

Please use this form to submit comments on the 1<sup>st</sup> draft of standard MOD-008-1 Transmission Reliability Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at [Andy.Rodriquez@nerc.net](mailto:Andy.Rodriquez@nerc.net) or by telephone at 609-947-3885.

<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Abbey Nulph	
Organization:	Bonneville Power Administration	
Telephone:	(360) 619-6421	
E-mail:	ajnulph@bpa.gov	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input checked="" type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input checked="" type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input checked="" type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



### Background Information

Project 2006-07 was initiated in 2006 to revise the then existing NERC reliability modeling standards to ensure the consistent and transparent calculation, verification, preservation, and use of Total Transfer Capability (TTC)/Available Transfer Capability (ATC)/Available Flowgate Capability (AFC). Project 2006-07 requires that specific reliability practices be incorporated into the TTC/ATC/AFC calculations and coordination methodologies and adds requirements for documentation of the methodologies used to coordinate TTC/ATC/AFC. Such changes will enhance the reliable use of the bulk power transmission system without arbitrarily limiting commercial activity.

On February 17, 2007 FERC issued Order 890 which directed, among other things, a number of reforms in the determination of ATC by requiring consistency in how TTC/ATC/AFC is evaluated, as well as providing greater transparency about how a transmission provider calculates and allocates TTC/ATC/AFC. Then on March 16, 2007 FERC issued Order 693 which provided directives on modifying the NERC standards, including those related to modeling.

Transmission Reliability Margin (TRM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-008-1.

The standard drafting team was charged with revising the set of modeling standards related to ATC to comply with the FERC directives and stakeholder recommendations. Please review the 'White Paper' and the proposed MOD-008 before answering the questions on the following pages. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line.

**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: "Planning Coordinator" is not defined in the NERC Glossary of Terms Used in Reliability Standards. Please clarify what the Planning Coordinator is or replace "Planning Coordinator" with Planning Authority.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: R1.3. should read "The description of the method of allocation across Posted Paths or Flowgates" where Posted Path is defined consistent with NAESB R-4005 and Order 889, RM95-9-000, April 24, 1996, P. 58-60.

R2. -- The parenthetical statement should read "...on each of its respective Posted Paths or Flowgates..."

R5. and R6. -- The term "path" should be replaced with "Posted Path".

R10. -- The term "posted path" should be capitalized.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: Please clarify that the uncertainties listed in R1.1 may be used in TRM calculations (as opposed to being required to be used).

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: While this methodology may be sufficient for several Transmission Service Providers (TSPs), it may not be for others. Therefore, use of this type of percentage should not be the only mechanism available for TSPs to determine TRM on their systems.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: BPA may not calculate TRM on some of its constraints due to uncertainty components being included in those constraints' TFC determinations. Therefore, a TRM of "0 MW" would be posted and documented, per R1.5. of MOD-008-1. Would this practice meet the intent of this standard?

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

**WECC MIC MIS ATC Task Force / Attendance Sheet**  
**Attendance for WECC-Specific NERC Comments**

<b>NAME</b>	<b>Company</b>	<b>PHONE</b>	<b>E-MAIL</b>	<b>Present</b>
Abbey Nulph	BPA	360-619-6421	<a href="mailto:ajnulph@bpa.gov">ajnulph@bpa.gov</a>	
Bob Schwermann	SMUD	916-732-5519	<a href="mailto:bschwer@smud.org">bschwer@smud.org</a>	
Brian Jobson	SMUD	916-732-5939	<a href="mailto:bjobson@smud.org">bjobson@smud.org</a>	
Brian Weber	Pacificcorp	(503) 813-6444	<a href="mailto:Brian.weber@pacificcorp.com">Brian.weber@pacificcorp.com</a>	
Casey Sprouse	Sr. Term Marketer	(509) 989-2081	<a href="http://www.csprous@gcpud.org">www.csprous@gcpud.org</a>	
Charles Mee	Ca. DWP	(916) 574-0669	<a href="mailto:cmee@water.ca.gov">cmee@water.ca.gov</a>	
Chuck Falls	SRP	(602) 236-0965	<a href="mailto:Chuck.Falls@srpnet.com">Chuck.Falls@srpnet.com</a>	
Dave Lunceford	CAISO	(916) 351-2292	<a href="mailto:dlunceford@caiso.com">dlunceford@caiso.com</a>	
Dick Buckingham	SMUD		<a href="mailto:rbuckin@smud.org">rbuckin@smud.org</a>	
Dilip Mahendra	SMUD			
Greg Ford	CISO-TP	916-351-2344	<a href="mailto:gford@caiso.com">gford@caiso.com</a>	
Jason Murray	AESO	(403) 539-2601	<a href="mailto:jason.murray@aeso.ca">jason.murray@aeso.ca</a>	
Jerry Smith	APS-TP	602-250-1135	<a href="mailto:Jerry.Smith@aps.com">Jerry.Smith@aps.com</a>	
Lou Ann Westerfield	IPUC-SP	208-334-0323	<a href="mailto:LouAnn.Westerfield@puc.idaho.gov">LouAnn.Westerfield@puc.idaho.gov</a>	
Maria Denton	SRP	602-236-4328	<a href="mailto:Maria.Denton@srpnet.com">Maria.Denton@srpnet.com</a>	
Mike Wells	WECC	801-582-0353	<a href="mailto:mike@wecc.biz">mike@wecc.biz</a>	
Patricia vanMidde	FERC Case MRG, Sempra	(858) 654-1716	<a href="mailto:pvanmidde@SempraUtilities.com">pvanmidde@SempraUtilities.com</a>	
Phil Odonnell	SMUD- Ops	916-732-5843	<a href="mailto:POdonne@smud.org">POdonne@smud.org</a>	
Raquel Aguilar	Tucson	520-745-7193	<a href="mailto:RaqAguilar@tep.com">RaqAguilar@tep.com</a>	
Raymond Vojdani, PE	WAPA	(970) 227-2823	<a href="mailto:avojdani@wapa.gov">avojdani@wapa.gov</a>	
Rebecca Berdahl	BPA	503-230-4502		
Ron Belval	Tucson			
Ron Belval	Tucson	520-745-3269	<a href="mailto:rbelval@tep.com">rbelval@tep.com</a>	
Shannon Black	SMUD	916-732-5734	<a href="mailto:sblack@smud.org">sblack@smud.org</a>	
Steve Knudsen	BPA	360-619-6254	<a href="mailto:fsknudsen@bpa.gov">fsknudsen@bpa.gov</a>	
Sueyen McMahan	LADWP	(818) 771-778	<a href="mailto:Sueyen.McMahan@ladwp.com">Sueyen.McMahan@ladwp.com</a>	
Terri M. Kuehneman	SRP System Operation	(602) 236-4392	<a href="mailto:tmkuehne@srpnet.com">tmkuehne@srpnet.com</a>	
Steve Tran	BP TX			



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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Greg Rowland	
Organization:	Duke Energy	
Telephone:	704-382-5348	
E-mail:	gdrowlan@duke-energy.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: It is unclear that the drafting team has addressed FERC's direction in paragraph 275 of Order No. 890 to establish appropriate maximum TRM. Perhaps the Standards Drafting Team should consider using the TPL standards requirements as a basis for bounding the maximum TRM value.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: This standard shouldn't be applicable to the Reliability Coordinator because this is a calculation methodology, and Reliability Coordination is a real-time role. Also, it is unclear which requirements of this standard apply to the Planning Coordinator. Unless specific roles in TRM determination are identified for the Reliability Coordinator and Planning Coordinator, they should be deleted from the Applicability section.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: There is no requirement for coordination between the Transmission Operator and the Transmission Planner. Also, there should be a requirement that the TRM values should be equal to or lower than long-term TRM as you move closer to real-time and uncertainty diminishes.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a "maximum uncertainty" to support the validity of a TRM value? If "Yes," please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If "Yes," please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: The explanation should describe how reliability is maintained in light of the uncertainties identified in R1.1

8. Are there other legitimate needs for TRM that should be in the list described in R1? If "Yes," please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If "Yes," please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: The "make publically available" Requirements R7 and R10 are inappropriate for NERC standards. These are communications which should be in the NAESB standards.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Narinder K. Saini	
Organization:	Entergy Services Inc.	
Telephone:	870-543-5420	
E-mail:	nsaini@entergy.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
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**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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\*If more than one region or segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: There is no requirement applicable to Reliability Coordinator or Planning Coordinator. Therefore, MOD-008-1 should not be applicable to Reliability Coordinator and Planning Coordinator.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: It is not clear if the intent of R2 is to document component of uncertainty on TRM on each posted path, or a general process to include impact of uncertainties in TRM methodologies is sufficient. The requirement should clarify such that the impact of uncertainties are included in TRM methodologies and not to document each component. R4 is written as a requirement for CBM methodology rather than for TRM methodology, it should be deleted or reworded.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: Study should include using historic data to determine impact of actual versus forecasted information on loading of transmission system components that are limiting the TTCs or TFCs.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: There is no technical justification of using 2 - 5% of Facility Rating as TRM. Since Facility Ratings are determined using conditions that are already worst case conditions, using additional safety factor results in underutilizing the transmission system. If uncertainties such as using first contingency conditions and using worst case scenarios for components that are used for ATC/AFC calculations already include uncertainties there should not be double counting of these uncertainties. If data can be supported by historic information, then only data should be used for setting aside TRM.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: R1.5 tends to imply that all Transmission Planner and Transmission Operators must use TRM, unless they can justify not using it. On the contrary, those TPs and TOs who use TRM should justify its use as use of TRM results in lower ATCs due to uncertainties that may already be included in determining the components that are used for ATC calculations.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

- 10.** Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Steve Myers	
Organization:	ERCOT	
Telephone:	512-248-3077	
E-mail:	smyers@ercot.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input checked="" type="checkbox"/> <b>ERCOT</b>	<input type="checkbox"/>	1 — Transmission Owners
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The standard drafting team was charged with revising the set of modeling standards related to ATC to comply with the FERC directives and stakeholder recommendations. Please review the 'White Paper' and the proposed MOD-008 before answering the questions on the following pages. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line.

**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: See IRC comments submitted by Charles Yeung.

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments: ERCOT is a separate Interconnection and Region connected to the Eastern Interconnection through DC ties. Texas Senate Bill 7 effective on 9/1/99 amended the Texas utilities code to provide for the restructuring of the electric utility industry within the ERCOT Interconnection. The act deregulated the electricity generation market to allow for competition in the retail sale of electricity. As of July 2001 the ERCOT interconnection began operation as a single Balancing Authority Interconnection and implemented a market in accordance with the Texas Public Utility commission ruling. Since the implementation of this Act, all of ERCOT has been a single Balancing Authority Area and there has been no reservation of transmission capacity in ERCOT.

Transmission Reliability Margin is defined as the amount of transmission transfer capability

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

Under ERCOT market rules, Transmission Service allows all eligible transmission service customers to deliver energy from resources to serve load obligations, using the transmission facilities of all of the Transmission Service Providers in ERCOT.

Currently ERCOT employs a zonal congestion management scheme that is flow-based, whereby the ERCOT transmission grid, including attached generation resources and load, is divided into a predetermined number of congestion zones. This congestion management scheme applies zonal shift factors, determined by ERCOT, to predict potential congestion under the known topology of the ERCOT System. This scheme is used in the Day Ahead and Adjustment Periods to evaluate potential congestion. During the operating period ERCOT uses zonal shift factors to determine zonal Redispatch deployments needed to maintain flows within zonal limits. The local congestion management scheme relies on a more detailed Operational Model to determine how each particular Resource or Load impacts the transmission system. This model uses the current known topology of the transmission system. Unit specific Redispatch instructions are then issued to manage local congestion.

In the future ERCOT will be transitioning from a Zonal Market to a full LMP market. This system is designed to manage congestion in the Day Ahead and Real-Time on a Resource specific basis. Under both of these market designs transmission facility limits are established in advance and updated based on coordinated exchange of information between transmission providers and ERCOT in planning and operating periods.

In the current and future ERCOT market design the use of TRM is not applicable to the ERCOT Region. ERCOT does not have a synchronous connection with any other Control Area, and does not use the transmission reservation and scheduling practices addressed by these standards. ERCOT requests the drafting team consider revising the wording so that Responsible Entities required to conform to the standards are those that are synchronously connected with other Balancing Authority Areas and/or offer transmission reservations and schedules within the interconnection. We also recommend that the standard allow for ERCOT exception or exemption from calculation and posting TRM without the need for a Regional variance.

- 10.** Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: See IRC comments submitted by Charles Yeung.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Dave Folk	
Organization:	FirstEnergy Corp.	
Telephone:	330-384-4668	
E-mail:	folkd@firstenergycorp.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input checked="" type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> RFC	<input checked="" type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



### Background Information

Project 2006-07 was initiated in 2006 to revise the then existing NERC reliability modeling standards to ensure the consistent and transparent calculation, verification, preservation, and use of Total Transfer Capability (TTC)/Available Transfer Capability (ATC)/Available Flowgate Capability (AFC). Project 2006-07 requires that specific reliability practices be incorporated into the TTC/ATC/AFC calculations and coordination methodologies and adds requirements for documentation of the methodologies used to coordinate TTC/ATC/AFC. Such changes will enhance the reliable use of the bulk power transmission system without arbitrarily limiting commercial activity.

On February 17, 2007 FERC issued Order 890 which directed, among other things, a number of reforms in the determination of ATC by requiring consistency in how TTC/ATC/AFC is evaluated, as well as providing greater transparency about how a transmission provider calculates and allocates TTC/ATC/AFC. Then on March 16, 2007 FERC issued Order 693 which provided directives on modifying the NERC standards, including those related to modeling.

Transmission Reliability Margin (TRM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-008-1.

The standard drafting team was charged with revising the set of modeling standards related to ATC to comply with the FERC directives and stakeholder recommendations. Please review the 'White Paper' and the proposed MOD-008 before answering the questions on the following pages. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line.

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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: This explanation increases transparency in the calculation process which is desired by FERC.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: R4 is contained in the revised MOD-004-1 provided with this SAR packet as R14. R4 is a duplicate requirement and should be deleted from MOD-008-1. The request referenced in R8 should be required to be in writing as a means of formally documenting the request was made, received, and acknowledged.

Please use this form to submit comments on the 1<sup>st</sup> draft of standard MOD-008-1 Transmission Reliability Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at [Andy.Rodriquez@nerc.net](mailto:Andy.Rodriquez@nerc.net) or by telephone at 609-947-3885.

<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Roger Champagne	
Organization:	Hydro-Québec TransÉnergie	
Telephone:	514 289-2211, X 2766	
E-mail:	champagne.roger.2@hydro.qc.ca	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
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<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
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<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: Variations in facility loading should be back in the R1.1 list

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: TRM depends on system and path topology

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: TP or TO should only explain why it reserves non-zero TRM since it reduces the available capacity for the market

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

1. Variation of load (for daily, weekly, monthly and yearly ATCs)
2. Uncertainty about weather conditions (for daily, weekly, monthly and yearly ATCs)
3. Variation in facility loading (sufficient TRM should be maintained for deviations from load forecast due to balancing of generation within a control area )
4. Calculation Inaccuracies (Sufficient TRM should be assumed to account for the limitation of the TTC calculation method.)

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: Are there different requirements on TRM for firm and non-firm ATC ?

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Ron Falsetti	
Organization:	IESO	
Telephone:	905-855-6187	
E-mail:	ron.falsetti@ieso.ca	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input checked="" type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
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**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments: We agree with combining the two standards, but the newly created standards contain quite a few more requirements than MOD-008-0 and MOD-009-0 taken together, and some of the requirements are duplicated (for example, R1 and R2). Also, some requirements are not clear as to who should be responsible, for example: there are conflicting yet sometimes duplicated requirements for documenting and calculating TRM. R1 and R2 hold the TP and TOP responsible for these tasks, yet R8 and R9 hold TSP responsible as well.

There needs more clarity particularly in the accountability for documenting the methodology and in providing the supporting basis for determining TRM.

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: Most of the directives appear to be addressed. However, in view of the above comments, we expect the standards need more work so a revisit of this question is required.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: We do not think the standard clearly conveys the accountability of each of the responsibility entities well enough. Please see our comments to Q1 above.

In addition, we feel that the entire set of MOD-001, -004, -008, -028, -029 and -30 lacks clarity in responsibility. For example, the RC and PC should not be responsible for calculating ATC. Why would they be included in the applicability section of some standards/requirements?

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: There are a number of duplicated requirements (e.g. R1 and R2 as noted above\_) and there is no clarity on the accountability (e.g. R9). The standard needs to be reviewed and revised to more clearly convey the roles and responsibilities in accordance with the functional model and today's practice (on a functional entity basis).

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: We do not believe any maximum values should be set as a standard. Individual TSP (or TP and TOP according to the proposed standard) should each determine the amount needed to cover transmission uncertainties, which may vary among systems. The validity of the calculated values can be assessed against the documented methodology and audit process.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: We do not believe this approach duly addresses the various components of TRM which may change depending on the system conditions. However, we hold no position on individual entities who choose to apply this approach to determine the TRM.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: If a 0 MW TRM is reserved, it suggests that the TP and TOP are comfortable with the available control actions other than utilizing the transmission service reserved for TRM to address transmission uncertainties. On the other hand, the value of TRM reserved, including 0 MW, are subject to verification if need be. The question then becomes why 0 MW needs to be explained but not any other values? For example, other transmission users may question a high value of TRM reserved which reduces the ATC for use by others.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: None, but there appears to be two requirements that pertain to access to external generation that may be duplicated or in excess of the CBM value: they are aggregate load forecast error and reserve sharing requirements. We suggest the SDT to review the two lists to eliminate any duplication or excessive allocation.

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments: None, but it should be noted that some entities do not provide physical transmission services and therefore some of the requirements in this standard may not be applicable to them.

- 10.** Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

Requirement 1.1 should not only include generation dispatch variations but also peak and off peak dispatch variations. Additionally, Requirement 1.1 – the first line “Identification any of the following...” should be written to read as “Identification of any of the following...”

We have provided similar comments on the supplementary SAR, MOD-001 and MOD-004. The SAR for revising and creating this set of standards has not gone through prior public review and comment on the need and direction for these standards. It is posted simultaneously with the revised standard, making posting of the SAR irrelevant. Yet the revised standards appear to be uncoordinated, duplicated and convoluted in some.

We understand these standards need to be revised to meet the FERC's timeline but they should be done in a proper and orderly manner to ensure manageability not just by the staff and the SDT but also by the stakeholders in the industry. We do not agree with the process, and we do have trouble reviewing the set of standards that in our view are not well structured (for example: combining all 4 standards MOD-004 to MOD-007 into one). There has been no industry input process that either supports or disagrees with this proposed combining before the standards are drafted and posted.

And some of the standards assign responsibilities to entities that should not be responsible for some of the tasks. For example, the RC and PC are not responsible for calculating ATC. The proposed intent to combine some of the MODs as one includes the RC and PC in these standards because of the TTC calculation requirements. But in doing so, the assignment of tasks and responsibilities becomes confusing resulting in these entities being assigned some tasks inappropriately.

We suggest the SDT to revise the supplementary SAR and post it for comments, with sufficient detail and specificity on the proposed scope and structure of the standard set, before drafting/revising the standards.

Please use this form to submit comments on the 1<sup>st</sup> draft of standard MOD-008-1 Transmission Reliability Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at [Andy.Rodriquez@nerc.net](mailto:Andy.Rodriquez@nerc.net) or by telephone at 609-947-3885.

<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> <b>ERCOT</b>	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> <b>FRCC</b>	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> <b>MRO</b>	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> <b>NPCC</b>	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> <b>RFC</b>	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> <b>SERC</b>	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> <b>SPP</b>	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> <b>WECC</b>	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> <b>NA – Not Applicable</b>	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



## Background Information

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Transmission Reliability Margin (TRM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-008-1.

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**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments: We agree with combining the two standards, but the newly created standards contain quite a few more requirements than MOD-008-0 and MOD-009-0 taken together, and some of the requirements are duplicated (for example, R1 and R2). Also, some requirements are not clear as to who should be responsible, for example: there are conflicting yet sometimes duplicated requirements for documenting and calculating TRM. R1 and R2 hold the TP and TOP responsible for these task, yet R8 and R9 hold TSP responsible as well.

There needs more clarity particularly in the accountability for documenting the methodology and in providing the supporting basis for determining TRM.

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: Most of the directives appear to be addressed. However, in view of the above comments, we expect the standards need more work so a revisit of this question is required.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: We do not think the standard clearly conveys the accountability of each of the responsibility entities well enough. Please see our comments to Q1 above.

In addition, we feel that the entire set of MOD-001, -004, -008, -028, -029 and -30 lacks clarity in responsibility. For example, the RC and PC should not be responsible for calculating ATC. Why would they be included in the applicability section of some standards/requirements?

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: There are a number of duplicated requirements (e.g. R1 and R2 as noted above\_) and there is no clarity on the accountability (e.g. R9). The standard needs to be reviewed and revised to more clearly convey the roles and responsibilities in accordance with the functional model and today's practice (on a functional entity basis).

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: We do not believe any maximum values should be set as a standard. Individual TSP (or TP and TOP according to the proposed standard) should each determine the amount needed to cover transmission uncertainties, which may vary among systems. The validity of the calculated values can be assessed against the documented methodology and audit process.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: We do not believe this approach duly addresses the various components of TRM which may change depending on the system conditions. However, we hold no position on individual entities who choose to apply this approach to determine the TRM.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: If a 0 MW TRM is reserved, it suggests that the TP and TOP are comfortable with the available control actions other than utilizing the transmission service reserved for TRM to address transmission uncertainties. On the other hand, the value of TRM reserved, including 0 MW, are subject to verification if need be. The question then becomes why 0 MW needs to be explained but not any other values? For example, other transmission users may question a high value of TRM reserved which reduces the ATC for use by others.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: None, but there appears to be two requirements that pertain to access to external generation that may be duplicated or in excess of the CBM value: they are aggregate load forecast error and reserve sharing requirements. We suggest the SDT to review the two lists to eliminate any duplication or excessive allocation.

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments: None, but it should be noted that some entities do not provide physical transmission services and therefore some of the requirements in this standard may not be applicable to them.

- 10.** Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: We have provided similar comments on the supplementary SAR, MOD-001 and MOD-004. The SAR for revising and creating this set of standards has not gone through prior public review and comment on the need and direction for these standards. It is posted simultaneously with the revised standard, making posting of the SAR irrelevant. Yet the revised standards appear to be uncoordinated, duplicated and convoluted in some.

We understand these standards need to be revised to meet the FERC's timeline but they should be done in a proper and orderly manner to ensure manageability not just by the staff and the SDT but also by the stakeholders in the industry. We do not agree with the process, and we do have trouble reviewing the set of standards that in our view are not well structured (for example: combining all 4 standards MOD-004 to MOD-007 into one). There has been no industry input process that either supports or disagrees with this proposed combining before the standards are drafted and posted.

And some of the standards assign responsibilities to entities that should not be responsible for some of the tasks. For example, the RC and PC are not responsible for calculating ATC. The proposed intent to combine some of the MODs as one includes the RC and PC in these standards because of the TTC calculation requirements. But in doing so, the assignment of tasks and responsibilities becomes confusing resulting in these entities being assigned some tasks inappropriately.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Brian Thumm	
Organization:	ITC	
Telephone:	248-374-7846	
E-mail:	bthumm@itctransco.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
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1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: Some of the requirements, such as R1.2 and R4 need additional work.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: For once, the Reliability Coordinator may be an appropriate entity in these standards. TRM is addressing uncertainty. A real-time operator will be more aware of actual system uncertainties than most people, including planners. "Loopflow" has proven to an elusive animal to keep track of. TRM for loopflow is an important parameter. The RC should have input here.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: This is a difficult question to answer but easily "measured". TRM is dealing with uncertainty so you're guessing at whatever you do. However, the ultimate real-time system response is your "test result" to see if you picked an appropriate TRM. If no one is denied service and there are no TLRs or congestion, you're right. If there are no or few TSR denials, and congestion or TLRs are persistent, the TRM is probably too low. If TSR is being denied and there is no evidence of congestion or TLR (level 3 for non-firm), TRM might be too high.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: You only need to investigate TRM if there is evidence of overselling or underselling. The compliance monitor should be so instructed. TRM is dealing with uncertainty. How do you study uncertainty? You don't, you just observe it in real-time.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: 5% is appropriate. However, as we have stated before, it could change with observed system response. If you are using 5% and denying service with no TLRs or congestion, you may want to lower it. Compliance monitoring of this standard should (must) include this type of evaluation. Just picking a number only works if the real-time system response justifies it.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: The justification is simple, no TLRs are observed and no market congestion is observed. If either symptom is present, TRM of zero is not justifiable. I.e, R1.5 is very easy to comply with.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: We're dealing with uncertainty here. What is legitimate uncertainty? There are enough requirements to find something to use.

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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Comments: As we have stated before, all compliance and measures should be based on evidence of overselling or underselling. Otherwise its just bureaucratic red-tape.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Jerry Tang	
Organization:	Municipal electric Authority of Georgia	
Telephone:	770-563-8190	
E-mail:	jtang@meagpower.org	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
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<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
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1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a "maximum uncertainty" to support the validity of a TRM value? If "Yes," please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: Once the determination of TRM methodology has been identified, the TSP or TP or TC should use it to determine the required TRM values. It should not be required to perform many other studies to determine a TRM with the "maximum uncertainty".

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If "Yes," please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments:

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Yes

No

Comments:

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Tom Mielnik	
Organization:	MidAmerican Energy Company	
Telephone:	563-333-8129	
E-mail:	tcmielnik@midamerican.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

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Yes

No

Comments: The Planning Coordinator and the Reliability Coordinator should have some role in this standard. They are listed as applicable Functional Entities that the standard is applicable yet they are not listed as the subject of any requirement.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: 1. R1.2 should be revised to indicated that "A statement to confirm that it shall be used CONSISTENT assumptions in calculating TRM.." Same assumptions implies an exactness which is not appropriate and is not required by FERC Order 890. 2. Makes revisions to R1.1 and R2 per comments provided in response to Question 8 below.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a "maximum uncertainty" to support the validity of a TRM value? If "Yes," please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: These studies should be coordinated as a NERC-wide activity outside of these standards.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If "Yes," please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: No - some of the area Transmission Service Providers use a percentage and also provide for incremental power flows for reserve sharing.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: Generally zero TRM is potentially providing inadequate protection for reliability.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If "Yes," please explain your answer in the comments area.

Yes

No

Comments: Maintenance Outages, Uncertainty in Location of future generation, and uncertainty in power transactions. Also, the Standards Drafting Team should clarify that the Reserve sharing requirements are "Incremental power flows for reserve sharing requirements or automatic sharing of reserves."

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If "Yes," please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: 1. The purpose of each of the standards should be revised to be more in-line. The purpose in this standard be revised by replacing "to help ensure more accurate calculation of

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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transfer capabilities" with "for reliability system operations." 2. The Standards Drafting Team has defined a scheduling horizon in addition to an operating horizon and a planning horizon. Why did the Standards Drafting Team establish it and why have they defined it as provided in the standard.

Please use this form to submit comments on the 1<sup>st</sup> draft of standard MOD-008-1 Transmission Reliability Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with "TRM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at [Andy.Rodriquez@nerc.net](mailto:Andy.Rodriquez@nerc.net) or by telephone at 609-947-3885.

<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Dennis Kimm	
Organization:	MidAmerican Energy Generation/Trading	
Telephone:	515 252 6737	
E-mail:	ddkimm@midamerican.com	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input checked="" type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input checked="" type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



### Background Information

Project 2006-07 was initiated in 2006 to revise the then existing NERC reliability modeling standards to ensure the consistent and transparent calculation, verification, preservation, and use of Total Transfer Capability (TTC)/Available Transfer Capability (ATC)/Available Flowgate Capability (AFC). Project 2006-07 requires that specific reliability practices be incorporated into the TTC/ATC/AFC calculations and coordination methodologies and adds requirements for documentation of the methodologies used to coordinate TTC/ATC/AFC. Such changes will enhance the reliable use of the bulk power transmission system without arbitrarily limiting commercial activity.

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Transmission Reliability Margin (TRM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-008-1.

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**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: This appears to require no consistency and appears to be a fill-in-the-blank standard.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments: The Planning Coordinator and the Reliability Coordinator should have some role in this standard. They are listed as applicable Functional Entities that the standard is applicable yet they are not listed as the subject of any requirement.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments: Again, this still seems like a fill-in-the-blank standard.

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: The reason for TRM is uncertainty. It is hard to believe that all of the ATC calculations are without uncertainty, so if uncertainty is buried in another part of the ATC calculation, it would be helpful to know where.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments: This appears to be a fill-in-the-blank standard.

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	MichelleRheault	
Organization:	Manitoba Hydro	
Telephone:	204-487-5445	
E-mail:	mdrheault@hydro.mb.ca	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input checked="" type="checkbox"/> MRO	<input checked="" type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
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<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
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	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: I don't know what the value of a maximum uncertainty would be. Each uncertainty has a probabilistic component to it. It would be simple enough to add up all the uncertainties but if the probabilistic analysis determined that the maximum uncertainty event was once every 10 years or once every 15 years, I do not know what value that would have. If the standard listed some assumptions, e.g. events that you expect to see within a 1 year or 3 year time frame, then this analysis could become more meaningful.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: I think that a percentage could be appropriate, but the best TRM value will always be one that is based on analysis of the potential uncertainties on a flowgate. I would hope that the committee will consider using a percentage as a default methodology, but allow for an analysis of uncertainties to modify the final value. A percentage would have to be based on flowgate capability. 5% may be a good default on a 100MW flowgate but overkill on a 1600MW flowgate.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: The analysis need not be extensive and based on past performance, however a 0 TRM allows the transmission customers access to a flowgate with no margin of error, and some thought should be put into that situation.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: I believe that the need to hold back TRM for Inertial response is broad enough. Just as system load can degrade inertial response, system loading can degrade voltage response. I would recommend that inertial response be changed to include transient, dynamic, and voltage response.

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

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---

Yes

No

Comments:

- 10.** Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Robert W. Creighton	
Organization:	Nova Scotia Power, Inc.	
Telephone:	902-428-7775	
E-mail:	robert.creighton@nspower.ca	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
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*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: explanation may divulge commercially sensitive or critical infrastructure information

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments: in the case of a system that is radially connected to other systems via a single interconnection will become islanded for a single contingency (loss of the interconnection). If the system was importing more than 10% (nominal) of its load at the time of the interconnection, the system will likely trigger Stage 1 under frequency load shedding. Therefore there must be a TRM facto that varies with system load to limit the amount of UFLS. In Nova Scotia, we set the import limit at 22% of total net load on our system to avoid Stage 2 UFLS for a single contingency. We use TRM as that variable (with additional margin for load forecast uncertainty. It is not clear if this need is addressed in this standard. Another need would be to share load following with our neighbour (AGC margin). For example, if NS and NB are jointly controlling the NB-New England tie, the NS-NB tie capacity must be held back from its TTC to allow room to respond to load and generation fluctuations (especially wind generation). The latter may be the intent of the R2 "Variations in generation dispatch".

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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Comments: Tariffs and Market Rules may have to be updated to reflect the new requirements of MOD-008.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> <b>ERCOT</b>	<input type="checkbox"/>	1 — Transmission Owners
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Yes

No

Comments:

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Comments:

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Yes

No

Comments: Our comments are from a regulatory perspective. This is strictly a technical issue.

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments: Our comments are from a regulatory perspective. This is strictly a technical issue.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: Our comments are from a regulatory perspective. This is strictly a technical issue.

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Yes

No

Comments:

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Yes

No

Comments:

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
<input checked="" type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)  
**Group Name:** Southern Company  
**Lead Contact:** DuShaune Carter  
**Contact Organization:** Southern Company Services  
**Contact Segment:**  
**Contact Telephone:** 205-257-5775  
**Contact E-mail:** ddcarter@southernco.com

<b>Additional Member Name</b>	<b>Additional Member Organization</b>	<b>Region*</b>	<b>Segment*</b>
JT Wood	Southern Company Services	<b>SERC</b>	1
Roman Carter	Southern Company Services	<b>SERC</b>	1
Gary Gorham	Southern Company Services	<b>SERC</b>	1
Marc Butts	Southern Company Services	<b>SERC</b>	1
Bill Botters	Southern Company Services	<b>SERC</b>	1
Ron Carlsen	Southern Company Services	<b>SERC</b>	1
Jim Howell	Southern Company Services	<b>SERC</b>	1
Jeremy Bennett	Southern Company Services	<b>SERC</b>	1
Jim Viikinsalo	Southern Company Services	<b>SERC</b>	1
Reed Edwards	Southern Company Services	<b>SERC</b>	5
Dean Ulch	Southern Company Services	<b>SERC</b>	1
Garey Rozier	Southern Company Services	<b>SERC</b>	5
Karl Moor	Southern Company Services	<b>SERC</b>	1
Chuck Chakravarthi	Southern Company Services	<b>SERC</b>	1

\*If more than one region or segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

### Background Information

Project 2006-07 was initiated in 2006 to revise the then existing NERC reliability modeling standards to ensure the consistent and transparent calculation, verification, preservation, and use of Total Transfer Capability (TTC)/Available Transfer Capability (ATC)/Available Flowgate Capability (AFC). Project 2006-07 requires that specific reliability practices be incorporated into the TTC/ATC/AFC calculations and coordination methodologies and adds requirements for documentation of the methodologies used to coordinate TTC/ATC/AFC. Such changes will enhance the reliable use of the bulk power transmission system without arbitrarily limiting commercial activity.

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Transmission Reliability Margin (TRM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-008-1.

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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

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Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: It is unclear what benefit would be gained by requiring the Transmission Planner or Transmission Operator to supply this explanation.

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

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NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
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<input type="checkbox"/> <b>NPCC</b>	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> <b>RFC</b>	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> <b>SERC</b>	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> <b>SPP</b>	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> <b>WECC</b>	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> <b>NA – Not Applicable</b>	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)  
**Group Name:** SERC Available Transfer Capability Working Group (ATCWG)  
**Lead Contact:** John Troha  
**Contact Organization:** SERC Reliability Corporation  
**Contact Segment:** 10 - RRO  
**Contact Telephone:** 704-948-0761  
**Contact E-mail:** jtroha@serc1.org

Additional Member Name	Additional Member Organization	Region*	Segment*
Darrell Pace	Alabama Electric Cooperative, Inc	<b>SERC</b>	10
Helen Stines	Alcoa Power Generating, Inc.		
Eugene Warnecke	Ameren		
Don Reichenbach	Duke		
Joachim Francois	Entergy		
Ross Kovacs	Georgia Transmission Corporation		
Larry Middleton	Midwest ISO		
Jerry Tang	Municipal Electric Authority of Georgia		
John Troha	SERC Reliability Corporation		
Al McMeekin	South Carolina Electric and Gas Company		
Stan Shealy	South Carolina Electric and Gas Company		
Carter Edge	SERC Reliability Corporation		
DuShaune Carter	Southern Company Services, Inc. -Trans		
Bryan Hill	Southern Company Services, Inc. -Trans		
Doug Bailey	Tennessee Valley Authority		



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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a "maximum uncertainty" to support the validity of a TRM value? If "Yes," please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments: Once the determination of TRM methodology has been identified, the TSP or TP or TC should use it to determine the required TRM values. It should not be required to perform many other studies to determine a TRM with the "maximum uncertainty".

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If "Yes," please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments:

8. Are there other legitimate needs for TRM that should be in the list described in R1? If "Yes," please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If "Yes," please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	W. Shannon Black Et Al ; Sacramento Municipal Utility District	
Organization:	Sacramento Municipal Utility District	
Telephone:	(916) 732-5734	
E-mail:	sblack@smud.org	
NERC Region	<input type="checkbox"/>	Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
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	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**


\*If more than one region or segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

### Background Information

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**You do not have to answer all questions. Enter All Comments in Simple Text Format.**

*Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.*

1. The drafting team combined the topics of MOD-008-0 and MOD-009-0 into the draft MOD-008-1 in an attempt to make the standard easier to follow. Do you agree with the drafting team's decision to combine all the requirements for Transmission Reliability Margin determination, verification, and use into a single standard? If "No," please explain why in the comments area.

Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments: No comment.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-008-1 standard and expanded the applicability section of the TRM standard to include all applicable entities. Do you agree with the functional entities identified in the "Applicability" section of the draft standard? If "No," please identify the functional entities you believe the standard should apply to and why.

Yes

No

Comments:

First, the "Applicability" section uses the term "Planning Coordinator" which is not a defined term in the NERC Glossary. If the NERC Team intends it use, it should become a defined term.

Second, where the term Planning Coordinator is used, WECC queries whether or not the more accurate entity would be the Transmission Planner.

4. The drafting team created new TRM requirements and expanded or deleted some prior TRM requirements. Do you agree with the requirements identified in the draft standard MOD-008-1? If "No," please explain why in the comment area.

Yes

No

Comments:



5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a "maximum uncertainty" to support the validity of a TRM value? If "Yes," please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If "Yes," please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

Two to five percent is acceptable. However, it should not be mandated as the single methodology allowed. Further, the TRM has multiple components, one of which is the Reserve Sharing Group component. The 2-5% is not appropriately applied to the Reserve Sharing Group subset of TRM; rather, the 2-5% accurately applies only to the "uncertainty" portion of the TRM.

While this methodology may be sufficient for several TSPs, it may not be sufficient for others. Therefore, use of this type of percentage should not be the only mechanism available for TSPs to determine TRM on their systems.

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments:

8. Are there other legitimate needs for TRM that should be in the list described in R1? If "Yes," please explain your answer in the comments area.

Yes

No

Comments: However, the NERC Team should clarify that the uncertainties listed in R1.1 "may" be used in TRM calculations (as opposed to being required to be used).

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If "Yes," please identify the conflict in the comments area.

Yes

No

Comments:

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

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10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments:

A.

Reiterating comments from MOD-04 CBM, the Team suggests the following CBM definition replace the existing CBM and TRM NERC definitions:

“Capacity Benefit Margin”

CBM is the amount of firm import transmission capability, requested by the LSE, to exclusively serve identified load only during periods of emergency generation deficiencies extending beyond the beginning of the scheduling hour in which the emergency generation deficiency occurs.”

B.

Typo on the first line of R1.1. Should state: "Identification of any of the following..."

C.

R8. Add: "Each Transmisison Service Provider shall make available (within seven CALENDAR days OF A REQUEST)... (Emphasis added.)

D.

As previously stated, there is an existing FERC approved definition for Posted Path that should be included in the NERC Glossary and utilized in the ATC standards.

R10. The term Posted Path should be used as a defined term.

The definition for Posted Path should be as follows:

Posted Path

Posted Path means: 1) any Balancing Authority to Balancing Authority interconnection; 2) any path for which service is denied, curtailed or interrupted for more than 24 hours in the past 12 months; 3) and any path for which a customer requests to have ATC or TTC posted. For purposes of this definition, an hour includes any part of an hour during which service was denied, curtailed or interrupted. (Plagiarized from NAESBE R-4005 and Order 889, RM95-9-000, April 24, 1996, P. 58-60.

E.

R5. Should read "... (on each POSTED PATH or Flowgate)..."

F.

R2. At minimum, the word "Contract Path" should be deleted as the intent is to cover all Posted Paths. This Team continues to suggest the adoption of the CFR defined term "Posted Path" that is the more accurate useage for this R.

G.

R11. Should be reworded as neither the Transmission Planner nor the Transmission Operator "reserve capacity" on their system(s). That's not within their Functional Model purview. The Transmission Planner and the Transmission Operator can identify capacity that "should be

**Comment Form — 1<sup>st</sup> Draft of Standard MOD-008-1 TRM (Project 2006-07)**

---

reserved" on their system(s); however, the Transmission Service Provider is the accurate entity to actually "reserve" the capacity.

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Chuck Falls	
Organization:	Salt River Project	
Telephone:	602 236-0965	
E-mail:	Chuck.Falls@srpnet.com	
NERC Region		Registered Ballot Body Segment
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
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Yes

No

Comments:

2. The drafting team attempted to address all of the directives identified in the Federal Energy Regulatory Commission's (FERC) Orders 890 and 693 related to TRM (summarized in Attachment 1). Do you agree that the drafting team has adequately responded to all of FERC's directives in FERC Orders 890 and 693 related to TRM in this draft of MOD-008-1? If "No," please explain why in the comments area.

Yes

No

Comments:

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Yes

No

Comments:

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Yes

No

Comments:

5. Requirement R1.1 lists the uncertainties for which TRM may be set aside. Should studies be required to determine a “maximum uncertainty” to support the validity of a TRM value? If “Yes,” please explain what kinds of studies should be performed for any or all of the uncertainties in your response in the comments area.

Yes

No

Comments:

6. Several Transmission Service Providers use a percentage of Facility Rating for the TRM preserved for reliability (typically 2–5%). Do you believe that a percentage of Facility Ratings reserved as TRM is sufficient to maintain adequate reliability for all ATC calculations? If “Yes,” please provide what you believe is an appropriate percentage in your response in the comments area.

Yes

No

Comments:

7. Do you agree with the necessity of R1.5, which requires any Transmission Planner or Transmission Operator who reserves zero (0) TRM in any time horizon to explain why? Please explain your answer in the comments area.

Yes

No

Comments: This is unnecessary "busy work." FERC is concerned about TSP's hoarding transmission capacity by unjustifiably setting aside large quantities of TRM. If I set aside zero TRM this should make FERC very happy because it frees up more ATC for purchase. By making me justify why I am setting aside zero TRM I am being encouraging to set aside non-zero TRM to avoid having to justify it. At the very least R1.5 should be rewritten to clarify precisely what circumstance require justification for zero TRM. For example, if I set aside zero TRM for only one hour on only one path do I have to explain why? Conversely, if I have zero TRM for all time periods and for all paths but one have I avoided the need to justify why I have zero TRM for the other paths?

8. Are there other legitimate needs for TRM that should be in the list described in R1? If “Yes,” please explain your answer in the comments area.

Yes

No

Comments:

9. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement? If “Yes,” please identify the conflict in the comments area.

Yes

No

Comments:

10. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standard MOD-008-1.

Comments: