complete, they will schedule a face-to-face meeting (within 30 days) with the SPS owner.
- Once the scheme is reviewed by the team and accepted, they will schedule conference calls with the PRTF and TAS to get their approval.
- Once approved by the PRTF and TAS, MRO staff will notify the SPS owner that their SPS is MRO-approved. MRO staff will update the MRO SPS database to include the new/revised SPS.

Note: If an SPS Owner must also obtain SPS approval from their Planning Authority, RTO or Regional Transmission Group, they will need to obtain this in parallel with the above approval process.

MRO SPS Review Procedure for PRC - 012



Agenda 8.
ERAG 2007/2008 Winter Assessment Update

Agenda 9.
MRO Winter Assessment

Agenda 10.
MMWG Database Update

Agenda 11.
Other Business

Agenda 12.
Next Meeting

October 17, 2007

Location – TBD

Agenda 13.
Adjourn
