Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	E. Nick Henery	
Organization:	APPA	
Telephone:	202-467-2985	
E-mail:	nhenery@APPAnet.org	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☒ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: APPA

Lead Contact: **E. Nick Henery**

Contact Organization: **APPA**

Contact Segment: **Segment 1**

Contact Telephone: **202-467-2985**

Contact E-mail: **nhenery@APPAnet.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Matt Schull	North Carolina Municipal Power Agency #1	**SERC**	Segment 5 - Electric Generators

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: The Standard, as written, will continue to allow the applicable functions to define CBM without any amount of consistency, which is what Order 890 wanted the Standards to accomplish. In addition, the Standard does not recognize that ATC is calculated on 3 different time horizons and CBM transmission reservation will vary from the Monthly to the Daily to the Hourly calculations.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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: All throughout this Standard the author has Reliability Functions performing duties that are counter to those duties prescribe in the Functional Model. In addition, the SDT has incorrectly included requirements for scheduling of energy, maintenance schedules, and so-on, which are preformed by other Reliability Functions in other Standards.

4. The drafting team created new CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: The Standard has Functional Entities performing duties that is contrary to the Functional Model's directions. Examples are in Requirement R 1.3 and R 10; the scheduling of

energy over the transmission capacity that is designated CBM only occur during the active hour to meet "generation reliability requirements." The Balancing Authority is the only Function that has that authority to schedule energy during the real-time. This Standard, as written, will create an environment where confusion will exist during critical situation in the real-time and cause the possibility of a command and control break down during a critical situation in the real-time. To require the Transmission Service Provider or the Load Serving Entity to be responsible for declaring emergencies or scheduling energy during those emergencies will create very non-reliable situation. A large part of this Standard needs to be rewritten to ensure reliable operations.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: The definition of CBM is causing the industry to calculate CBM is many different ways. The definition of CBM states that CBM is used to meet an entity's "generation reliability requirements." Some entities are saying that the use of CBM to handle "Planning Reserves" is the correct and reserve transmission capacity as CBM to bring in energy from energy resources outside the BA's area that were determined when the entity calculated "Planning Reserves." Other entities calculate the amount of CBM capacity based on "Operating Reserves." As the definition of CBM is written either one could be correct or incorrect. This definition worked well when the industry maintained reliability of the BES from Reliability Policies.

The CBM definition's undefined term "generation reliability requirement" allows an excessive amount of transmission capacity to be removed from the BES as CBM and prevents the correct amount of ATC to be placed on the market for use by other entities. In addition, the definition of CBM is so general it is impossible for a Compliance Program to determine if an entity is non-compliant.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: The needs to secure a transmission path to reach generation resources outside a LSE Balancing Authority Area that will "meet generation reliability requirements" are extremely important to reliable operations of the BES. Since the Reliability Standards are written to insure reliable operations a TSP would be hard pressed to deny an LSE the ability to secure resources to meet "generation reliability requirements." If a TSP denied this service it could be exposed to acts of non-compliance should the BES's integrity diminish because the TSP denied the LSE the CBM capacity.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: The use of CBM capacity is just a reservation of transmission capacity that will only be used should an adverse situation develop in the BES and generation resources are needed to meet "generation reliability requirements." However, those generation resources are out side the LSE's Balancing Authority's Area. The simulation of energy over the CBM would be a study to determine how the system reacted under adverse operating conditions of the BES. How the use of CBM transmission capacity is treated will be determined how the final definition of CBM is written. Presently, both method would be needed because CBM is used for different purposes throughout the industry.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: Reducing the CBM because new generation is built in the LSE's Balancing Authority's Area would be a financial decision by the LSE. I do not believe this Standard has authority to mandate financial decisions. However if new reliability rules are passed that limit the amount of resources located outside the LSE's Balancing Authority's Area, which can be used to meet "generation reliability requirements" then this Standard has the obligation to lower the CBM to the predetermined about of transmission capacity used for CBM.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: The LSE is performing many functions of the other Functional Entities, which are described in the Functional Model. As stated in Question 3 the author has incorrectly assigned duties of many different Functional Entities to the LSE in R.6 and will create confusion between this Standard and other Standards that are written for the many different subjects covered in R.6. It is recommended this requirement be completely removed.

10. 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: As noted above.

11. 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-001-1. Comments: NA

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: It is not within the scope of this SDT to deal with resource studies, in fact the glossary states the Resource Planner determines the resource adequacy. Generation Reserves has not been defined in the standards nor has Resource Adequacy.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: It is not within the scope of this SDT to deal with resource studies, in fact the glossary states the Resource Planner determines the resource adequacy. LOLE and LOLP are methods used by the Resource Planners.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Abbey Nulph	
Organization:	Bonneville Power Administration	
Telephone:	(360) 619-6421	
E-mail:	ajnulph@bpa.gov	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☒ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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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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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, and use into a single standard? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: R1 of MOD-004-1 needs to clarify that CBM procedures need only be made publicly available if the Transmission Service Provider uses CBM.

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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments: The discussion of CBM in Order 890 and NERC's definition of CBM refer only to generation reliability requirements, not resource adequacy requirements. Please clarify what is meant by "resource adequacy requirements".

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☐ No

Comments:

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

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☐ Yes

☐ No

Comments:

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments: R1. through R9. and R13. should be clarified that CBM need only be posted and requested on Posted Paths, where "Posted Path" is defined consistent with NAESB R-4005 and Order 889, RM95-9-000, April 24, 1996, P. 58-60.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: For Generation Reserve and Resource Adequacy requirements, BPA follows the procedures developed by the Northwest Power Pool which meet the WECC's Minimum Operating Reliability Criteria. BPA also meets the requirements in the NERC standards for Control Performance BAL-001-0 and Disturbance Control BAL-002-0.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
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- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply:

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

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

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Greg Rowland	
Organization:	Duke Energy	
Telephone:	704-382-5348	
E-mail:	gdrowlan@duke-energy.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

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Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☒ Yes

☐ No

Comments: CBM requests should be addressed on a "first-come first-served" basis. LSE's are required to submit annual 10-year projections to the Transmission Service Provider. CBM requests will have lower priority than existing queued firm transmission service requests. NAESB should formalize the queuing process.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: The standard should be flexible enough to allow the Transmission Service Provider to use either method which best supports reliability in their control area.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: As resource mix changes, CBM would be re-evaluated on an annual basis with updated LSE requests for CBM.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments: R3.1.1 - Existing Transmission Commitments (ETC) is not included in definitions, but it should be defined.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: The NC and SC state commissions exercise their authority in this area by requiring an annual filing by the regulated utilities, which includes the identification and justification of reserve margins.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: None

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Narinder K. Saini	
Organization:	Entergy Services Inc.	
Telephone:	870-543-5420	
E-mail:	nsaini@entergy.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☐ **NPCC**	☐	4 — Transmission-dependent Utilities
☐ **RFC**	☐	5 — Electric Generators
☒ **SERC**	☐	6 — Electricity Brokers, Aggregators, and Marketers
☐ **SPP**	☐	7 — Large Electricity End Users
☐ **WECC**	☐	8 — Small Electricity End Users
☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*
George Bartlett	Entergy Services Inc.	**SERC**	Transmission Owner
Jim Case	Entergy Services Inc.	**SERC**	Transmission Owner
Ed Davis	Entergy Services Inc.	**SERC**	Transmission Owner

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, and use into a single standard? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments: Entergy supports combination of CBM Calculation, verification, preservation, and use into one standard.

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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: There is no need to have a queue process for CBM. Transmission Service Requests are approved if ATC is available and ATC is calculated using CBM. Therefore, CBM needs to be set aside first to accurately calculate ATC before Transmission Service Requests can be approved.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: CBM should be set aside on a path based on the response of CBM import MW level on that path. This should be treated similar to impact of loads or generation on paths by including their response on paths rather than algebraically subtracting from the path..

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: CBM should be recalculated to determine accurate CBM requirements that should include meeting the generation requirement from any other transmission service or new generation. Any double counting of elements that impact CBM calculations should be avoided.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: Requirement R6 addresses resource adequacy requirement and it does not belong in the CBM standard. Requirement R5.2 covers identification of appropriate criteria used for resource adequacy studies that will identify need for CBM, if any. Probabilistic studies, if included in resource adequacy studies criteria shall be used and there is no need to include requirement R6 in this standard.

10. 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:

11. 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-001-1. Comments: Entergy does not understand asking for comments on standard MOD-001-1 in this questionaire. Requirement R8.1 should include a condition by appending the language " if other entities who reserved CBM on that path are not using their share of CBM. Under no circumstances, the total use of CBM by all entities on a path at any time will exceed the total amount of CBM reserved on that path and for that period." Definitions of terms on page 2 do not belong in this standard and should be removed. Entergy does not use CBM in their ATC/AFC calculations. It appears from the standard that it is mandatory for Transmission Service Providers to use CBM. It should be left to the descretion of Tansmission Service Provider to use CBM and its use should not be made mandatory.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply:

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Steve Myers	
Organization:	ERCOT	
Telephone:	512-248-3077	
E-mail:	smyers@ercot.com	
NERC Region		**Registered Ballot Body Segment**
☒ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☒	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☐ **NPCC**	☐	4 — Transmission-dependent Utilities
☐ **RFC**	☐	5 — Electric Generators
☐ **SERC**	☐	6 — Electricity Brokers, Aggregators, and Marketers
☐ **SPP**	☐	7 — Large Electricity End Users
☐ **WECC**	☐	8 — Small Electricity End Users
☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

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Additional Member Name	Additional Member Organization	Region*	Segment*

*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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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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: See IRC comments submitted by Charles Yeung.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: See IRC comments submitted by Charles Yeung.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: See IRC comments submitted by Charles Yeung.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: See IRC comments submitted by Charles Yeung.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: See IRC comments submitted by Charles Yeung.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: See IRC comments submitted by Charles Yeung.

10. 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 Interconnection and there has been no reservation of transmission capacity in ERCOT.

Capacity Benefit Margin is defined as the amount of firm transmission transfer capability preserved by the transmission provider for Load- Serving Entities (LSEs), whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies.

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. In the current and future ERCOT market design the use of CBM is not applicable to the ERCOT Interconnection. 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 Entitles 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 of ATC, TTC, CBM, and TRM without the need for a Regional variance.

11. 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-001-1. Comments: See IRC comments submitted by Charles Yeung.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?

Reply: Within ERCOT, a technical recommendation is developed by ERCOT System Planning, acting as the Planning Coordinator. ERCOT Market Participants can give input to the process through open meetings. The technical recommendation is subject to approval by the ERCOT Board of Directors and the Public Utilities Commission of Texas (PUCT). The technical recommendation stipuates generation reserve and resource adequacy requirements both for long term planning and for operating reserve.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: CBM is not used within ERCOT.

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Dave Folk	
Organization:	FirstEnergy Corp.	
Telephone:	330-384-4668	
E-mail:	folkd@firstenergycorp.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☒	3 — Load-serving Entities
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☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*
Richard Kovacs	FirstEnergy Corp. EDPP		
Phil Bowers	FirstEnergy Corp. EDPP		

*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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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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: CBM is a reliability product that must be available when called upon. Transmission service requests are a business product that may have reliability impacts if properly scheduled. Any queing process would have to give priority to CBM.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: The posted ATC for the CBM reserved path should have been based on the network response or contractual limit for that POR to POD, and thus subtracting CBM on that path is consistent with the ATC determination.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: In the case of new generation, the recalcuation periodicity would conceivably be in frequent. In the case of capacity-backed transmission service, the recalculation periodicity may be frequent, but is necessary to allow the markets to function properly.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments: R2 requires copies of models used for CBM allocation, but the allocations are not required to be and may not be based on power flow modeling. In addition, it requires a request from an entity with a valid need. Methods are needed to determine what constitutes a valid need, who decides the validity of the need, and for resolving disputes. R4.2 requires the LSE to allocate the CBM by path; however, the LSE may not have/use power flow tools consequently they may have difficulty complying with this requirement. The standard should include a method for managing offsetting resource requirements where the TSP has multiple LSEs such as the situation where LSE A provides needed energy to LSE B without requiring an import. Under this scenario too much CBM may be set aside as the standard is currently written. R7.1 appears to attempt to cover this situation but it is not clearly stated and the basis for managing this is not addressed. R13 states the TP "shall include all valid requests and projected CBM import MW requirements ... in its planning process." However, a method for needs to be established for managing situations where the import limitation is outside his area of responsibility. Overall, there are many good things in here. R12 requires the TSP to make publicly available the report prepared by the LSE pursuant to R11. This requirement should be placed on the LSE that created and owns the report and has the retention responsibility. To reduce confusion R14 should list the components of uncertainty rather than refering to MOD-008-1 R1.1. This MOD-008-1 requirment requires TPs and TOPs to include these elements in the TRM analysis where MOD-004-1 requires the LSE to exclude these values from the CBM calculation. The difference in application may be lost in switching back and forth between the two standard's requirements.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: The Regional Reliability Organization - ReliabilityFirst

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.

- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: Currently the ISO determines CBM via an LOLE study based on 1/10 of a day/year. Currently Ohio does not have a requirement for an LOLP. ReliabilityFirst has established a 1 day in 10 year LOLP criteria that is voluntary. In the future, the ISO PRSG may self-contract an LOLP enforcement requirement. It is expected that the ISO market rules will eventually enforce LOLP.

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Ron Falsetti	
Organization:	IESO	
Telephone:	905-855-6187	
E-mail:	ron.falsetti@ieso.ca	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☒	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☒ **NPCC**	☐	4 — Transmission-dependent Utilities
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☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, and use into a single standard? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: We do not agree with combining all of the above mentioned standards in one standard (MOD-004). This coupled with the need to make a distinction between the ATC calculation methods used and the descriptive procedure for resource adequacy assessment has made the new MOD-004 very convoluted, and the requirements difficult to follow and measured. If combining some standards of related objective is desired, a more manageable and appropriate alternative is to divide these 4 standards into two groups - one on the determining and verifying the calculation of CBM and the other on the use and reporting of use of CBM.

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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments: In a general sense, yes, but the amount of detail seems to exceed the requirements implied by the FERC directives, which has resulted in repetitions and circular requirements. For example, R5 repeats most of R4's requirements, except in R5 the retention periods are specified, which arguably should be covered in the compliance section. Another example is R6.1 suggests that the CBM is calculated as a parameter or a by-product of a resource adequacy assessment, but R6.2 requires that the load assumption of the CBM study be the same as that assumed in the the resource adequacy assessment.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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 only one requirement for the Transmission Planner, and that is in R13. However, we do not feel that R13 belongs to this standard. The inclusion of requested and projected CBM values in its planning process belongs to a standard that stipulate requirements for transmission planning. If this requirement is removed or relocated, then TP does not need to be included as an applicable entity. Similar thoughts for the applicability of the BA.

4. The drafting team created new CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: Please see the above comments on some of the repetitive and extraneous requirements.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: We should redefine it along the line that is provided in FERC's directive that CBM is required for generation deficiency only.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: By virtue of the definition and formula of ATC determination, CBM is the component that must be allotted before any transmission service requests are assessed and granted.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments: The way it is specified in R3.3 (and R3.2) is the correct approach.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: CBM is intended for having transmission capability to meet generation deficiency. If this deficiency can be met via other means, then the CBM allotted will no longer be required and could even be reduced to 0 if required.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: By and large, R6 describe the process and assumption requirements for resource adequacy assessment via which the CBM is determined. It is our interpretation that FERC requires the basis of this assessment be made known to support and demonstrate a fair and consistent approach is taken in determining the CBM value. That said, R6 could arguably be

placed in a standard on resource adequacy assessment. If R6 is to stay, at the very least some of the subrequirements can be removed or combined (see Comments under Q2 for an example).

10. 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: However, there are entities that do not provide physical transmission services. Hence, these standards or some of the requirements in these standards may not apply.

11. 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-001-1. Comments: ETC is introduced in this standard for the first time and hence this term needs to be defined here.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: In Ontario, it would be the IESO and the Ontario Power Authority (OPA) which would be responsible for establishing generation reserve and resource adequacy requirements.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: The IESO uses stochastic tools like GE MARS to establish reserve requirements for meeting loss of load expectations (LOLE). However, for Ontario, the concept of CBM is not used and is set to 0.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
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☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: IRC Standards Review Committee

Lead Contact: **Charles Yeung**

Contact Organization: **SPP**

Contact Segment: **2**

Contact Telephone: **832-724-6142**

Contact E-mail: **cyeung@spp.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Jim Castle	NYISO	**NPCC**	2
Alicia Daugherty	PJM	**RFC**	2
Ron Falsetti	IESO	**NPCC**	2
Matt Goldberg	ISO-NE	**NPCC**	2
Brent Kingsford	CAISO	**WECC**	2
Steve Myers	ERCOT	**ERCOT**	2
Anita Lee	AESO	**WECC**	2
Bill Phillips	MISO	**RFC+**	2
		MRO+	
		SERC+	
		SPP	

*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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The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, and use into a single standard? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: We do not agree with combining all of the above mentioned standards in one standard (MOD-004). This, coupled with the need to make a distinction between the ATC calcualtion methods used and the descriptive procedure for resource adequacy assessment has made the new MOD-004 very convoluted, and the requirements difficult to follow and measured. If combining some standards of related objective is desired, a more manageable and appropriate alternative is to divide these 4 standards into two groups - one on the determining and verifying the calculation of CBM and the other on the use and reporting of use of CBM.

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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments: In a general sense, yes, but the amount of detail seems to exceed the requirements implied by the FERC directives which has resulted in repetitions and circular requirements. For example, R5 repeats most of R4's requirements, except in R5 the retention periods are specified, which arguably should be covered in the compliance section. Another example is R6.1 suggests that the CBM is calculated as a parameter or a by-prodcut of a resource adequacy assessment, but R6.2 requires that the load assumption of the CBM study be the same as that assumed in the the resource adequacy assessent.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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 only one requirement for the Transmission Planner, and that is in R13. However, we do not feel that R13 belongs to this standard. The inclusion of requested and projected CBM values in its planning process belongs to a standard that stipulate requirements for transmission planning. If this requirement is removed or relocated, then TP does not need to be included as an applicable entity. Similar thoughts for the BA.

4. The drafting team created new CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: Please see the above comments on some of the repetitive and extraneous requirements.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: We should redefine it along the line that is provided in FERC's directive that CBM is required for generation deficiency only.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: By virtue of the definition and formula of ATC determination, CBM is the component that must be allotted before any transmission service requests are assessed and granted.

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☐ Yes

☒ No

Comments: CBM on path/flowgate should be the 'max' rather than 'sum' of all that's required to meet each individual LSE's resource adequacy requirement. Reasoning: Generation emergencies don't happen all at once. Reserve a 'sum' is beyond the 1-day-in-10-year criterion (or whatever criterion that's used by the region), and is not an efficient way of utilizing transmission capacity..

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: CBM is intended for having transmission capability to meet generation deficiency. If this deficiency can be met via other means, then the CBM allotted will no longer be required.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: By and large, R6 describe the process and assumption requirements for resource adequacy assessment via which the CBM is determined. It is our interpretation that FERC requires the basis of this assessment be made known to support and demonstrate a fair and consistent approach is taken in determining the CBM value. That said, R6 could arguably be placed in a standard on resource adequacy assessment. If R6 is to stay, at the very least some of the subrequirements can be removed or combined (see Comments under Q2 for an example).

10. 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: However, there are entities that do not provide physical transmission services. Hence, these standards or some of the requirements in these stnadards may not apply.

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We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: Unable to provide a specific answer as a group. Gernally speaking, however, it is the region that stipuates generation reserve and resource adequacy requirements both for long term planning as well as for operating reserve. (SRC please note: I'm only speculating. Don't let me put words in your mouth)

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

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- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: Unable to provide a specific answer as a group. Again, the LOLE approach is rather commonly used by the ISOs and RTOs in assessing resource adequacy. (SRC please note: ditto the above)

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Brian Thumm	
Organization:	ITC	
Telephone:	248-374-7846	
E-mail:	bthumm@itctransco.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Additional Member Name	Additional Member Organization	Region*	Segment*

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1. The drafting team combined the topics of MOD-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, and use into a single standard? If "No," please explain why in the comments area.

   ☒ Yes

   ☒ No

   Comments: We highly recommend sticking to one single standard to address all of the CBM requirements.

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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: The NERC glossary and CBM definition should be expanded to include other terms, such as "Resource Adequacy" to fully address this issue. This expansion may come as a result of future LSE requests for CBM based on a justification not currently envisioned.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: Absolutely not. The original justification for CBM is that the transmission system was built for the contingencies envisioned by CBM. It was paid for by the original local network customers. No one should be allowed, by queuing process, to supercede this. However, if there is not sufficient transmission capacity to provide a CBM margin as well as requests for transmission service, the system should be expanded to provide the needed capacity. While there is a system impact process to cover this situation, it has not worked well in the last 10 years. Improved import capacity into a deficient system to meet all needs should be addressed in the planning process not some queuing process.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: It should be based on the response of the network to the most likely sources. It is important that the availability of generation in the source area be considered when doing this. For example, assuming a source network with minimal reserves would be a poor assumption. This is an area that will ultimately require a very astute compliance monitor to determine compliance.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: This is a simple answer. You invite double counting if you don't reduce CBM when this happens. It amounts to hoarding. This is already a problem in our opinion.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: How else would a compliance monitor be able to evaluate a justification for CBM if he doesn't have the input used to make such a determination. If anything, this could be expanded to assist the compliance monitor in such a determination.

10. 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: R4 gives the LSE great latitude in defining their resource adequacy requirements. R4 allows the LSE to fully document whatever requirement they have. It will ultimately be up to the compliance monitor to evaluated their justification and documentation.

11. 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-001-1. Comments: (note question 11 should have referred to MOD-004 not MOD-001) While compliance has not been addressed, it is worth noting that the compliance monitor for CBM requirements will have to be a very astute individual or group to deal with the multiple possible resource adequacy requirements under the ERO. They will no doubt have to deal with non-jurisdictional entities to make their evaluations. We suspect it will be a lengthy process in some cases. We would also like to point out that the TSP has little latitude in using the MW import requirement supplied by the LSE. If they suspect that this value is too high, they don't have recourse here to do anything about it. Even if a large fine could result from a compliance issue, the TSP must sell service with a margin they may have good reason to feel is unjustified. Is a large find justification enough to not give the TSP some latitute?

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: ITC does not have a resource adequacy requirement. We must work with the LSEs in our service territory to determine appropriate CBM to plan for. These requirements allow for this to happen.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: ITC does not have a requirement, although we are familiar with the LOLE/LOLP evaluations. We strongly believe that R6 is a must for this standard. We have heard estimates that as much as 90% of the load in this country is subject to LOLE requirements based on LOLP studies. To not have requirements in this area would be negligent.

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Jerry Tang	
Organization:	Municipal Electric Authority of Georgia	
Telephone:	770-563-8190	
E-mail:	jtang@meagpower.org	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☐ **NPCC**	☐	4 — Transmission-dependent Utilities
☐ **RFC**	☐	5 — Electric Generators
☒ **SERC**	☐	6 — Electricity Brokers, Aggregators, and Marketers
☐ **SPP**	☐	7 — Large Electricity End Users
☐ **WECC**	☐	8 — Small Electricity End Users
☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: R8.1 needs clarification.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☐ No

Comments:

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: The use of CBM capacity is for LSE under any potential emergency of generation deficiency. By modeling the CBM as the transaction from the POR to POD at the required CBM import MW level would treat the adverse operation asa normal condition and reduce the import TTC for the TSP.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments:

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments:

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We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply:

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Tom Mielnik	
Organization:	MidAmerican Energy Company	
Telephone:	563-333-8129	
E-mail:	tcmielnik@midamerican.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☒ **MRO**	☒	3 — Load-serving Entities
☐ **NPCC**	☐	4 — Transmission-dependent Utilities
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☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: 1. R3.1.2, R3.2.1, and R3.3.1 should be clarified by matching the language in FERC 890 as follows: "The Transmission Service Provider shall not include transmission capacity set aside for THE INCREMENTAL POWER FLOWS RESULTING FROM reserve sharing in CBM." (The words in all caps be added.) It could be that CBM is reserved to the LSE's generation reliability criteria which is based upon a reserve sharing requirement. It is just that those flows that result from increment power flows resulting from reserve sharing are to be included in TRM. 2. In R1.1, it would be better to include the exact language from Order 890 in the parantheses to explain the resource adequacy requirements that are to be included in the CBM, as follows: "…..for meeting its resource adequacy requirement (i.e., its procedure for setting aside of Transfer Capability in the form of CBM to MEET a Load-Serving Entity's GENERATION RELIABILITY CRITERIA.)

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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: I believe that the Functional Entity as provided in A.4.1.1 should not be qualified, for example, A.4.1.1 should just list Load-Serving Entity. However, if the Standards Drafting Team continues to list only those "Load-Serving Entity that is entitled and would like to have transmission capability set aside in the form of CBM" then I recommend that "would like" changed to "needed" in other words, reservation of CBM should not be based on likes but based on needs as demonstrated with the studies to be provided in support of the CBM.

4. The drafting team created new CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: 1. I recommend that R2 be changed from "following a request by an entity with a valid need for such information" to "following a request by a Functional Entity with a valid need for such information, subject to security and confidentiality requirements." 2. R5.3 does not represent all the conditions that organizationally exist, therefore, I recommend that a bullet be added under R5.3 as follows" "Planning Reserve Sharing Group reserve margin to meet the Regional Reliability Organization resource adequacy requirements". 3. R6.2 should refer to "a load forecast that has a 50/50% probability of occurrence". This means that there is a 50% probability that the load will actually be below the forecast and there is a 50% probability that the load is above the forecast. A statement that it is a 50% probability forecast has no mening without adding some information to it. For example, is it a 50% Confidence Interval forecast in which case it would be two numbers with 50 percent probability that the actual number will be within the two numbers.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: It would be better if CBM is defined in the NERC glossary as provided in the FERC Order 890 as meeting "Generation Reliability Criteria" however, the existing definition is adequate.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: CBM is basic reliability requirement. If not met, transmission expansion planning should plan for it and should not sell addition transmission service on the same path/flowgate.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: CBM on path/flowgate should be the 'max' rather than 'sum' of all that's required to meet each individual LSE's resource adequacy requirement. Reasoning: Generation emergencies don't happen all at once. Reserve a 'sum' is beyond the 1-day-in-10-year criterion (or whatever criterion that's used by the region), and is not an efficient way of utilizing transmission capacity.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: It is to the benefits of all stakeholders if the use of transmission is optimized so CBM should be re-evaluated and possible reduced if CBM is met by other means.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: I prefer if all CBM requests were supported by appropriate probabilistic based studies. It does seem odd that when the better approach (the probabilistic approach) is used, then the standard has all kinds of requirements defining how the better approach is to be done.

10. 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:

11. 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-001-1. Comments: The purpose of each of the standards should be revised to be more in-line with the other ATC/TTC/TRM stanadards. The purpose in this standard be revised to state: "To promote the consistent and transparent…use of Capacity Benefit Margin (CBM) for reliable system operation."

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: It is my understanding of the 2005 Energy Policy Act that the Regional Reliability Organization or NERC can either set the generation reliability critiera or enforce the generation reliability criteria, but it cannot do both. The MRO is in the process of proposing to set the generation reliability criteria as 1 day in 10 years. It will be the responsibility of the Load Serving Enetity or its delegate (such as a Planning Reserve Sharing Group) within the MRO to set the reserve margin to meet the 1 day in 10 year criteria. The State will enforce the generation reliability criteria and the Planning Reserve Sharing Group will enforce the reserve margin requirement.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: I would prefer an LOLE study requirement to support the CBM requests of the Load Serving Entities.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Dennis Kimm	
Organization:	MidAmerican Energy Generation/Trading	
Telephone:	515 252 6737	
E-mail:	ddkimm@midamerican.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
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Group Comments (Complete this page if comments are from a group.)

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Lead Contact:

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Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: 1. R3.1.2, R3.2.1, and R3.3.1 should be clarified by matching the language in FERC 890 as follows: "The Transmission Service Provider shall not include transmission capacity set aside for THE INCREMENTAL POWER FLOWS RESULTING FROM reserve sharing in CBM." It could be that CBM is reserved to the LSE's generation reliability criteria which is based upon a reserve sharing requirement. It is just that those flows that result from increment power flows resulting from reserve sharing are to be included in TRM. 2. In R1.1, it would be better to include the exact language from Order 890 in the parantheses to explain the resource adequacy requirements that are to be included in the CBM, as follows: "…..for meeting its resource adequacy requirement (i.e., its procedure for setting aside of Transfer Capability in the form of CBM to MEET a Load-Serving Entity's GENERATION RELIABILITY CRITERIA.) 890 and 693 also require some level of consistency and the methodology requirements for CBM appear to be fill-in-the-blank.

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: Many of the requirements are fill-in-the-blank (Isn't R1.2 a requirement to "tell me how you do it? and shouldn't it be "this is how you do it")

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☒ Yes

☐ No

Comments: This should be address in the TSPs OATT and filed at FERC. (Maybe it could be a requirement to just that in this standard)

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments: (Not sure if the Yes/No is for the first part of thequestion or the second) Network Response on path should be based upon network response by modeling it from the POR to the POD.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: It is to the benefits of all stakeholders if the use of transmission is optimized so CBM should be re-evaluated and possible reduced if CBM is met by other means. Maybe the TSPs OATT should be the right place for this information.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

10. 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: FERC Order 890 required consistency and this standard does not require any consistency.

11. 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-001-1. Comments: The purpose of each of the standards should be revised to be more in-line with the other ATC/TTC/TRM stanadards. We recommend that the purpose in this standard be revised to state: "To promote the consistent and transparent…use of Capacity Benefit Margin (CBM) for reliable system operation." The standard should make it clear that an LSE should be required to do comply with certain requirements within this standard only if it requests CBM. Also this industry is sophisticated enough to perform or have performed a probabilistic study so that it what the CBM should be based on.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: LOLE study

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Michelle Rheault	
Organization:	Manitoba Hydro	
Telephone:	204-487-5445	
E-mail:	mdrheault@hydro.mb.ca	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☒ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs and ISOs
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☐ No

Comments:

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments: MH is not a supporter of the use of CBM as we believe that CBM makes the unsupportable assumption that there will be energy and transmission avaialable in the adjoining entitity during the time of the emergency. However as there a desire to maintain this feature, MH believes that there should be a requirement to build if CBM causes the AFC on a flowgate to become negative and that a portion of cost should be assigned to the LSE who is responsible for the CBM.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply:

Please use this form to submit comments on the 1st draft of standard MOD-004-1 Capacity Benefit Margin. Comments must be submitted by **June 24, 2007**. You may submit the completed form by e-mail to sarcomm@nerc.net with "CBM Standard" in the subject line. If you have questions please contact **Andy Rodriquez** at Andy.Rodriquez@nerc.net or by telephone at 609-947-3885.

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

Group Comments (Complete this page if comments are from a group.)

Group Name: Midwest Reliability Organization (MRO)

Lead Contact: **Tom Mielnik**

Contact Organization: **MRO for Group (MEC for lead contact)**

Contact Segment: **10**

Contact Telephone: **563-333-8129**

Contact E-mail: **tcmielnik@midamerican.com**

Additional Member Name	Additional Member Organization	Region*	Segment*
Neal Balu	WPS	**MRO**	10
Terry Bilke	MISO	**MRO**	10
Robert Coish, Chair	MHEB	**MRO**	10
Carol Gerou	MP	**MRO**	10
Ken Goldsmith	ALT	**MRO**	10
Todd Gosnell	OPPD	**MRO**	10
Jim Haigh	WAPA	**MRO**	10
Joe Knight	GRE	**MRO**	10
Pam Oreschnick	XEL	**MRO**	10
Dave Rudolph	BEPC	**MRO**	10
Eric Ruskamp	LES	**MRO**	10
Mike Brytowski, Secretary	MRO	**MRO**	10
28 Additional MRO Members	MRO	**MRO**	10

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments: 1. R3.1.2, R3.2.1, and R3.3.1 should be clarified by matching the language in FERC 890 as follows: "The Transmission Service Provider shall not include transmission capacity set aside for THE INCREMENTAL POWER FLOWS RESULTING FROM reserve sharing in CBM." (The MRO is recommending that the words in all caps be added.) It could be that CBM is reserved to the LSE's generation reliability criteria which is based upon a reserve sharing requirement. It is just that those flows that result from increment power flows resulting from reserve sharing are to be included in TRM. 2. In R1.1, it would be better to include the exact language from Order 890 in the parantheses to explain the resource adequacy requirements that are to be included in the CBM, as follows: "…..for meeting its resource adequacy requirement (i.e., its procedure for setting aside of Transfer Capability in the form of CBM to MEET a Load-Serving Entity's GENERATION RELIABILITY CRITERIA.)

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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 MRO believes that the Functional Entity as provided in A.4.1.1 should not be qualified, for example, the MRO recommends that A.4.1.1 just list Load-Serving Entity. However, if the Standards Drafting Team continues to list only those "Load-Serving Entity that is entitled and would like to have transmission capability set aside in the form of CBM" then the MRO recommends that "would like" changed to "needed" in other words, reservation of CBM should not be based on likes but based on needs as demonstrated with the studies to be provided in support of the CBM.

4. The drafting team created new CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: 1. MRO recommends that R2 be changed from "following a request by an entity with a valid need for such information" to "following a request by a Functional Entity with a valid need for such information, subject to security and confidentiality requirements." 2. R5.3 does not represent all the conditions that organizationally exist in the MRO, therefore, we recommend that a bullet be added under R5.3 as follows" "Planning Reserve Sharing Group reserve margin to meet the Regional Reliability Organization resource adequacy requirements". 3. R6.2 should refer to "a load forecast that has a 50/50% probability of occurrence". This means that there is a 50% probability that the load will actually be below the forecast and there is a 50% probability that the load is above the forecast. A statement that it is a 50% probability forecast has no mening without adding some information to it. For example, is it a 50% Confidence Interval forecast in which case it would be two numbers with 50 percent probability that the actual number will be within the two numbers.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: It would be better if CBM is defined in the NERC glossary as provided in the FERC Order 890 as meeting "Generation Reliability Criteria" however, the existing definition is adequate.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: CBM is basic reliability requirement. If not met, transmission expansion planning should plan for it and should not sell addition transmission service on the same path/flowgate.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: CBM on path/flowgate should be the 'max' rather than 'sum' of all that's required to meet each individual LSE's resource adequacy requirement. Reasoning: Generation emergencies don't happen all at once. Reserve a 'sum' is beyond the 1-day-in-10-year criterion (or whatever criterion that's used by the region), and is not an efficient way of utilizing transmission capacity.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: It is to the benefits of all stakeholders if the use of transmission is optimized so CBM should be re-evaluated and possible reduced if CBM is met by other means.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☒ No

Comments: The MRO would prefer if all CBM requests were supported by appropriate probabilistic based studies. It does seem odd that when the better approach (the probabilistic approach) is used, then the standard has all kinds of requirements defining how the better approach is to be done.

10. 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:

11. 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-001-1. Comments: The purpose of each of the standards should be revised to be more in-line with the other ATC/TTC/TRM stanadards. The MRO recommends that the purpose in this standard be revised to state: "To promote the consistent and transparent…use of Capacity Benefit Margin (CBM) for reliable system operation."

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: It is the MRO's understanding of the 2005 Energy Policy Act that the Regional Reliability Organization or NERC can either set the generation reliability critiera or enforce the generation reliability criteria, but it cannot do both. The MRO is in the process of proposing to set the generation reliability criteria as 1 day in 10 years. It will be the responsibility of the Load Serving Enetity or its delegate (such as a Planning Reserve Sharing Group) within the MRO to set the reserve margin to meet the 1 day in 10 year criteria. The State will enforce the generation reliability criteria and the Planning Reserve Sharing Group will enforce the reserve margin requirement.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: MRO would prefer an LOLE study requirement to support the CBM requests of the Load Serving Entities.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☒ **NPCC**	☐	4 — Transmission-dependent Utilities
☐ **RFC**	☐	5 — Electric Generators
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☐ **SPP**	☐	7 — Large Electricity End Users
☐ **WECC**	☐	8 — Small Electricity End Users
☐ **NA – Not Applicable**	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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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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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☒ No

   Comments: What happened to the requirement that CBM is a planning quantity only and tends to zero in the operating horizon. Does this mean that CBM cannot be used for non-firm import transactions?

3. The drafting team attempted to clearly identify the functional classes of entities responsible for complying with the proposed draft MOD-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: CBM is required to meet Resource Adequacy Requirements. Generation Reliability implies that access to transmission makes generation (and generators) more reliable. Resource Adequacy ensures that firm load can be supplied to a level of reliability adopted by the RRO. The resources to meet those requirements include reserve margin provided by excess generation or interruptable load. If the "resource" is located across a posted path, then CBM provides access to the resource. Since "resource" can include generation and load, then the NERC definition is insufficient.

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☒ Yes

☐ No

Comments: There can easily be conflicts for multple LSE's requesting CBM, and there is a problem if the aggregate of all CBM requests exceeds the transmission capacity (R7). Therefore, if this is a new requirement, then there must be some "open season" to collect requests within a fixed time window similar to the Section 2.1 of FERC Order 888 pro-forma tariff. The CBM would be awarded to all comers if there is sufficient capacity but is allocated in lottery fashion if there are more requests than capacity. However, there is the question of the role of ETC in allocating CBM by this method. How much transmission capacity would be offered for CBM? I assume that existing Transmission Reservations cannot be impacted by the CBM bidding process, so only ATC for the planning horizon (if there is any) can be offered. What would an LSE pay for CBM. If it was required to pay the same as it would for a long-term (firm) reservation, then are they really getting CBM or are they getting a long-term firm Transmission Reservation). Some entities interpret Section 2.1 of Order 888 pro-forma tariff to permit bidding on amount and duration to award capacity to the "highest net present value" of the capacity. If there is no charge for CBM, how does the TSE recover lost transmission revenue? It seems that many of these questions must be directed to NAESB

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☒ Yes

☒ No

Comments: It will depend on where the LSE is located in relation to the interface. For example, can an LSE request CBM to access reserve capacity two systems away? Let's say that there are there radially connected systems A is connected to B and C is is only connected to B. LSE#1 in A requests CBM through B to access capacity in C. LSE#2 requests access to capacity in A. In assigning import CBM on the A-B interface, LSE B must consider that the requirement for capacity reserve is due to a shortage in B or in C or to a lesser probability in B+C.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: CBM requirements can change from year to year. For example, if the market responds to price signals and additional generation is built, there is no longer a need for the originally plannned CBM, which should be released to the market. The same is true for entities which are required to install renewable generation or demand-side management programs, which can free existing generation to provide Resource Adequacy without the need for CBM

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments: There should be a high level of proof that CBM is required. An important component is the ability to deliver this energy with single contingencies.

10. 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: R2 requires documention to be "publically released" (published on OASIS) information that is either commercially sensitive or can include Critical Infrastructure Information, the wording of R8 in MOD-008 should be used in MOD-004 to protect information. The process of taking bids on CBM will require modifcations to transmission tariffs Tariffs and Market Rules may have to be updated to reflect the new requirements.

11. 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-001-1. Comments: The standard does not address the issue of export transmission capacity, since CBE is an import capacity only. An interface involves at least two TSP's: the TSP owning the export side and the TDP owning the import side. Has the drafting team examined the issues around a LSE that requests CBM held back from import but the export TDP can accept reservations without consideration to CBM. Say that the ATC on A-B interface is 200 MW. An LSE in B requires 50 MW of CBM which reduces import ATC on the B side to 150 MW and ATC on the A side remains at 200 MW. A transmission customer in B requests firm reservations on the A-B interface of 200 MW. The A TSP assigns 200 MW to the customer and the B TSP says he can only have 150 MW. The customer takes all 200 MW on the A side but nothing on the B side. Does he then effectively block A-B transactions?.

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: NPCC sets LOLE standards.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: LOLE simulations with assumed transmission capacity, however the answer is around 20% reserve

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

Group Comments (Complete this page if comments are from a group.)

Group Name: Public Service Commission of South Carolina

Lead Contact: **Phil Riley**

Contact Organization: **Public Service Commission of South Carolina**

Contact Segment: **9**

Contact Telephone: **803-896-5154**

Contact E-mail: **philip.riley@psc.sc.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
Mignon L. Clyburn	PSCSC	**SERC**	9
G. O'Neal Hamilton	PSCSC	**SERC**	9
John E. "Butch" Howard	PSCSC	**SERC**	9
Randy Mitchell	PSCSC	**SERC**	9
C. Robert "Bob" Moseley	PSCSC	**SERC**	9
David A. Wright	PSCSC	**SERC**	9

*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 calculation 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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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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☒ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☐ No

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

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

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8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☐ Yes

☐ No

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

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments:

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We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: PSCSC reviews reserve margin / resource adequacy of regulated electric utilities in Integrated Resource Plans.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

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

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

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

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Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments:
   5.2 comments: The wording in R5.2 of the proposed standard implies that only one of the identified entities has a role in determining the Load-Serving Entity's resource adequacy requirements. These adequacy requirement could be determined by one or more or none of the listed entities. This requirement should be reworded to require the LSE to list the responsible entity(ies).

   Suggested wording:

R5.2. Identify the entity(ies) (e.g., the municipality, state commission, Regional Transmission Organization/Independent System Operator, Regional Reliability Organization, or Regional Entity) responsible for establishing the Load-Serving Entity's resource adequacy requirements.

5.3 comments: The Load-Serving entity should be added to the list in R5.3.

6.4 comments: The resources referenced in R6.4 should be limited to only those owned or controlled by the Load-Serving entity. Therefore, R6.4 should be reworded and R6.4.2. should be removed.

Suggested wording:
"R6.4. Identify all resources that are owned or controlled by the Load-Serving Entity in its area excluded from serving the Load-Serving Entity's load, including:"

6.5 & 6.7.1 comments: Replace rates with assumptions.

6.7.5 comments (grammatical): Change effect to affect.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☒ Yes

☐ No

Comments: The request to reserve (set aside) a CBM amount by the LSE should be treated like any other firm transmission service request.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☒ Yes

☐ No

Comments: For this method, a maximum TTC is calculated for each path, and the CBM set aside is decremented from that path to yield the remaining capacity available for Firm use. The network response for the CBM set aside (POR to POD) is considered and reflected in the TTC when it is calculated. To consider the network response of the CBM set aside for a second time would result in a lower value than the requested amount being decremented from the requested path. This could result in an over-commitment for that path.

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☐ Yes

☒ No

Comments: This could facilitate the opportunity for hording transmission capacity. The standard as drafted requires the LSE to request CBM as needed and maintain the proper documentation as required.

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☒ No

Comments: This requirement would be best addressed in the resource adequacy standard. If the drafting team decides not to remove R6, more specific comments were made in question 4.

10. 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: R7 requires the Transmission Service Provider to answer a request for CBM within 30 days of receipt. This is inconsistent with the time allowed to answer other firm transmission service requests per Tariff and should be revised to track the tariff requirements for processing long term firm transmission requests.

11. 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-001-1. Comments:

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12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

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- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: Addressing these concerns should be the role of the resource adequacy drafting team and should be handled in the resource adequacy standard.

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

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☒ No

   Comments:
   1. R8.1 needs clarification.
   2. As drafted, R5.2 implies that only one of the identified entities has a role in determining the Load-Serving Entity's resource adequacy requirements. This adequacy requirement could be determined by more than one or none of the listed entities. This requirement should be reworded to require the LSE to disclose the responsible entity(ies).

3. The resources referenced in R6.4 should be limited to only those owned or controlled by the Load-Serving entity. Therefore, R6.4 should be reworded to state, and R6.4.2. should be removed.

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☒ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☒ No

Comments: We need more clarification on the queing process. What is the definition.

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments:

In addition to the questions above, the standard drafting team is seeking industry input on a few issues discussed during the revisions of MOD-004 thru MOD-007 related to Capacity Benefit Margin. The intent of this portion of the comment form is to solicit general feedback from the industry related to CBM. Please take a few minutes to offer your opinion relative to the questions below. It is not the intent of the drafting team to prepare formal responses to the questions below; we are solely interested in industry opinions on these issues.

We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply:

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply:

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Chuck Falls	
Organization:	Salt River Project	
Telephone:	602 236-0965	
E-mail:	Chuck.Falls@srpnet.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	x	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
☐ **MRO**	☐	3 — Load-serving Entities
☐ **NPCC**	☐	4 — Transmission-dependent Utilities
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	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*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 calculation 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.

Capacity Benefit Margin (CBM) is one component of the TTC/ATC/AFC calculations, the calculation, verification, preservation, and use of which is detailed in draft standard MOD-004-1.

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.

The standard drafting team would like to receive industry comment on the proposed requirements and structure of MOD-004-1 Capacity Benefit Margin. Once there is consensus on the requirements, the drafting team will add measures and compliance elements. Please review the 'White Paper' and MOD-004-1 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 with "CBM 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-004-0, MOD-005-0, MOD-006-0, and MOD-007-0 into the draft MOD-004-1 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 Capacity Benefit Margin calculation, verification, preservation, 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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

6. In the future, LSEs will be required to request CBM. Do you believe there should be a queuing process to deal with potential conflicts between requests for CBM and transmission service requests? If "Yes" please describe how you believe the queuing process should work and whether the process should be addressed in this standard or elsewhere.

☐ Yes

☐ No

Comments:

7. Do you agree with R3.3 of MOD-004-1 that requires that CBM be algebraically subtracted from the path on which it was reserved, or should the CBM set aside be based on the response of the network by modeling the transaction from the POR to POD at the CBM import MW level? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

8. If the needs for capacity that resulted in a request for CBM have been met by other means (e.g., via capacity-backed transmission service or new generation), should this standard require that CBM be re-evaluated and possibly reduced (resulting in a change in ATC)? Please explain your answer in the comments area.

☐ Yes

☐ No

Comments:

9. Do you think that Requirement R6 is appropriate for this standard? If "No," please explain why in the comments area.

☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments:

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We would like to better understand the various generation supply adequacy requirements that have transmission-related implications, implied or specified. This will assist in further development of MOD-004-01 CBM.

12. What entity is responsible for establishing your Generation Reserve and Resource Adequacy requirements (commission, region, etc)?
Reply: SRP sets its Generation Reserve and Resource Adequacy requirements in accordance with WECC Standards.

13. With respect to draft standard MOD-004-1 R5.4, what type of deterministic and probabilistic studies do you perform or what rules do you follow to determine a Load Serving Entity's quantity of CBM? Some examples:

- A Loss of Load Expectation (LOLE) study based on a Loss of Load Probability (LOLP) that allows or establishes a transmission requirement for access to external resources.
- A statutory obligation to meet a regional standard (which might also be an LOLE requirement). What is the transmission requirement if definable?
- A statute with a defined transmission obligation implied or specified.
- A generation requirement, such as loss of the largest unit, which can be interpreted to require access to external resources to cover the loss of the resource.

Reply: SRP's current planning reserve target is based on historical study work that considered unit availability, load uncertainty, and projected costs associated with carrying different levels of reserves.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Clay Young	
Organization:	South Carolina Electric & Gas	
Telephone:	803-217-9129	
E-mail:	cyoung@scana.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☐	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs and ISOs
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Additional Member Name	Additional Member Organization	Region*	Segment*

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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 CBM (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 CBM in this draft of MOD-004-1? 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-004-1 standard and expanded the applicability section of the CBM 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 CBM requirements and expanded or deleted some prior CBM requirements. Do you agree with the requirements identified in the draft standard MOD-004-1? If "No," please explain why in the comments area.

   ☐ Yes

   ☐ No

   Comments:

5. In the NERC glossary, CBM is defined as being necessary to meet "Generation Reliability Requirements." Do you believe the current NERC definition is adequate? If "No," please explain why in the comments area.

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Comments:

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☐ Yes

☐ No

Comments:

10. 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:

11. 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-001-1. Comments: I suggest the following changes to the definitions: Transmission Service Request: A request by the Transmission Customer to the Transmission Service Provider for transmission service to move energy from a Point of Receipt to a Point of Delivery.

In R1 requirements, the multiple meanings of "its" is confusing. Also, Network Customers can have many PORs and PODs on a system, there could be several hundred combination paths, an unmanagable number. I suggest the following language for R1 requirements.

R1. The Transmission Service Provider shall make publicly available:

R1.1. Its procedure for a Load-Serving Entity to request a CBM import MW requirement on each Point of Receipt for meeting its resource adequacy requirement (i.e., its procedure for setting aside of Transfer Capability in the form of CBM to maintain a Load-Serving Entity's resource adequacy requirement).

R1.2. Its procedure and assumptions for allocating CBM over each path or Flowgate.

R1.3. Its procedure for CBM use (i.e., its procedure for scheduling of energy over transmission capacity set aside as CBM).

R1.4. The most recent values of CBM used for calculating Available Transmission Capacity (ATC) or Available Flowgate Capability (AFC) for each timeframe by Flowgate or path, as applicable.

(If this comment is adopted, this same type of change is needed in other places in this standard)

.

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Reply: 1 and 4