Consideration of Comments on 3rd Draft of MOD-001; 2nd Draft of MOD-004, MOD-008, MOD-028, MOD-029, and MOD-030 — Project 2006-07

The ATC Standards Drafting Team thanks all commenters who submitted comments on the 3rd draft of MOD-001; 2nd draft of MOD-004, MOD-008, MOD-028, MOD-029, and MOD-030. These standards were posted for a 45-day public comment period from October 31 through December 14, 2007. The standard drafting team asked stakeholders to provide feedback on the standards through a special SAR Comment Form. There were 51 sets of comments, including comments from more than 181 different people from more than 95 companies representing all of the 10 Industry Segments as shown in the table on the following pages.

Based on the comments received, the drafting team is recommending that the Standards Committee authorize moving these standards forward to for 30-day pre-ballot review.

In this 'Consideration of Comments' document stakeholder comments have been organized so that it is easier to see the responses associated with each question. (Note that not all commenters responded to all questions.) All comments received on these standards can be viewed in their original format at:

http://www.nerc.com/~filez/standards/MOD-V0-Revision.html

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Gerry Adamski at 609-452-8060 or at gerry.adamski@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.[1]

[1] The appeals process is in the Reliability Standards Process Manual: http://www.nerc.com/standards/newstandardsprocess.html.

The Industry Segments are:

1 — Transmission Owners
2 — RTOs, 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, Regional Entities

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
1.	A. L. Barredo (G3)	Florida Power & Light Company			✓							
2.	Aaron Staley (G3)	Orlando Utilities Commission			✓							
3.	Abbey Nulph (I) (G14) **	Bonneville Power Administration	✓		✓		✓	✓			✓	
4.	Al McMeekin (G11)	South Carolina Electric & Gas	✓		✓		✓					
5.	Alan Adamson (G8)	New York State Reliability Council		✓								
6.	Alessia Dawes	Hydro One Networks	✓		✓							
7.	Andy Sharer (G13)	LaGen/NRG Energy			✓	✓	✓	✓				
8.	Anita Lee (I) (G5)	Alberta Electric System Operator		✓								
9.	Annie Tra (G3)	Seminole Electric Cooperative, Inc.				✓						
10.	Art Brown (G10)	Santee Cooper	✓									
11.	Art Nordlinger (G3)	Tampa Electric Company	✓									
12.	Barry Green	EPSA					✓	✓				
13.	Bert Bressers	Southwest Power Pool		✓								
14.	Biju Gopi (G8)	IESO		✓								
15.	Bob Easton (G14)	WAPA: RMR, DSW and SNR regions	✓		✓	✓	✓	✓	✓			
16.	Brett Koelsch	Progress Energy, Carolinas	✓		✓		✓	✓				
17.	Brian Cole (G15)	Arizona Public Service Co.	✓									
18.	Brian Jobson (G14)	SMUD	✓		✓		✓				✓	
19.	Bryan Hill (G11)	Southern Company	✓		✓		✓					
20.	C. Robert Moseley (G9)	Public Service Commission of SC									✓	
21.	Carol Ballantine (G14)	Platte River Power Authority	✓		✓	✓	✓	✓			✓	
22.	Carol Gerou (G7)	MP										✓

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
23.	Casey Sprouse (G14)	SMUD	✓		✓		✓				✓	
24.	Charles Yeung (G5)	SPP -- ISO/RTO Council (IRC)		✓								
25.	Charlie Reinhold (G15)	WestConnect	✓									
26.	Chris Advena	PJM Interconnection LLC		✓								
27.	Chris Constantine (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
28.	Chuck Falls (I) (G14)** (G15)	Salt River Project	✓		✓		✓	✓			✓	
29.	D. A. McInnis (G3)	Florida Power & Light Company			✓							
30.	Dan Huffman (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
31.	Danielle Beaulieu (G4)	NPCC	✓									
32.	Dave Folk (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
33.	Dave Huff (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
34.	Dave Lunceford (G14) **	CAISO		✓								
35.	Dave Rudolph (G7)	BEPC										✓
36.	David A. Wright (G9)	Public Service Commission of SC									✓	
37.	David Baugh (G13)	Cottonwood Energy LLC					✓					
38.	David Kiguel (G8)	Hydro One Networks	✓									
39.	David Olivares	Modesto Irrigation District										
40.	Dee M. Reynolds	Fall River Rural Electric Cooperative			✓	✓						
41.	Dennis Gerlach (G14)	Salt River Project	✓		✓		✓				✓	
42.	Dennis Kimm	MidAmerican Energy Electric Trading	✓		✓			✓	✓			
43.	Dick Buckingham (G14)	SMUD	✓		✓		✓				✓	
44.	Dilip Mahendra (G14)	SMUD	✓		✓		✓				✓	
45.	Dolores Stegeman	Tacoma Power	✓		✓	✓	✓	✓				
46.	Don Reichenbach (G11)	Duke Energy - Carolinas	✓		✓		✓					
47.	Donald E. Nelson (G8)	Massachusetts Dept. of Telecommunications and Energy									✓	
48.	Donald Williams (G11)	PJM Interconnection LLC	✓	✓	✓		✓					

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
49.	Doug Bailey (G11)	TVA	✓		✓		✓				✓	
50.	Doug Hohlbaugh (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
51.	Doug McLaughlin (G11) (G12)	Southern Co Transmission	✓		✓		✓					
52.	DuShaune Carter (G11) (G12)	Southern Company Transmission	✓		✓		✓					
53.	Earl Fair (G3)	Gainesville Regional Utilities	✓									
54.	Elizabeth B. Fleming (G9)	Public Service Commission of SC									✓	
55.	Eric Ruskamp (G7)	LES										✓
56.	Eugene Warnecke (I) (G11)	Ameren Services	✓		✓		✓					
57.	G. O'Neal Hamilton (G9)	Public Service Commission of SC									✓	
58.	Gary Tarplee (G14)	SMUD	✓		✓		✓	✓				
59.	Greg Campoli (G8)	New York Independent System Operator, Inc (NYISO)		✓								
60.	Greg Rowland	Duke Energy	✓		✓							
61.	Guy V. Zito (G8)	NPCC Regional Standards Committee									✓	✓
62.	H. Steven Myers (I) (G5)	ERCOT		✓								
63.	Helen Stines (G11)	APGI - Yadkin	✓				✓					
64.	J T Wood (G12)	Southern Company Transmission	✓									
65.	Jack Cashin	EPSA					✓	✓				
66.	James Hsu (G15)	Salt River Project	✓									
67.	Jason Murray, MBA (G14)	Alberta Electric System Operator (AESO)	✓								✓	
68.	Jason Shaver	American Transmission Company	✓									
69.	Jay Campbell	Sierra Pacific Resources Transmission	✓									
70.	Jeni Mistry (G15)	Salt River Project	✓									
71.	Jerry Smith (I) (G14)** (G15)	Arizona Public Service Co.	✓		✓		✓				✓	
72.	Jerry Tang (G11)	Municipal Electric Authority of GA	✓		✓		✓					
73.	Jim Busbin (G12)	Southern Company Transmission	✓									
74.	Jim Castle (G5)	New York Independent System Operator, Inc		✓								

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
		(NYISO)										
75.	Jim Haigh (G7)	Western Area Power Administration										✓
76.	Jim Peterson (G10)	Santee Cooper	✓									
77.	Jim Viikinsalo (G12)	Southern Company Transmission	✓									
78.	Joachim Francis (G1)	Entergy Services Inc.	✓									
79.	Joe Francois (G11)	Entergy	✓		✓		✓					
80.	John Burnett (G14)	LADWP	✓		✓		✓	✓			✓	
81.	John Collins (G14)	Platte River Power Authority	✓		✓		✓				✓	
82.	John Dalessi, Director, (Navigant Consulting) (G14)	Transmission Administration of Northern California	✓									
83.	John E. Howard (G9)	Public Service Commission of SC									✓	
84.	John Hernandez (G15)	Salt River Project	✓									
85.	John Steward (G15)	Western Area Power Administration	✓									
86.	John Troha (G11)	SERC Reliability Corporation										✓
87.	Jon Loresch (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
88.	Jose Solva (G15)	Salt River Project	✓									
89.	K. David Hagen	Clearwater Power Company			✓							
90.	Kathleen M. Goodman (G8)	ISO-New England, Inc.		✓								
91.	Ken Dizes	Salmon River Electric Cooperative										
92.	Ken Goldsmith (G7)	ALTW										✓
93.	Kenneth A. Sugden	Flathead Electric Cooperative			✓							
94.	Kiet Nguyen (G11)	Associated Electric Cooperative, Inc	✓		✓		✓					
95.	Kun Zhu (G6) (G7)	Midwest ISO		✓								✓
96.	Larry Hartley (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
97.	Larry Middleton (G6) (G11)	Midwest ISO	✓	✓	✓		✓					
98.	Larry Rodriguez (G11)	Union Power Partners				✓	✓					
99.	Larry Rodriguez (G13)	Entegra Power Services					✓	✓				
100.	Laura Lee (G11)	Duke Energy - Carolinas	✓		✓		✓					
101.	Leonard York (G15)	Western Area Power Administration	✓									

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
102.	Linda Finley (I) (G14)	Snohomish PUD	✓		✓	✓	✓				✓	
103.	Lou Ann Westerfield (G14)	SCE									✓	
104.	Marc Butts (G12)	Southern Company Transmission	✓									
105.	Marc E. Donaldson, P.E., MGR (I) (G14)	NorthWestern Energy	✓		✓							
106.	Maria Denton (G14) (G15)	Salt River Project	✓		✓		✓				✓	
107.	Maria Neufeld	Manitoba Hydro	✓		✓		✓	✓				
108.	Mariam Mirzadeh P.E. (G14)	Western Area Power Administration - SNR	✓		✓	✓	✓	✓	✓	✓	✓	
109.	Marilyn Franz (G15)	Sierra Pacific Power Corp./Nevada Power	✓									
110.	Mark Graham	Tri-State Generation and Transmission Association	✓		✓		✓					
111.	Matt Burns (G11)	Big Rivers Electric Cooperative	✓		✓		✓					
112.	Matt Goldberg (G5)	ISO-NE		✓								
113.	Mee Charles (G14)	St. of Ca.			✓	✓	✓	✓	✓		✓	
114.	Michael Brytowski (G7)	Midwest Reliability Organization (MRO)										✓
115.	Michael Toll (G11)	E.ON. U.S.	✓		✓		✓					
116.	Mignon L. Clyburn (G9)	Public Service Commission of SC									✓	
117.	Murale Gopinathan (G8)	Northeast Utilities	✓									
118.	Narinder K Saini (G1)	Entergy Services Inc.	✓									
119.	Neal Balu (G7)	WPS										✓
120.	Pam Oreschnick (G7)	XCEL										✓
121.	Patricia vanMidde, FERC Case Manager (G14)	SDG&E	✓		✓	✓	✓					
122.	Patrick Damiano (G14)	Consultant	✓	✓	✓	✓	✓	✓				
123.	Paul Arnold, Vice President (I) (G14)	Columbia Grid	✓									
124.	Paul Graves (G3)	Progress Energy Florida			✓							
125.	Phil Creech (G11)	Progress Energy - Carolinas	✓		✓		✓					
126.	Phil O'Donnel (G14)	SMUD	✓		✓		✓				✓	
127.	Phil Park	British Columbia Transmission Corporation		✓								

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
128.	Phil Riley (G9)	Public Service Commission of SC									✓	
129.	Phil Sanchez (G15)	Western Area Power Administration - SNR	✓									
130.	Phil Tice (G14)	SMUD	✓		✓		✓	✓				
131.	Phuong Tran (G3)	Lakeland Electric	✓									
132.	Ralph Honeycutt (G13)	Suez Energy Marketing					✓	✓				
133.	Ralph Rufrano (G8)	New York Power Authority	✓									
134.	Randy MacDonald	New Brunswick System Operator		✓								
135.	Randy Mitchell (G9)	Public Service Commission of SC									✓	
136.	Raquel Aguilar (G14)	Tucson Power	✓		✓							
137.	Raymond Vojandi (G14)	Grant County Public Utility	✓		✓	✓	✓	✓	✓			
138.	Rebecca Turner (G13)	Entegra Power Services					✓	✓				
139.	Rene' Free (G10)	Santee Cooper	✓									
140.	Rich Salgo (G14)	SPPC	✓		✓		✓					
141.	Rich Salgoz (G14)	Nevada Power Company (NEVP -the Nevada Companies)	✓		✓		✓					
142.	Rick Gonzales	New York Independent System Operator, Inc (NYISO)		✓								
143.	Rob Martinko (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
144.	Rob Potter, FERC Analyst (G14)	Portland General Electric	✓		✓		✓	✓	✓	✓		
145.	Robert Coish (G7)	MHEB										✓
146.	Robert H. Easton	Western Area Power Administration - RMR	✓								✓	
147.	Robert Harshbarger	Puget Sound Energy	✓									
148.	Robert Schwermann (G14)	SMUD	✓		✓		✓				✓	
149.	Roberto Paliza (G13)	Paliza Consulting, LLC.					✓					
150.	Rod Noteboom	Public Utility District #2 of Grant County, Washington			✓	✓	✓					
151.	Roger Champagne (G4) (G8)	Hydro-Québec TransÉnergie (HQT)	✓	✓								
152.	Roman Carter (G12)	Southern Company Transmission	✓									
153.	Roman Gillen	Consumers Power, Inc.	✓		✓							

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
154.	Ron Belva (G14)	Tuscon Power	✓		✓							
155.	Ron Carlsen (G12)	Southern Company Transmission	✓									
156.	Ron Falsetti (I)(G5) (G8)	IESO		✓								
157.	Ron Schellberg (G14)	Idaho Power Company	✓		✓		✓				✓	
158.	Ron Slagel (G6) (G7)	MISO		✓								✓
159.	Ross Kovacs (I) (G11)	Georgia Transmission Corporation	✓		✓		✓					
160.	Sam Ciccone (G2)	FirstEnergy Corp.	✓		✓		✓	✓				
161.	Scott Goodwin (G6)	Midwest ISO		✓								
162.	Shayleah LaBray	PacifiCorp	✓				✓					
163.	Stan Shealy (G11)	South Carolina Electric & Gas	✓		✓		✓					
164.	Steve Knudsen (G14)	Bonneville Power Administration	✓		✓		✓				✓	
165.	Steve Sorey, MRG (G14)	SMUD	✓		✓		✓				✓	
166.	Sueyen McMahon (G14) (G15)	LADWP	✓		✓		✓	✓			✓	
167.	Tad Simms (G14)	SMUD	✓		✓		✓				✓	
168.	Teresa Kuehneman (G14) (G15)	Salt River Project	✓		✓		✓				✓	
169.	Terri Clynes (G13)	ConocoPhillips					✓	✓				
170.	Terry Bilke (G7)	MISO										✓
171.	Terry Blackwell (G10)	Santee Cooper	✓									
172.	Tina Lee (G13)	KGEN Hinds LLC & KGEN Hot Spring LLC					✓					
173.	Tom Abrams (G10)	Santee Cooper	✓									
174.	Tom Mielnik (G7)	Midwest Reliability Organization (MRO)										✓
175.	Vicente Ordax (G3)	FRCC										✓
176.	Vicky Budreau (G10)	Santee Cooper	✓									
177.	W. R. Schoneck (G3)	Florida Power & Light Company			✓							
178.	W. Shannon Black (G14) ** (G15)	Sacramento Municipal Utility District	✓	✓	✓	✓	✓	✓		✓	✓	
179.	Warren Clark	Avista Corporation	✓									
180.	William Gaither (G10)	Santee Cooper	✓									

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
181.	William Phillips (G5)	MISO		✓								
182.	Woody Saylor (G13)	Cottonwood Energy LLC					✓					

(G1) — Entergy Services
(G2) — FirstEnergy
(G3) — FRCC
(G4) — Hydro-Québec TransÉnergie (HQT)
(G5) — ISO/RTO Council (IRC)
(G6) — Midwest ISO
(G7) — Midwest Reliability Organization (MRO)
(G8) — NPCC Regional Standards Committee
(G9) — Public Service Commission of South Carolina
(G10) — Santee Cooper
(G11) — SERC ATCWG
(G12) — Southern Company Transmission
(G13) — The Southeast Coalition
(G14) — WECC MIC MIS ATC TF Drafting Team **

**Comments drafted by the WECC MIC MIS ATC TF Drafting Team are not those solely of the drafting team but represent the technical support and expertise of multiple agencies and entities. Those names and entities appearing below provided technical support and review of these comments and stand "in support" of these comments in addition to any additional comments their firms may make aside from these WECC comments. It is estimated that these entities will implement ATC for an estimated 35-45 million people. These comments represent 37 individuals from varying technical backgrounds representing 25 separate entities and approximately 35-45 million people.

(G15) — WestConnect Transfer Capability Workgroup

Index to Questions, Comments, and Responses

1. The drafting team has proposed an Implementation Plan for these standards. Should additional time be provided for successful implementation?

Summary Consideration: The majority of commenters supported the 12-month period, and no change has been made with regard to the duration. Some commenters requested that the effective dates in the standards be made consistent; the drafting team has done so, recognizing that the standards will now be posted for separate ballots. One commenter requested an 18-month period, and one commenter requested that the period be shortened; however, since the majority supported the 12-month period, these comments are being considered as outliers.

Two entities requested the implementation date and effective date language to be changed, such that the time required is not dependent on regulatory approvals; we reviewed the current language required by the Standards Committee, and believe the language used in the standard is correct. The drafting team cannot accurately predict a date when all applicable regulatory authorities will approve the set of standards. The proposed language allows the standards to move forward as quickly as the applicable regulatory approvals can be obtained.

The SDT corrected an error in the table that identifies the functional entities with responsibilities in the proposed standards. The first version of the implementation plan indicated that MOD-008 was applicable to six functional entities, and should have identified just the Transmission Operator and the Transmission Service Provider.

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Commenter	Yes	No	1. Comments on Implementation Plan
Alberta Electric System Operator			
Ameren Services		☑	
American Transmission Company		☑	
Arizona Public Service Co.		☑	Arizona Public Service Co. strongly supports the inclusion of a 12 month implementation period for these standards.
Response: Thank you for your supportive comment.			
Avista Corporation	☑		Avista strongly supports the inclusion of a 12-month implementation period for these standards. A 12-month implementation period is particularly important for MOD-29. MOD-29, as drafted, will require that numerous paths not previously exposed to the high rigors of the MOD-29 TTC determination process will have to be examined. Avista anticipates that it will elect the Rated System Path Methodology for certain Posted Paths on Avista's system. Avista will, at a minimum, require a 12-month implementation period to assure proper review of the Posted Paths under the methodology. It will be difficult, if not impossible, to fully implement MOD-29 in the absence of the recommended 12-month implementation period.

Commenter	Yes	No	1. Comments on Implementation Plan
Response: The implementation plan grants a 12-month period, and the SDT believes this supports your need, based on your comments.			
Bonneville Power Administration		☑	This allotted time is sufficient and if shortened, would be a burden, especially for those entities electing to use the Rated System Path methodology that will require a much more rigorous TTC determination process than has historically been used.
Response: The Drafting team has not shortened the implementation period.			
British Columbia Transmission Corporation	☑	☑	We have two concerns, discussed in our comments below, that if not addressed may be problematic for a 12 month implementation, as BCTC may have difficulty in achieving compliance with any of the three ATC methodologies within 12 months. Our first concern is discussed in our comment 6.3 below regarding MOD-028-1, R7. MOD-028-1 will not be an option for BCTC if we cannot continue to use interpolation between representative TTCs (that we calculate according to the process described in R7). It will take BCTC longer than 12 months, if it is even practical, to develop the systems to calculate TTC with the same level of accuracy as we do today without interpolation, given the complexity of our system, the range of variable, limitations, and contingencies we consider to determine TTCs. Response: The MOD-028 method requires an actual simulation of the system to calculate the TTC values. The drafting team does not believe an interpolation process conforms to the requirements of the standard. A deviation from this process could be obtained through a regional variance. Our second concern is discussed in our comment 6.5 with respect to MOD-029-1 M-1. We believe that this requirement is redundant to M4. However, if it is retained as a specific requirement to produce models, BCTC will have a problem because it appears to retroactively require that models be produced for TTC calculations that were done in the past, and such models are no longer archived. BCTC does not use flow based methods, so MOD-030-1 is not applicable to us. For these reasons, for BCTC to be compliant within 12 months, it is important to us that the concerns described above and discussed further in our comments 6.3 and 6.5 be accommodated within the standards. Response: The team agrees and has deleted the word model from M4.
Response: Please see in-line responses.			
Clearwater Power Company		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
ColumbiaGrid, Inc.			[Intentionally left blank.]
Consumers Power, Inc.		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
Duke Energy	☑		Increased recalculation frequencies will require implementation of new methods and tools. Suggest effective date of 18 months after applicable regulatory approvals.
Response: The majority of the industry is supportive of this time period, and the drafting team believes this to be an appropriate duration, given the amount of work that will be required for many entities to become compliant. Entities should note that many of the requirements			

Commenter	Yes	No	1. Comments on Implementation Plan
within these standards are based on Order 890, and efforts to become compliant with 890 can be started prior to the approval of these standards. Such efforts will likely aid in preparation for the compliance effort associated with these standards (e.g., researching software, performing studies, identifying divergent areas within current practice, etc…).			
Entergy Services Inc.		☑	
EPSA		☑	The implementation plan for the standard is too long. EPSA has not objected to NERC's recent request to FERC to extend by several months, the date when these standards will be submitted to FERC given the amount of work involved in developing these standards. However, to require up to 15 months beyond the date of regulatory approval for implementation of this standard is excessive.
Response: The majority of the industry is supportive of this time period, and the drafting team believes this to be an appropriate duration, given the amount of work that will be required for many entities to become compliant. Note that anyone can implement these standards earlier if they so choose.			
ERCOT			
Fall River Rural Electric Cooperative, Inc.		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
FirstEnergy Corp.	☑		1. While we agree that the proposed Implementation Plan allows for sufficient time to achieve compliance with the various requirements, a successful implementation is reliant on tasks that must be completed in succession by NERC Responsible Entities who are not within the same organization. We encourage the standards drafting team to consider setting midpoint milestone dates, where appropriate, to allow sufficient time for entities that have tasks that are dependent upon the timely completion of other work prior to their own. Requirements for "implementation documentation" would be effective after 12 months, but then other data that relies on these documents should have additional time for implementation. Response: Entities are expected to set their own mid-point milestone dates as appropriate within their own organizational structures, and, if necessary, establish contractual arrangements in support of meeting the requirements of the standards. 2. The Implementation Plan shows a table of the applicable entities for each proposed standard. In this table, the Purchasing-Selling Entity (PSE) is shown as applicable to MOD-008, but it is not listed as an applicable entity within the text of this standard or any of the proposed standards. Response: The drafting team has modified the implementation plan to address this.
Response: Please see in-line responses.			
Flathead		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			

Commenter	Yes	No	1. Comments on Implementation Plan
FRCC		☑	
Georgia Transmission Corporation		☑	GTC does not think that additional time is needed; however, GTC would like to point out that the implementation period should not be shortened. The standards require development of extensive NAESB business practice standards. NAESB's working plan requires approximately six months after NERC approval of the NERC standards to create NAESB business practices that implement the NERC standards. Therefore, entities that must implement the NERC standards will only have approximately six months after the NAESB standards to implement the combination of NERC and NAESB standards.
Response: The Drafting team has not shortened the implementation period.			
Hydro One Networks		☑	
Hydro-Québec TransÉnergie (HQT)		☑	
IESO	☑		1) The standards suggest retiring FAC-012 and FAC-013. We are uncomfortable with this since we strongly believe the MOD standards fall short of replacing these requirements and in our view the TTC should be determined within the FAC standards. Response: The drafting team has analyzed the current FAC-012 and FAC-013, and believes that the requirements from those standards have been incorporated in the new MOD standards. In addition, TTC is not a physical facility rating, but rather an aggregate potential rating of multiple facilities based on contingency analysis. As such, we believe it to be a value determined through modeling and analysis that is based on facility ratings, and therefore place it in the MOD standards. 2) Tying the implementation date with the various regulatory approvals means that the effective dates will be all over the map. The effective dates should be set to a specific time after NERC BOT approval, that allows time for the appropriate regulatory approvals. These concerns were presented to NERC some time ago and it is our understanding that they had accepted this argument. Response: The current language is that which has been specified for use by the NERC Standards Committee.
Response: Please see in-line responses.			
ISO/RTO Council (IRC)	☑		Tying the implementation date with the various regulatory approvals for the MOD standards could mean effective dates can be varied across North America. A definitive effective date should be set that accounts for the time needed for appropriate regulatory approvals.
Response: The current language is that which has been specified for use by the NERC Standards Committee.			
Manitoba Hydro		☑	

Commenter	Yes	No	1. Comments on Implementation Plan
MidAmerican Energy Electric Trading		☑	
Midwest ISO		☑	
Modesto Irrigation District		☑	MID supports the comments submitted by the Sacramento Municipal Utility District ("SMUD") on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
MRO		☑	
New Brunswick System Operator			
NorthWestern Energy (NWMT)	☑		Not sure if this question is asking for additional time beyond the proposed implementation date or just a confirmation of what is proposed. I feel the proposed effective date language is sufficient. As mentioned below, the drafting team should review the effect date language in all six MODs to ensure consistency.
Response: The drafting team has reviewed the effective dates and made them consistent, recognizing that the standards will now be posted for separate ballots.			
NPCC Regional Standards Committee		☑	
NYISO		☑	Not applicable.
Response: No response required.			
PacifiCorp		☑	PacifiCorp strongly supports the inclusion of a 12 month implementation period for these standards. The entities electing the Rated System Path Methodology will require this much needed period to assure proper review of the Posted Paths under their purview.
Response: Thank you for your supportive comment.			
PJM Interconnection LLC		☑	This time allotted is sufficient but, if shortened, would be a burden.
Response: The Drafting team has not shortened the implementation period.			
Progress Energy, Carolinas			
Public Service Commission of SC		☑	
Public Utility District #2 of Grant County, Washington		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
Puget Sound Energy	☑		The proposed effective date language is sufficient. As mentioned below, the drafting team should review the effect date language in all six MODs to ensure consistency.
Response: The drafting team has reviewed the effective dates and made them consistent, recognizing that the standards will now be			

Commenter	Yes	No	1. Comments on Implementation Plan
posted for separate ballots.			
Salmon River Electric Cooperative		☑	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
Salt River Project		☑	
Santee Cooper		☑	
SERC ATCWG		☑	This time allotted is sufficient but, if shortened, would be a burden.
Response: The Drafting team has not shortened the implementation period.			
Sierra Pacific Resources Transmission		☑	NEVP and SPPC, the SPR companies, strongly support the inclusion of a 12 month implementation period for these standards. Particularly for MOD-29, the standard as drafted will require that numerous paths not previously exposed to the high rigors of the MOD-29 TTC determination process will have to be examined. Entities such as NEVP and SPPC electing the Rated System Path Methodology will require this period to assure proper review of the Posted Paths under their purview. Should a shorter period be mandated, it is highly likely that entities electing the Rated System Path Methodology will be in non-compliance as of any implementation date short of the full 12 months recommended.
Response: Thank you for your supportive comment. The Drafting team has not shortened the implementation period.			
Snohomish PUD		☑	This allotted time is sufficient and if shortened, would be a burden, especially for those entities electing to use the Rated System Path methodology that will require a much more rigorous TTC determination process than has historically been used.
Response: The Drafting team has not shortened the implementation period.			
The Southeast Coalition		☑	We strongly support the one year time-frame for complete implementation of the Standard and believe that some requirements of the Standard could be implemented earlier. TSPs should be encouraged and provided with flexibility to phase-in changes to their ATC calculations to meet the new requirements with the objective to complete all changes in one year.
Response: Thank you for your supportive comment. While the drafting team agrees with your suggestions regarding "phasing in" requirements, the drafting team is not mandating any specific schedule, other than the specific milestone at which entities must be compliant with all requirements in the standards.			
Southern Company Transmission		☑	
SPP			No comment.
Tacoma Power		☑	Tacoma Power supports the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.			
Tri-State Generation and			

Commenter	Yes	No	1. Comments on Implementation Plan
Transmission Association			
WECC MIC MIS ATC TF Drafting Team		☑	The WECC MIC MIS ATC Drafting Team (hereafter "Team") solicited comments WECC-wide on all matters associated with this ATC filing. The Team solicited "in person" comments from 50+ members as well as the approximately 40 members of the WECC MIC MIS ATC TF advisory panel that served to provide the Team with continuing telephone and email advisory support on the technical issues associated with these filings. The Team and those listed above echo the concerns of the NERC Standards Drafting Team and strongly supports the inclusion of a 12 month implementation period for these standards. Particularly for MOD-29, the standard as drafted will require that numerous paths not previously exposed to the high rigors of the MOD-29 TTC determination process will have to be examined. Those entities electing the Rated System Path Methodology will require this much needed period to assure proper review of the Posted Paths under their purview. Without this period, or in the alternative, should a shorter period be mandated, it is highly likely that entities electing the RSP methodology will be in non-compliance as of any implementation date short of the full 12 months recommended.
Response: Thank you for your supportive comment. The Drafting team has not shortened the implementation period.			
WestConnect Transfer Capability Workgroup		☑	The Team strongly supports the inclusion of a 12 month implementation period for these standards. Particularly for MOD-29, the standard as drafted will require that numerous paths not previously exposed to the high rigors of the MOD-29 TTC determination process will have to be examined.
Response: Thank you for your supportive comment.			
Western Area Power Administration – RMR		☑	The WECC MIC MIS ATC Drafting Team (hereafter "Team") solicited comments WECC-wide on all matters associated with this ATC filing. The Team solicited "in person" comments from 50+ members as well as the 43 members of the WECC MIC MIS ATC TF advisory panel that served to provide the Team with continuing telephone and email advisory support on the technical issues associated with these filings. Western was part of the Team review, however, did not get consensus on its comments in time to be included in the overall WECC response. Therefore, Western has submitted the WECC comments with our additional comments included as follows and in the appropriate location in this comment form: General – Document is very wordy – beginning with the definition of "Proposed Effective Date" – need to cut down language throughout. Response: We have made the language as clear and explicit as possible, which has in some cases resulted in some very "wordy" language. MOD-001 – Posted Path definition clarification question. Response: It is unclear what is question is being asked. M5 and D1.3 suggestions

Commenter	Yes	No	1. Comments on Implementation Plan
			Response: It is unclear what is question is being asked. MOD-004 – point on R4.2.1 Response: It is unclear what point is being referred to. MOD-029 – General comment regarding R2 conflicting with FAC-012 Response: FAC-012 will be retired as part of the implementation plan associated with these standards. R6 – what is meant by "non-firm NITS"? Response: Non-firm NITS refers to network service from non-designated resources (NN-6). M1.2 and M1.3 are redundant; M8.1 and M9.1 are redundant Response: We have modified M1.2 and M1.3 to eliminate the redundancy; we do not believe M8.1 and M9.1 to be redundant, as one refers to ETC and the other refers to ATC. M7 – R.2.1 wrong reference. Response: We have modified R2.1 to point to the correct reference. General – under D1.3 – data retention – why not require ONE retention time frame? Response: These timeframes are based on NERC Compliance criteria, which varies based on the entities being discussed. The Team echoes the concerns of the NERC Standards Drafting Team and strongly supports the inclusion of a 12 month implementation period for these standards. Particularly for MOD-29, the standard as drafted will require that numerous paths not previously exposed to the high rigors of the MOD-29 TTC determination process will have to be examined. Those entities electing the Rated System Path Methodology will require this much needed period to assure proper review of the Posted Paths under their purview. Without this period, or in the alternative, should a shorter period be mandated, it is highly likely that entities electing the RSP methodology will be in non-compliance as of any implementation date short of the full 12 months recommended. Response: Thank you for your supportive comment.
Response: Please see in-line responses.			

2. If there are any proposed definitions that you believe are incorrect, please identify the term and provide a substitute definition.

Summary Consideration: The drafting team eliminated the use of the term "Posted Path" and replaced it with "ATC Path," which is now defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."

The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.

A definition for "Business Practices" was added, which reads: Those business rules contained in the Transmission Service Provider's applicable tariff, rules, or procedures; associated Regional Reliability Organization business practices; or NAESB Business Practices.

The drafting team modified the approach to counterflow in the standards based on the comments provided. The default values were removed and a requirement for the ATCID to provide detail regarding how the TSP handles counterflows. Accordingly, the SDT believe this eliminated the need for a definition for Counterflows or the use of the separate term Counterschedules.

The SDT provided a new definition for Block Dispatch, which reads as follows: A simplification of dispatch rules such that given a specific amount of load to serve, an approximate generation dispatch can be determined. To accomplish this, the capacity of a given generator is segmented into loadable "blocks," each of which is grouped and ordered relative to other blocks (based on characteristics including, but not limited to, efficiency, run of river or fuel supply considerations, and/or "must-run" status).

The SDT provided a new definition for Dispatch Order, which reads as follows: A simplification of dispatch rules such that given a specific amount of load to serve, an approximate generation dispatch can be determined. To accomplish this, each generator is ranked by priority.

The SDT provided a new definition for Participation Factors, which reads as follows: A simplification of dispatch rules such that given a specific amount of load to serve, an approximate generation dispatch can be determined. To accomplish this, generators are assigned a percentage that they will contribute to serve load.
The drafting team removed references to "interface point" and "adjacent upstream TSP," instead now referring to "the immediately adjacent Balancing Authority associated with the Transmission Service Provider to (from) which the power is to be delivered (received)."

The drafting team has modified the definitions of Area Interchange Methodology and Rated System Path Methodology. The following sentence was added in MOD-028, "Under the Area Interchange Methodology, TTC results are generally reported on an area to area basis." The following sentence was added in MOD-029, "Under the Rated System Path Methodology, and TTC results are generally reported as specific transmission path capabilities."

The SDT modified the definition of Flowgate Methodology to read as follows: The Flowgate methodology is characterized by identification of key Facilities as Flowgates. Total Flowgate Capabilities are determined based on facility ratings and voltage and stability limits. The impacts of Existing Transmission Commitments (ETCs) are determined by simulation. The impacts of ETC, Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) are subtracted from the Total Flowgate Capability to determine the Available Flowgate Capability (AFC) value for that Flowgate. AFCs are used to determine Available Transmission Capability (ATC).

The definition of AFC was expanded to include the relationship with CBM and TRM.

The SDT has modified the definition of Flowgate to read as follows: 1.) A portion of the Transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more

monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System

The SDT has modified the definition of Power Transfer Distribution Factor to read as follows: In the pre-contingency configuration of a system under study, a measure of the responsiveness or change in electrical loadings on transmission system facilities due to a change in electric power transfer from one area to another, expressed in percent (up to 100%) of the change in power transfer.

The SDT has modified the definition of Outage Transfer Distribution Factor to read as follows: In the post-contingency configuration of a system under study, the electric Power Transfer Distribution Factor (PTDF) with one or more system Facilities removed from service (outaged).

The drafting team has also added a new definition for "Planned Resource Sharing Group (PRSG)" for those LSEs who have jointly agreed to meet their resource adequacy requirements.

The SDT modified the definition of Total Flowgate Capability to read as follows: The maximum flow capability on a Flowgate, not to exceed its thermal rating, or in the case of a flowgate used to represent a specific operating constraint (such as a voltage or stability limit), not to exceed the associated System Operating Limit.

The SDT made other minor corrections and clarifications as needed.

Commenter	2. Comments on Definitions
Alberta Electric System Operator	
Ameren Services	
American Transmission Company	
Arizona Public Service Co.	Arizona Public Service Co. agrees with the WECC's Comment that the NERC ATC Drafting team should clarify the meaning of the term counterflows. Response: Please see responses to the WECC MIC MIS ATC Drafting Team. In addition the NERC ATC Drafting team should clarify what is meant by the term post back. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.
Response: Please see in-line responses.	
Avista Corporation	In MOD-001, "Posted Path" is included as a defined term. "Posted path" is also defined in 18 CFR § 37.6 (b)(1)(i). Using a term that is already defined in the CFR may create confusion. Accordingly, Avista suggests that throughout the MOD standards, NERC replace the term "Posted Path" with a different defined term, such as "paths required to be posted", "paths requiring posting" or "paths for which ATC is calculated."

Commenter	2. Comments on Definitions
Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."	
Bonneville Power Administration	a. A definition for counterflow should be provided and used consistently in MOD-028, -029, and -030. A suggested definition follows: "Counterflow: the impact of schedules, reservations, or actual flows of energy in the direction opposite to the constraint." Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. b. MOD-004 – In Order 890, FERC limited the use of CBM to meet generation reliability criteria – please clarify what is meant by "reserve adequacy requirements" Response: When FERC refers to "generation reliability criteria" associated with CBM, the drafting tram believes they are referring to the need to have sufficient planning reserves to ensure generation to load balance (resource adequacy). b. MOD-029 – The definition of Rated System Path Methodology incorrectly refers to ATC as "Available Transmission Capability" – this should be corrected to "Available Transfer Capability" Response: We have changed the definition per your correction.
Response: Please see in-line responses.	
British Columbia Transmission Corporation	
Clearwater Power Company	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
ColumbiaGrid, Inc.	[Intentionally left blank.]
Consumers Power, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Duke Energy	
Entergy Services Inc.	Definition of AFC in MOD-030-1 should be expanded to include CBM and TRM in addition to only committed uses similar to that for ATC in NERC standards. Response: The definition has been modified to incorporate the suggestion.

Commenter	2. Comments on Definitions
	MOD-028-1 R11 and R12 and MOD-030 R8 and R9 include a capitalized term Business Practices in Postback definition. The term Business Practices should either be defined, or clarified in the standard. Response: The SDT has created a definition for "Business Practices."
Response: Please see in-line responses.	
EPSA	
ERCOT	
Fall River Rural Electric Cooperative, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
FirstEnergy Corp.	MOD-004-1 – GCIR Definition: This definition may incorrectly imply that this is merely another resource that an LSE can use to meet its Resource Adequacy Requirements (RAR). RAR, such as planning reserve requirements (PRM), cannot be met with the use of CBM. Also, the definition refers to GCIR as "an alternative to internal resources" which may be misleading. The definition needs to address the fact that GCIR (as CBM) can only be used in an emergency. It is a "contingency option" rather than a "resource alternative".
Response: The STD has modified the definition to use the term you have suggested "resource adequacy requirements". The SDT disagrees that CBM cannot be used to meet RAR. It is up to the entity responsible for RAR to decide whether to allow the use of CBM (margin needed to import the GCIR). The very definition of CBM implies that this is so. The SDT also agrees that it can only be used in EEA 2 or higher and have added this concept to the definition.	
Flathead	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
FRCC	MOD-001-1: What is the "Time Horizon: Operations Planning"? Response: "Time Horizon: Operations Planning" refers to a component of the NERC Compliance Monitoring and Enforcement Program, and is used in combination with the Violation Risk Factors and Violation Severity Levels to determine appropriate sanctions for a violation of a requirement of the standard. R8 specifies "associated operations studies or planning studies for the time period studied". In order to be consistent with Order 890, it should specify "associated operating horizon studies or planning horizon studies for the product time period being calculated" and further, since these horizons are being used in the context of ATC determination, the prefix "ATC" should be added to eliminate ambiguity, just as the TPL standards do with near-term planning horizon (year 1 to year 5) and longer term planning horizon (years 6 to 10) Response: The SDT believe the language is clear as written. MOD-028-1: R5.3 – define "interface point" and "adjacent upstream TSP". This requirement is complex and it

Commenter	2. Comments on Definitions
	should include examples with pictures. Response: The drafting team has clarified the language as follows to eliminate the ambiguity. Rather than referring to "interface point" and "adjacent upstream TSP," we are now referring to "the immediately adjacent Balancing Authority associated with the Transmission Service Provider from which the power is to be received." Similar language has been used to address the other related scenarios.
Response: Please see in-line responses.	
Georgia Transmission Corporation	MOD-028, -029 and -030 refer to "Postbacks" with a definition that uses the term "postback". There is not a definition in the NERC Glossary for this term. The current NAESB draft definition (dated 9/12/07) is "The increase in ATC due to a change in status of a Transmission Service request or the release of unscheduled Transmission Service." The following definitions are suggested for MOD-028, -029 and -030: "Postbacks(F) are the changes in Firm ATC due to a change in Firm Transmission Service during that period, as defined in Business Practices"; "Postbacks(NF) are the changes in non-firm ATC due to a change in non-firm Transmission Service, as defined in Business Practices".
Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.. The drafting team has modified the formula definitions as follows: "Postbacks(F) are the changes in Firm ATC due to a change in the use of Firm Transmission Service for that period, as defined in business practices"; "Postbacks(NF) are the changes in non-firm ATC due to a change in the use of non-firm Transmission Service for that period, as defined in business practices".	
Hydro One Networks	
Hydro-Québec TransÉnergie (HQT)	
IESO	MOD-004 CBM is intended to be used for accessing generation from external sources to meet the LSE's PLANNED capacity installation requirement. The word "planned" should be inserted in the definition for GCIR. Response: The SDT agrees and have inserted the word "planned" in the definition. MOD-28 and MOD-029 The definitions for Area interchange Methodology and Rated System Path Methodology seem to be woefully inadequate – the "determination via simulation" explanation for the methodologies is pretty meaningless by itself – these should either be explained properly or be removed from the standards as "definitions" or could be added to the MOD-001 definition list.

Commenter	2. Comments on Definitions
	Response: The drafting team has modified the definitions of Area Interchange Methodology and Rated System Path Methodology. The following sentence was added in MOD-028, "Under the Area Interchange Methodology, TTC results are generally reported on an area to area basis." The following sentence was added in MOD-029, "Under the Rated System Path Methodology, and TTC results are generally reported as specific transmission path capabilities." MOD-030 Is the Flowgate Methodology definition needed. If it is, shouldn't it simply be the method used to determine key facilities for selling transmission service? The current definition at a minimum needs to consider IROL as potential TFC instead of just system facilities. Response: The SDT believes the definition is required, and has modified the definition to read as follows: Flowgate Methodology: The Flowgate methodology is characterized by identification of key Facilities as Flowgates. Total Flowgate Capabilities are determined based on facility ratings and voltage and stability limits. The impacts of Existing Transmission Commitments (ETCs) are determined by simulation. The impacts of ETC, Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) are subtracted from the Total Flowgate Capability to determine the Available Flowgate Capability (AFC) value for that Flowgate. AFCs are used to determine Available Transmission Capability (ATC). The Flowgate definition should add "monitored transmission" in front of Facilities. A generator is also a facility but is not included as part of a flowgate definition. Also, bullet one should start with: "Designated paths on…" It is not a point. Response: The SDT has modified the definition to read as follows: Flowgate: 1.) A portion of the Transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System. The definition of PTDF also needs to be modified – it could be modified to read: "In the pre-contingency configuration of a system under study, a measure of the responsiveness or change in electrical loadings on transmission system facilities due to a change in electric power transfer from one area to another, expressed in percent (up to 100%) of the change in power transfer." Response: The SDT has modified the definition to read as follows: Power Transfer Distribution Factor (PTDF): In the pre-contingency configuration of a system under study, a measure of the responsiveness or change in electrical loadings on transmission system facilities due to a change in electric power transfer from one area to another, expressed in percent (up to 100%) of the change in power transfer. The definition of OTDF also needs to be modified – it could be modified to read: "In the post-contingency

Commenter	2. Comments on Definitions
	configuration of a system under study, the electric Power Transfer Distribution Factor (PTDF) with one or more transmission facility element removed from service (outaged)." This is to ensure that PTDF is not confused with Generator Transfer Distribution Function (GTDF), as a generator is also a facility. Response: The SDT has modified the definition to read as follows: Outage Transfer Distribution Factor (OTDF): In the post-contingency configuration of a system under study, the electric Power Transfer Distribution Factor (PTDF) with one or more system Facilities removed from service (outaged).
Response:	
ISO/RTO Council (IRC)	MOD-004 CBM is intended to be used for accessing generation from external sources to meet the LSE's PLANNED capacity installation requirement. The word "planned" should be inserted in the definition for GCIR. Response: The SDT agrees and have inserted the word "planned" in the definition. MOD-030 Total Flowgate Capability does not consider that an IROL may be a limit. Response: TFC does account for SOLs, and all IROLs are by definition also SOLs. Is the Flowgate Methodology definition needed. If it is, shouldn't it simply be the method used to determine key facilities for selling transmission service? The current definition at a minimum needs to consider IROL as potential TFC instead of just system facilities. Response: The SDT believes the definition is required, and has modified the definition to read as follows: Flowgate Methodology: The Flowgate methodology is characterized by identification of key Facilities as Flowgates. Total Flowgate Capabilities are determined based on facility ratings and voltage and stability limits. The impacts of Existing Transmission Commitments (ETCs) are determined by simulation. The impacts of ETC, Capacity Benefit Margin (CBM) and Transmission Reliability Margin (TRM) are subtracted from the Total Flowgate Capability to determine the Available Flowgate Capability (AFC) value for that Flowgate. AFCs are used to determine Available Transmission Capability (ATC). The Flowgate definition should strike the word monitored and add transmission in front of Facilities. The NERC Glossary of Terms gives a generator as an example of Facility and the current definition would then allow a generator to define a flowgate. Also bullet one should start with: A designated set of transmission facilities. It is not a point. Response: The SDT has modified the definition to read as follows: Flowgate: 1.) A portion of the Transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions. 2.) A mathematical construct, comprised of one or more monitored transmission Facilities and optionally one or more contingency Facilities, used to analyze the impact of power flows upon the Bulk Electric System.

Commenter	2. Comments on Definitions
	MOD-029 The SRC notes that Order 890, P. 212 requires that the NERC Drafting Team address "counterflows" but does not provide direction as to the meaning of that term. As the term is often used interchangeably to mean actual flows of energy, scheduling of energy or reservations of transmission for possible scheduling of energy, the Team suggests that the NERC ATC Drafting Team clarify the meaning of the term as well as how it integrates into each proposed standard. Specifically, the NERC Drafting Team should clarify such items as: 1) is it a flow, a schedule or a reservation, 2) does it change characteristics based on the time frame examined (E.g. is it a reservation before it becomes a schedule?), 3) is it uni-directional or bi-directional. The term is used in numerous calculations but as presented is too vague to calculate rendering the formula opaque. Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required.
Response: Please see in-line responses.	
Manitoba Hydro	
MidAmerican Energy Electric Trading	
Midwest ISO	
Modesto Irrigation District	MID supports the comments submitted by SMUD on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
MRO	a. The Posted Path definition in MOD-001-1 that indicates it includes any "Balancing Authority to Balancing Authority interconnection" and then R1 of the standard says ATC must "select one ATC methodology… for each Posted Path" and then R2 states that the TSP "shall calculate ATC values…using the ATC methodologies." As a result, the TSP must calculate ATCs and post those ATCs and all the Posted Paths. Many of these BA to BA paths are not useful paths to post either for commercial or reliability reasons. Therefore the language in the definition or the requirements should clarify that the definition provides the items such as any BA to BA path, path on which there has been curtailment, etc. that may qualify for posting or else the requirements should be changed to indicate that postings are not developed for all such paths but are developed for those paths that such postings are required for commercial and/or reliability reasons. b. Presuming that changes are made per our comment 2.a. so that the Posted Path definition is only including items that are eligible for Posted Path and does not include items that must be posted, we note that the Posted Path definition in MOD-001-1 does not cover all the instances of a posted path in that there are flowgates that should be set up for reliability purposes to cover a system constraint that is not properly represented in the transmission service request evaluation process and is not covered by the three items listed. Service may not have been denied, curtailed, or interrupted yet due to the constraint because the facilities were not included in a flow gate. The MRO

Commenter	2. Comments on Definitions
	recommends that the following be included as an item in the definition "4) Any flowgate." Posted Path Definition: The MRO asks the SDT to consider adding some language onto the end of Item (2) to qualify the statement. Something like "…and for which congestion is expected to occur." This is needed because it could have been an unusual operating condition (multiple generator/line outages) that caused the curtailment and that condition is not expected to occur again.
Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."	
New Brunswick System Operator	
NorthWestern Energy (NWMT)	In MOD-001, Posted Path is included in defined terms. This is a duplication of "Posted path" in 18 CFR Part 37.6 (b)(1)(i). Suggest that throughout these MODs, replace the term Posted Path with "paths required to be posted" or "paths requiring posting" or "paths for which ATC is calculated".
Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."	
NPCC Regional Standards Committee	
NYISO	The NYISO supports the comments that the Northeast Power Coordinating Council ("NPCC") has submitted in response to this question. Except as noted by the NPCC, all of the proposed definitions appear to be correct, assuming that NERC shares the NYISO's view that the definitions are sufficiently flexible to accommodate transmission providers that have obtained waivers from various FERC ATC and OASIS requirements and that do not offer transmission service based on physical reservations. As is discussed in more detail in response to Question Five, the NYISO, with FERC's approval, does not offer the kind of physical reservation transmission service that is the primary focus of Order Nos. 888 and 890. Nevertheless, the NYISO believes that its form of financial reservation transmission service fits within the framework of NERC's proposed definitions and standards. It is very important to the NYISO that the proposed definition of "Existing Transmission Commitments" ("ETC") in MOD-028 and MOD-029 be interpreted flexibly. Many of the variables in the proposed ETC algorithm will not be applicable (or will always have a value of zero) in the NYISO's case. Specifically, the NYISO does not reserve capacity to serve native load growth, its customers do not hold physical reservations of point to point transmission service and have never taken Network Integration Transmission Service. On the other hand, the most important input into the NYISO's ATC calculations is "Transmission Flow Utilization," which is based on the security constrained network powerflow solutions determined by the NYISO's day-ahead and real-time market software. It appears that the OS(F) variable in the proposed ETC algorithm is broad enough for the NYISO to include Transmission Flow Utilization information when calculating ETC (and thus ATC). To the extent necessary, the NYISO will provide additional information concerning its market software's computation of Transmission Flow Utilization and its role in the ETC calculation in the NYISO's Available Transfer Capability Implementation Document

Commenter	2. Comments on Definitions
	("ATCID"). If NERC disagrees with this interpretation then the NYISO requests that the MOD-028 and MOD-029 definition of ETC (and/or OS(F)) be revised to expressly allow ISO/RTO market software results, such as the NYISO's Transmission Flow Utilization information, to be considered in ETC calculations. Otherwise, the NYISO's existing method of calculating and posting ATC using market software outputs, which is a core feature of its FERC-approved market design, would be in conflict with NERC's standard. Additional information on the NYISO's financial reservation system is provided in the response to Question Five, below. Finally, the definition of the OS(F) variable in the MOD-29 description of the ETC algorithm (at R9) may be slightly narrower in scope than the MOD-28 version because the MOD-29 definition does not include the language referencing "any other firm adjustments to reflect impacts on other Posted Paths as described in the ATCID" that is found in MOD-28. Because it is not clear why the two OS(F) definitions should be different, the NYISO asks that NERC revise the MOD-29 version to conform to the MOD-28 version. Response: The SDT has modified the standard to allow for inclusion of details in the ATCID. However, path interactions as described in MOD-028's definition of OS_f are addressed in the determination of TTC in MOD-029, and adding such language here is inappropriate.
Response: We generally agree with your comments, and believe that you should be able to comply with the requirements. Please see additional in-line responses.	
PacifiCorp	The WECC MIC MIS ATC Drafting Team suggests in its comments that the NERC ATC Drafting Team clarify the meaning of the term "counterflows." PacifiCorp suggests that with regard to this comment, any changes to clarify the term "counterflows" should not undermine the flexibility allowed in the definition of the term "counter-schedules" in MOD-029 that states "Counter-schedules are adjustments to firm/non-firm Available Transfer Capability as determined by the Transmission Service Provider and described in its Available Transfer Capability Implementation Document.
Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. By making this change, the drafting team no longer believes it necessary to have a separate definition for counter-schedules.	
PJM Interconnection LLC	GCIR should observe the practice of multiple LSEs aggregating and agreeing with other entities such as ISOs to determine such requirements. The GCIR for grouped LSEs would differ from the sum of the individual LSEs. In such a case CBM will be determined for the aggregate and processes/ procedures for individual LSEs to request CBM will not be observed.
Response: The SDT agrees that an aggregation of LSEs to determine an aggregated GCIR would be more efficient than separate LSE calculations for the same "electrical area". However, the SDT cannot mandate aggregation or limit a genuine LSE request. The standard does not preclude aggregation. The drafting team has also added a new definition for "Planned Resource Sharing Group(PRSG)" for those LSEs who have jointly agreed to meet their resource adequacy requirements . The SDT has also revised the standard to make it clearer regarding requirements of PRSGs.	

Commenter	2. Comments on Definitions
Progress Energy, Carolinas	
Public Service Commission of SC	
Public Utility District #2 of Grant County, Washington	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Puget Sound Energy	In MOD-001, Posted Path is included in defined terms. This is a duplication of "Posted path" in 18 CFR Part 37.6 (b)(1)(i). Suggest that throughout these MODs, replace the term Posted Path with "paths required to be posted" or "paths requiring posting" or "paths for which ATC is calculated".
Response: The Drafting Team believes that, for reliability, where ATC must be calculated is not captured completely by the FERC definition of Posted Path. As such, a new term, ATC Path, has been defined for use in the NERC standards.	
Salmon River Electric Cooperative	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Salt River Project	SRP supports those definitions provided in MOD-4, MOD-08 and MOD-29. SRP does not elect to comment on defined terms offered in MOD-28 or MOD-30. MOD-001-01 The term Posted Path should not be defined in the standard. Defining Posted Path conflicts with the Background Information provided by the Standards Drafting Team and duplicates FERC regulations in 18CFR37.6. Specifically, the request for comments stated "…Major Changes include-removed all requirements to make data or information 'publicly available' – the drafting team has been working cooperatively with NAESB and all posting requirements will be addressed in NAESB business practices." Therefore, because Postings are not being addressed and because Posted Path is defined in CFR37.6, the term Posted Path should not be defined in a NERC standard and should be referenced as a FERC term.
Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."	
Santee Cooper	Recommend changing Posted Path 1) definition to read "Any Balancing Authority to Balancing Authority direct interconnection". Add the word direct.
Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated."	
SERC ATCWG	MOD-0028, 029 and 030 refer to "postback". There is not a definition in the NERC Glossary for this term. Please consider the following as the definition: "Postbacks are increases to ATC values resulting from transmission service being redirected by customers to other paths or from transmission service not being scheduled by customers during that period, as defined in Business Practices."
Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that	

Commenter	2. Comments on Definitions
NAESB will be defining specifically what values should be considered when determining Postbacks.	
Sierra Pacific Resources Transmission	MOD-001 "Posted Path" is included in defined terms. Because this is a duplication of "Posted Path" in 18 CFR Part 37.6 (b)(1)(i) it is suggested "paths where ATC is calculated" or similar definition be used. Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC. It is defined as "Any combination of Point of Receipt and Point of Delivery for which ATC is calculated." "Counterflows" appears to be used interchangeably to mean actual flows of energy, scheduling of energy or reservations of transmission for possible scheduling of energy. The SPR Companies suggest the NERC ATC Drafting Team clarify the meaning of the term as well as how it integrates into each proposed standard. Specifically, the NERC Team should clarify such items as: 1) is it a flow, a schedule or a reservation, 2) does it change characteristics based on the time frame examined (E.g. is it a reservation before it becomes a schedule?), 3) is it uni-directional or bi-directional. The term is used in numerous calculations but as presented is too vague to calculate in the formula. Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required.
Response: Please see in-line responses.	
Snohomish PUD	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
The Southeast Coalition	The term "Postback" is not standard in the industry and has not been defined in the Standard. A definition for this term should be included in the Standard. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. Requirements R6.2, R6.3, and R6.4 of MOD-030 refer to transmission service "expected to be scheduled". Is this term being used to refer to reservations that are frequently scheduled as opposed to those that are infrequently scheduled? Please clarify. Response: Although the frequency of the reservation being scheduled can influence your expectations, in some instances an infrequently scheduled reservation could be expected to be scheduled. For example, you may use seasonal or historical trends to guide expectations.
Response: See in-line responses above.	

Commenter	2. Comments on Definitions
Southern Company Transmission	MOD-028-1. Suggest adding the following language to the end of the "Area Interchange Methodology" definition: "Under the Area Interchange Methodology, TTC results are generally reported on an area to area basis, as opposed to being based upon a specific Transmission Path." Please see 1995 TTC Reference Document Reporting of transfer Capability on pages A-6. Response: The drafting team has modified the language in the standard to include these concepts. MOD-029-1. Suggest adding the following language to the end of the "Rated System Path Methodology" definition: "Under the Rated System Path Methodology, TTC results are reported with a focus toward specific transmission path capabilities." Please see 1995 TTC Reference Document Reporting of transfer Capability on pages A-7. Response: The drafting team has modified the language in the standard to include these concepts. MOD-030. TFC is generally based upon ratings, not SOL. Suggest the following language. Total Flowgate Capability (TFC): The maximum flow capability on a Flowgate, not to exceed its thermal rating, or in the case of a proxy flowgate used to represent a specific operating constraint (such as a stability limit), not to exceed the associated System Operating Limit. Response: The SDT has accepted your suggestion, with slight modification to remove the reference to "proxy" flowgates. "The maximum flow capability on a Flowgate, not to exceed its thermal rating, or in the case of a flowgate used to represent a specific operating constraint (such as a voltage or stability limit), not to exceed the associated System Operating Limit."
Response: Please see in-line responses.	
SPP	No comment.
Tacoma Power	Tacoma Power supports the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Tri-State Generation and Transmission Association	
WECC MIC MIS ATC TF Drafting Team	The Team and those listed above support those definitions provided in MOD-01, MOD-4, and MOD-08. The Team and those listed above do not elect to comment on defined terms offered in MOD-28. The Team and those listed above note that Order 890, P. 212 requires that the NERC Drafting Team address "counterflows" but does not provide direction as to the meaning of that term. As the term is often used interchangeably to mean actual flows of energy, scheduling of energy or reservations of transmission for possible scheduling of energy, the Team and those listed above suggest that the NERC ATC Drafting Team clarify the

Commenter	2. Comments on Definitions
	meaning of the term as well as how it integrates into each proposed standard. Specifically, the NERC Team should clarify such items as: 1) is it a flow, a schedule or a reservation, 2) does it change characteristics based on the time frame examined (E.g. is it a reservation before it becomes a schedule?), 3) is it uni-directional or bi-directional. The term is used in numerous calculations but as presented is too vague to calculate rendering the formula opaque.
Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. By making this change, the drafting team no longer believes it necessary to have a separate definition for counter-schedules.	
WestConnect Transfer Capability Workgroup	The Team agrees with the WECC's Comment that the NERC ATC Drafting team should clarify the meaning of the term counterflows.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Western Area Power Administration – RMR	The Team supports those definitions provided in MOD-01, MOD-4, and MOD-08. The Team does not elect to comment on defined terms offered in MOD-28. The Team notes that Order 890, P. 212 requires that the NERC Drafting Team address "counterflows" but does not provide direction as to the meaning of that term. As the term is often used interchangeably to mean actual flows of energy, scheduling of energy or reservations of transmission for possible scheduling of energy, the Team suggests that the NERC ATC Drafting Team clarify the meaning of the term as well as how it integrates into each proposed standard. Specifically, the NERC Team should clarify such items as: 1) is it a flow, a schedule or a reservation, 2) does it change characteristics based on the time frame examined (E.g. is it a reservation before it becomes a schedule?), 3) is it uni-directional or bi-directional. The term is used in numerous calculations but as presented is too vague to calculate rendering the formula opaque.
Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. By making this change, the drafting team no longer believes it necessary to have a separate definition for counter-schedules.	

3. If there is a requirement in any of the proposed standards that you believe is technically incorrect, please identify the standard and requirement and identify what is incorrect. If possible, provide alternate language that you believe would make the requirement technically correct.

Summary Consideration: Several entities expressed concern regarding the requirement that CBM be granted prior to TSRs when capacity became avail able. The drafting team discussed this issue at length, and determined that both methods (holding capacity for un-granted CBM requests, putting CBM requests into a queue for processing) were acceptable. Accordingly the SDT has changed the standard to allow entities to take either approach, provided they document the manner used in their ATCID.

The drafting team modified the approach to counterflow in the standards based on the comments provided. The default values were removed and a requirement for the ATCID to provide detail regarding how the TSP handles counterflows.

The drafting team modified many of the requirements in MOD-030 related to the thresholds used to determine if the impacts of other neighboring systems such that they only have to be used if they're impact is greater than what is used in the Transmission Service Provider's Interconnection-wide congestion management procedure. This ensures that in general, service is not sold on a basis that is more liberal than that which is used to curtail service. TSPs may use thresholds lower than that specified if desired.

Many entities expressed concern that the monthly updates related to changes in CBM were excessive. The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The standard has been modified to clarify that entities must update their CBM at least once a month if it changes, but that determination may be through a recalculation or through a simple adjustment (e.g., a addition or subtraction, based on contracts or other drivers).

Some entities expressed a misunderstanding of the relationship between Violation Severity Levels and Violation Risk Factors. VSLs are related to the amount of deviation from the standard. VRFs are related to the impact on reliability. An analogous situation would be grades in school; Severity Levels are similar to the "grade" (A, B, C, D, and F) and the Risk Factor is similar to the "type of grade" (homework, quiz, research paper, term paper, final exam).

Many entities expressed concern regarding the amount of time allowed to comply with a request for information. In general, these requirements were extended to allow thirty days.

Timing and calculation requirements for ATC, TTC, AFC, and TFC were modified to reflect provider's comments. MOD-001 now requires recalculation of ATC on a fixed schedule unless none of the elements used in the ATC formulas have changed. AFC requires recalculation on a fixed schedule.

Many entities expressed a desire for more justification and consistency in the requirements related to the scope of the model used in determining ATC. The drafting team made MOD-030 and MOD-028 consistent with regard to size and the use of equivalences. MOD-029 was modified to incorporate a local review process.

With regard to the Violation Risk Factors, several entities requested either many or all requirements be set to Low. The drafting team discussed the requested changes at length, but was ultimately unable to come to consensus sufficient enough to establish the required supermajority vote to change the VRFs. NERC defines that requirement with a Violation Risk Factor of Lower is one that "if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system." The SDT does believe that there are many requirements in these standards to which this VRF should apply, but there also are many that can have a more significant impact than this.

Many entities expressed disagreement with the SDT with regard to the assignment of responsibility to functional entities. The SDT referred entities to the functional model for clarification. However, the SDT notes that the functional model is not always clear, and in some cases, the SDT's interpretation may be different that that of other entities. The SDT notes that the functional model is currently being reviewed and updated.

Many entities expressed confusion with regard to the difference between NERC and NAESB responsibilities. The SDT clarified that items related to the customer interface, such as the posting of documents on OASIS or public disclosure of information to the marketplace, were the responsibility of NAESB. Items related to the determination of information related to reliability coordination are within the scope of NERC.

NERC defines that a requirement with a Violation Risk Factor of Medium is one that "if violated, could directly affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures." The SDT believes that several of the requirements in these standards, if not met, can directly affect the electrical state or capability of the bulk electric system. These have been assigned a VRF of medium.

Some entities expressed concern with a MOD-001 R10 requiring the provision of data without clarifying the owner of that data. The requirement was modified to be clear that only provision of the entities own data is required.

Many entities expressed concern that the requirement to use "peak" load forecasts was too prescriptive. The drafting team removed the requirement to use only "peak" load forecasts.

The SDT made other minor corrections and clarifications as needed.

Commenter	3. Comments on Requirements
Alberta Electric System Operator	
Ameren Services	MOD-004-1 - R4.2. This is a fundamental mathematical analytical dichotomy. The CBM component is based on probabilistic LOLE/LOLP style analyses that look at aggregate probability loss. The reserve sharing component of TRM is deterministic. It is imprudent to combine these as they are not derived from the same methodology except in the rare case where the generation is sufficiently constrained that the only resulting generation left after CBM event is the reserve sharing generation. Response: The drafting team did not mandate that TRM be deterministic, or that CBM be probabilistic. However, the standard does require that they not be additive such that double counting occurs. FERC order 890 paragraphs 1069, 1078 and 1082 all make reference to not allowing the use of CBM and TRM "for the same purposes" From paragraph 1078:"We continue to believe this Reliability Standard should be modified to include a provision ensuring that CBM, TRM and ETC cannot be used for the same purpose, such as loss of the identical generating unit." Having a portion of TRM for reserve sharing would constitute the "loss of the identical generating unit" as is covered in setting aside CBM for the loss of multiple units. Hence, only the portion of TRM used for reserve sharing must be subtracted from CBM - R4.2.2. Since AFC is determined from CBM, CBM for each Flowgate should not be dependent on AFC. CBM can be big enough to drive AFC to zero or negative. This simply means that resource adequacy criteria can't be met, and no capacity will be available on that Flowgate (which is what the original wording of this requirement was trying to do

Commenter	3. Comments on Requirements
	anyway). Therefore CBM should not be set to AFC, it should be left at whatever value was calculated. This concept applies to R4.2.1 and R5.2 as well. Response: The standard has been edited to allow the TSP to decide how to address this concern and requires they document their decision in their CBMID. R4.3 and R5.3 Not necessary. Refer to R4.2.2 for explanation. Response: These sections have been removed and the standard has been edited to allow the TSP to decide how to address this concern and requires they document their decision in their CBMID.
Response: Please see in-line responses.	
American Transmission Company	
Arizona Public Service Co.	Arizona Public Service Co. is in agreement with the WestConnect Comments and in general agreement with the WECC Comments. Response: Please see responses to WestConnect and the WECC MIC MIS ATC Drafting Team. In addition the Arizona Public Service Co. adds the following comment. MOD-001 The use of Counter Schedules to create firm ATC is of concern to APS. This practice could result in unreliable conditions to the interconnection if the counter flows do not occur. Due to the reliability concerns there should be a requirement for the Transmission Provider to provide documentation of actions that it will take if the Counter Flows do not occur. Response: The standard does not require the creation of firm ATC from counterflows or counterschedules; rather, it only allows for the creation of those counterflows or counterschedules if included in the provider's ATCID. The Drafting Team has removed R4 and R5 (the "default" counterflow requirements) to further clarify that use of counterflows/counterschedules is not required.
Response: Please see in-line responses.	
Avista Corporation	
Bonneville Power Administration	MOD-001 - i.R1 and R2 – "time periods" should be replaced with "time horizons" Response: The drafting team eliminated the term "horizons" to eliminate confusion with other Time Horizons (e.g., those used by compliance).

Commenter	3. Comments on Requirements
	- ii. R3.2 – "counter-schedules" should be deleted and "counterflows" should be capitalized with the definition supplied above [Counterflow: the impact of schedules, reservations, or actual energy flows in the direction opposite to the constraint Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. - iii. R3.3 – BPA suggests removal of this requirement, as it would require extensive modification to existing databases without serving a great need. Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. - iv. R4 and R5 – should be cut from MOD-001 and placed in MOD-028, -029, and -030 Response: R4 and R5 have been removed and a description has been required in the ATCID per R3 of MOD-001. - v. R10 – The wording is confusing and should be modified to the following: "…current versions of the following data, limited to that data requested, in electronic format…" Response: We have modified the language slightly to be clearer. Note that the provider must only make available the data as requested (i.e., if the data was not requested, it doesn't need to be made available) - vi. R10.2 – "Peak" should be deleted, as non-peak load forecasts may be used in ATC calculations We have deleted the word "peak" per your suggestion. - vii. R10.3 – BPA requests that the term "Block dispatch" be defined Response: We have added the following definition: BLOCK DISPATCH – A simplification of dispatch rules such that given a specific amount of load to serve, an approximate generation dispatch can be determined. To accomplish this, the capacity of a given generator is segmented into loadable "blocks," each of which is grouped and ordered relative to other blocks (based on characteristics including, but not limited to, efficiency, run of river or fuel supply considerations, and/or "must-run" status). - viii. R10.4 – Should be modified to the following, to be less vague and more consistent with the pro-forma OATT: "Aggregated capacity encumbered for Network Integration Transmission Service and Secondary Service"

Commenter	3. Comments on Requirements
	Response: The Drafting Team has changed this requirement using similar language that is consistent with that used in MOD-028 and MOD-029. -ix. R10.6 – Should be modified to the following, to allow for the inclusion of Grandfathered service or other statutory obligations that have not been contracted for: "Aggregated capacity encumbered for Grandfathered obligations" Response: The Drafting Team has changed this requirement using "set aside" instead of "encumbered". -x. R10.13 – It appears as though the following is missing from the last right parenthesis: "(TRM" Response: The SDT has modified the standard to address this typographical error. b. MOD-004 - i. R1 – Should have a fourth sub-requirement added to explain that if there is insufficient capacity available to satisfy all requests for CBM, the Transmission Service Provider shall explain in its CBMID how allocation of CBM will occur Response: Since CBM is a margin, and not a reservation, there is no need to allocate. If there is insufficient capacity, then either the TSP will set aside what is available or allow the ATC/AFC to become negative. (the new R4.2 and R4.3) The only time this would be required would be if multiple entities who requested to schedule using CBM above what the system could accommodate at the same time. At that time, their use would need to be pro-rata adjusted (possibly through TLR). - ii. R2 – Should be modified to the following: "…CBMID to the Transmission Operator, adjacent Transmission Service Provider…" Response: The SDT has modified this language to address your concerns. - iii. R8 – Should be modified to the following: "…set aside as CBM unless affected by a declared NERC Energy Emergency Alert (EEA) 2 or higher" Response: The SDT has modified this language to address your concerns. c. MOD-029 - i. R1.4 – "Non-regulating" should not be capitalized Response: The SDT has modified the standard to address this typographical error. - ii. R1.6 – "peak" should be deleted, as non-peak load forecasts may be used in TTC calculations Response: The SDT has removed the word "peak" to address your concerns. - iii. R1.12 – "ACTID" should be changed to "ATCID" Response: The SDT has modified the standard to address this typographical error.

Commenter	3. Comments on Requirements
	- iv. R2.2 – There appears to be a potential discrepancy between this requirement and other reliability requirements for establishing System Operating Limits. Response: The drafting team does not believe that there is a discrepancy between this requirement and any other reliability requirement for establishing System Operating Limits. Requirement R3 address' the relationship between the requirements in this standard and System Operating Limits. The new wording for R3 is as follows: The Transmission Operator shall establish the TTC at the lesser of the value calculated in R2 or any System Operating Limit for that ATC Path. We believe R3 now addresses the concern expressed. - v. R2.3 – "R1.2.1" should be changed to "R2.1" Response: The SDT has modified the standard to address this typographical error. - vi. R5 – "reserved" should be changed to "encumbered" in the description of NL, GF, and OS, as these obligations may not have been reserved via an OASIS transaction – Additionally, the "Firm Transmission Service" in the description of GF should not be capitalized Response: To address your concern, the SDT has changed the standard to use the term "set aside." - vii. R6 – "reserved" should be changed to "encumbered" in the description of GF and OS, as these obligations may not have been reserved via an OASIS transaction – Additionally, the "Transmission Service" in the description of GF should not be capitalized Response: To address your concern, the SDT has changed the standard to use the term "set aside." - viii. R7 and R8 – "Counter-schedules" should be changed to "Counterflows" with the definition supplied above [Counterflow: the impact of schedules, reservations, or actual flows of energy in the direction opposite to the constraint] Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. - ix. R8 – "non-" should be deleted from the description of ETC Response: The SDT has modified the standard to address this typographical error. d. MOD-030 - i. R2.1 – Delete "for" after "Flowgates" Response: The SDT has modified the standard to address this typographical error. - ii. R2.1.1 – BPA suggests the following clarification to this requirement, to avoid posting unnecessary data: "Any Facility within the Transmission Operator's area based on thermal, stability or voltage limits is a Flowgate if such limits

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	reduce transfer capability on a Posted Path Response: The Standard Drafting Team agrees. This requirement has been changed to reflect a more reasonable scope. - iii. MOD-001 allows an entity to select multiple methodologies to determine ATC. For example, an entity may elect to use Flowgates inside their affected area whereas they may also elect to use the Rated System Path Methodology at the interface of their affected area. Under this scenario, the applicable entity need not study Flowgates beyond the intercepting cut plane of its interface as the ATC at the interface falls not under MOD-030, but MOD-029. To prevent unneeded seams issues, the following rewrites are suggested: 1. R2.1.2 – All first Contingency transfer analyses from all adjacent Balancing Authority source sink combinations such that at a minimum the first three limiting Elements/Contingency combinations within the Transmission Operator's system are included as Flowgates, unless the interface between such adjacent Balancing Authorities is accounted for using the Rated System Path Methodology 2. If adopted, similar language should be applied to R3.5, R3.6, R5.1, R6.1, R6.3, R6.4, R7.2, and R7.4 Response: The SDT has modified the standard to ensure conflicts between the standards are minimized. R6.1, R6.3, R6.4, R7.2, R7.4 have been addressed by adding the stipulation that impacts of other neighboring systems only have to be used if they're impact is greater than what is used in the regional congestion management procedure. This allows for sparse networks that do not get impacted by neighboring transactions to ignore them. - iv. R4 – "Use" should not be capitalized. Response: The SDT has modified the standard to address this typographical error. Additionally, two sub-requirements should be added to allow for the modeling of impacts of Network Integration Transmission Service and Grandfathered service in the base AFC calculations. Response: The drafting team feels that R6 and R7 allow for the impacts of Network Integration Transmission Service and Grandfathered service to be accounted for in the AFC calculations. - v. R6.1 – "Firm Network" should be changed to "Network Integration Transmission Service" to be consistent with how this service is identified in the OATT Response: The language has been changed to be consistent with the OATT. - vi. R6.1.1.1, R6.1.2.1, R6.1.3.1, and R6.1.4.1 – "Peak" should be deleted, as non-peak load forecasts may be used in ETC calculations – Response: The SDT agrees, and has eliminated the word "peak."

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	Additionally R6.1.3.1 is incorrectly identified as "R6.1.3.1.1" Response: The SDT has modified the standard to address this typographical error. - vii. R6.3 – The last sentence should be a separate requirement, similar to R7.3 – this would result in the final sentence of R6.3 becoming R6.4 and the current R6.4 becoming R6.5. The new R6.4 and R6.5 should also be modified to the following to accommodate Grandfathered service or other statutory obligations for which a contract does not exist or scheduling requirements are not in place: "The impact of any firm Grandfathered obligations expected to be utilized…" Response: The SDT has modified the standard to address this typographical error. The SDT also incorporated the language suggested regarding "obligations" versus "contracts." - viii. R7.3, and R7.4 – Each should have the word "contracts" replaced with "obligations" to accommodate GF service that does not hold a contract. Response: The SDT agrees, and has replace contracts with obligations. ix. R7 – A sub-requirement should be added to allow for the inclusion of the impacts of Network Integration Transmission Service and Secondary Service Response: The SDT agreed, and has corrected this oversight.
Response: Please see in-line responses.	
British Columbia Transmission Corporation	1. MOD-001-1, R3.3 - The word "Facility" should be replaced with "Posted Path". Response: The Drafting Team changed the requirement so that neither term is necessary. 2. MOD-029-1, R1.6 - We suggest that the word "peak" be removed. Often maximum TTC occur at off-peak conditions when load near to the generation is lower. Response: The SDT has removed the word "peak" to address your concerns.
Response: Please see in-line responses.	
Clearwater Power Company	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
ColumbiaGrid, Inc.	[Intentionally left blank.]
Consumers Power, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	

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Duke Energy	- MOD-001-1, R5.2 should say "approved Interchange Transaction Tags" instead of "schedules". Response: This requirement has been removed. - MOD-001-1, R9 should say "recalculate" rather than "update". Response: The Drafting Team has modified the language and has included this change. - MOD-001-1, R10 should allow 30 days instead of 14 days to make data available after a request, since setting up the required data exchange protocols will be time-consuming. Response: The Drafting Team has incorporated this change. MOD-004-1, R3.1.1.2 should be revised to require a monthly GCIR value for each month during the current year and the following two years for each Balancing Authority or Posted Path. Response: The drafting team has set the requirement to 24 months. MOD-004-1, R3.2 should be revised as follows: Pursuant to the frequency established in the Transmission Service Provider's CBMID, update the request provided per 3.1 to reflect any changes that alter future needs for CBM or indicate that no change is needed. Response: The drafting team has provided clarifying language in R3.2 to address your concerns. MOD-004-1 Requirements: R3.2 At least every thirty-one days, update the request provided per R3.1 to reflect any changes that alter future needs for CBM or indicate that no change is needed. M4. The Load-Serving Entity that wants CBM shall provide dated copies of its updated CBM requests as evidence that it has updated its CBM request or confirmed no update was needed at least every thirty-one days, per R3.2 (R3). VSLs tied to this measure increase in severity due to change in GCIR. (e.g., Moderate VSL is tied to failure to update and Generation Capability Import Requirement had changed by more than 20MW or 10%, whichever is smaller, and not more than 30MW or 20%, whichever is smaller. Severe VSL is tied to failure to update and Generation Capability Import Requirement had changed by more than 40MW or 30%, whichever is smaller.) Duke Comments: 1. There is no basis in Order 890 for this requirement of updating every 31 days. This creates an unnecessary administrative burden on the Transmission Provider, the Transmission Planner, and the Load-Serving Entities. Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The standard is requiring that entities update their CBM at least once a month if it changes to ensure that no unneeded CBM is still being held back from the market.

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	2. The VSLs are too severe; If an LSE's GCIR is 5 MW when the initial request was submitted and it later rose to 7 MW (40% change), the LSE would be subject to penalty based on SEVERE VSL. Severity should reflect magnitudes of MW values that have a meaningful impact on reliability, not arbitrarily defined calculations. Response: The SDT understands the concern expressed, but believes it to be based on a misunderstanding of the relationship between Violation Severity Levels and Violation Risk Factors. VSLs are related to the amount of deviation from the standard. VRFs are related to the impact on reliability. In this case (R3), the Violation Risk Factor is "lower," indicating there is a low impact on reliability. This would result is a range of smaller Sanctions for violations of this requirement (based on the June 7, 2007, Sanction Guidelines, sanctions would range between $1,000 and $25,000 for this violation; additionally, since the Time Horizon is Operations Planning, sanctions would likely be on the lower side of this range). An analogous situation would be grades in school; Severity Levels are similar to the "grade" (A, B, C, D, and F) and the Risk Factor is similar to the "type of grade" (homework, quiz, research paper, term paper, final exam). 3. The requirements and measure should be changed so that it more accurately reflects the VSLs and should require updating the CBM request if GCIR changes by more than xx MW. Response: The SDT believes the requests should be accurate. Any case where the number is not accurate is a violation; how far off the number was from reality defines the grossness of the violation. 4. The only required timing update should be annual updates in order to provide requirements for the new 10th year. Response: The SDT disagrees for the reasons described above. MOD-004-1 Requirements: R3. A Load-Serving Entity (or group of Load-Serving Entities with an aggregated need for CBM) that wants Transfer Capability to be set aside in the form of CBM shall: R6. Within five days of the determination of CBM as described in R4 or R5, the Transmission Service Provider shall provide each Load-Serving Entity (or group of Load-Serving Entities with an aggregated need for CBM) that requested CBM and the Balancing Authority hosting its (their) load with a report that includes: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning] R6.1. The total amount of CBM for each Posted Path or Flowgate on the Transmission Service Provider's system in each of the months or years specified in the original request. If less than the sum of all requests was established as the CBM for any period: - For each Posted Path or Flowgate, a list of the values of each GCIR used to set the CBM for each of the months and years specified in the original request

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	- The option to request a system impact study. Duke Comments: 1. How shall penalties be assessed for a group of Load-Serving Entities? Is each LSE subject to the full penalty or is the penalty allocated to each LSE in the group? If allocated, how is that done? Are there NERC rules to address this situation? Response: We have incorporated the use of a Planned Resource Sharing Group (PRSG) A PRSG will need to register as a Joint Registration Organization and it would be the assessed entity. How the PRSG handles it from that point is outside the scope of this standard. 2. We foresee difficulties in groups of LSEs making a request for a system impact study and think this option should be removed. CBM is a margin and not a transmission service as defined by FERC, so there is no clearly defined mechanism for charging customers for such upgrades. The introduction of this option creates significant controversy which may delay approval of the standard. Response: The drafting team has changed this language to be clearer about the obligations of the TSP. Typo in R2 – Replace CBID with CBMID "R2. The Transmission Service Provider shall make available the CBMID and any changes to the CBMID to the Transmission Operator, Transmission Service Provider, Reliability Coordinator, Transmission Planner, and Planning Coordinator within seven days of a change." Response: The SDT has addressed this typographical error. MOD-004-1 Requirements: Evaluation deadlines do not consider other received requests R4. Within fourteen calendar days of receiving a request or change to a request for CBM that meets the requirements defined in R3.1, the Transmission Service Provider shall set the CBM for the months requested… R5. Within sixty calendar days of receiving a request or change to a request for CBM that meets the requirements defined in R3.1, the Transmission Planner shall set the CBM for the years requested… R4 High VSL: The Transmission Service Provider set CBM for the months requested as described in R3.1.1.2 more than 14, but not more than 30, days after receiving a request for CBM. R4 Severe VSL: The Transmission Service Provider set CBM for the months requested as described in R3.1.1.2 more than 30 days after receiving a request for CBM. R5 High VSL: The Transmission Planner set CBM for the years requested as described in R3.1.1.3 more than 60, but not more than 120, days after receiving a request for CBM. R5 Severe VSL: The Transmission Planner set CBM for the years requested as described in R3.1.1.3 more than 120 days after receiving a request for CBM. Duke Comments: CBM requests should be evaluated in queue order along with other Firm service requests and all rules that apply to evaluation timing of firm service request should apply to CBM requests. Monthly CBM requests should be have the

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	same timing requirements as Monthly Firm Point-to-Point requests and Yearly CBM requests should have the same timing requirements as Yearly Firm Point-to-Point requests. Delays in processing CBM requests may legitimately be due to the need to fully process earlier queued requests but the NERC process does not make provisions for such delays. NAESB should revise these rules. Transmission Providers should not be subject to penalties for failure to evaluate on time by both NERC and NAESB rules. Response: The standard has been modified to clarify that how the TSP handles the processing of CBM and TSRs will need to be described in their CBMID. Modifying CBM after evaluations have been completed is not aligned with current request evaluation process and may cause billing issues Response: The standard has been modified to remove conflicts with queuing to address your concern. MOD-004-1 Requirements: R4.3. If the sum of all CBM requests can not be met simultaneously, and during the evaluation of monthly ATC or AFC, additional capacity becomes available, increase the CBM based on availability up to a maximum of the sum of all CBM requests. R5.3. If the sum of all requests can not be met simultaneously, and during the planning process, additional capacity becomes available, increase the CBM based on availability up to a maximum of the sum of all requests. R4 High VSL: The Transmission Service Provider did not follow the process described in R4.1, R4.2, and R4.3. R4 Severe VSL: The Transmission Service Provider did not follow the process described in R4.1, R4.2, and R4.3, and the resource adequacy requirements of one or more Load Serving Entities requesting CBM were not met. R5 High VSL: The Transmission Planner did not follow the process described in R5.1, R5.2, R5.3, and R5.4. R5 Severe VSL: The Transmission Planner did not follow the process described in R5.1, R5.2, R5.3, and R5.4, and the resource adequacy requirements of one or more Load Serving Entities requesting CBM were not met. Duke Comments: 1. The current request evaluation process concludes with granting of capacity. If additional capacity becomes available, all parties with an interest in that capacity are permitted to request it and it is made available in queue order under established rules. These rules circumvent the current evaluation process and grant higher priority to unfulfilled CBM requests. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID.

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	2. Once an LSE has been denied CBM, the LSE should make other arrangements to meet needs. For example, the LSE could request CBM on a different Posted Path. If other arrangements are made, the LSE no longer needs CBM on the requested path, even if capacity becomes available at a later time. Response: The SDT does not disagree, and the LSE has an obligation to both make other arrangements and to modify their request to reduce their need for CBM if those other arrangements are made. If they do not reduce their request, then they may be penalized for so not doing. If they don't make other arrangements and the CBM never becomes available, then they may have problems meeting their generation reliability needs. 3. If these rules were applied and CBM changed after a rate filings had been submitted by the Transmission Provider (as required in FERC Order 890 paragraphs 257 & 258), the Transmission Provider's filing will be inaccurate. Response: Paragraphs 257 and 258 require that Transmission Providers "reflect the set-aside of transfer capability as CBM in the development of the rate for point-to-point transmission service." Paragraph 263 further clarifies "We also require transmission providers to design their transmission charges to ensure that the class of customers not benefiting from the CBM set-aside, i.e., point-to-point customers, do not pay a transmission charge that includes the cost of the CBM set-aside." The rules specified in the standard will not in themselves lead an inaccurate filing, but a rate design that is based in part on a CBM value derived from customer requests may do so, depending on the design. We believe that either the design should be modified to address this concern or the concern should be brought to the FERC by those parties with the concern. 4. Duke recommends removing these requirements. If additional ATC becomes available, LSEs should submit revised requests for CBM capacity. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. - MOD-008-1, Requirements R3 and R4 should allow the Transmission Operator and Transmission Service Provider 14 days instead of 7 days to make the information available after a request, since the responsible individual could be on vacation. The 7 day requirement could be especially burdensome on small entities. Response: The SDT reviewed this requirement. Based on your comments and others drafting team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient. #3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all

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	parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. - MOD-028-1, This proposed change, and the corresponding change proposed below for MOD-030-1 (new R3.2) should both be made for consistency. The technical reason for the change is as follows: Each of the two methods needs to use a model large enough in scope to correctly evaluate TTC. The wording regarding equivalent representation of areas also needs to be refined. The base model that is used is already an equivalent model and the standard is allowing for further reduction of the model at greater distances from the region under study. The wording implies that the base model cannot have any reduction for the RC area under study – it should allow for some reduction in the RC area under study and further reduction for the adjacent RC areas and complete elimination for 2nd tier RC areas. To make this proposed change, delete R2.2 and reword R2.1 as follows: Modeling data and topology of its Reliability Coordinator's area of responsibility and immediately adjacent synchronously connected Reliability Coordination areas. Response: The standard drafting team has modified the model scope in response to these comments. - MOD-028-1, R3.1 Delete the word "intra-peak" Response: We have modified the standard to eliminate this typographical error. - MOD-028-1, Add new R6.3 to read as follows: Upon the occurrence of a significant contingency such as the loss of 500 MW generation at any location, or loss of any transformer with low side rated greater than 200 kV, or loss of any other transmission facility rated 500 kV or above. Response: The standard drafting team has added the following language, "6.3 Within 24 hours of the unexpected outage of a 500 kV or higher transmission Facility or a autotransformer with a low-side voltage of 200 kV or higher for TTCs in effect during the anticipated duration of the outage; provided such outage is expected to last 24 hours or longer in duration." - MOD-030-1, Delete R3.2, R3.3, R3.4, R3.5 and R3.6 and add new R3.2 to read as follows: Contains modeling data and topology of its Reliability Coordinator's area of responsibility and immediately adjacent synchronously connected Reliability Coordination areas. Response: The SDT has modified the standard to incorporate this suggestion, but continued to require that entities model or equivalence adjacent non-synchronous systems. - MOD-030-1, Add new R3.3 as follows: Updated as defined below, unless otherwise requested by the Transmission Service Provider: R3.3.1 Updated at least once per day for AFC calculations for intra-day, next day, and days two

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	through 30. R3.3.2 Updated at least once per month for AFC calculations for months two through 13. R3.3.3 Updated upon the occurrence of a significant contingency such as the loss of 500MW generation at any location, or loss of any transformer with low side rated greater than 200 kV, or loss of any other transmission facility rated 500 kV or above. Response: There are minimum update intervals in the standard. The Transmission Operator and the Transmission service provider are free to agree on a more frequent interval.
Response: Please see in-line responses.	
Entergy Services Inc.	MOD-001-R2.3 Monthly ATC time period is defined as lasting through month 12. This is not consistent with MOD-030-R3.3 which specifies monthly AFC calculations through month 13. Similar descriptions are included in MOD-028-1 and MOD-029-1. Add in parenthesis "(months 2 through 13)" at the end of this sentence for clarification. Response: The Drafting Team has incorporated this change. MOD-001-1 R3.1 - replace "may' with "can" in 4th row of this requirement. Response: The Drafting Team has incorporated this change. MOD-001-1 R3.6 - It is not clear what is expected under Allocation methodology and what needs to be allocated. This requirement should be deleted or Allocation methodology should be more clearly defined. Response: The Drafting Team added detail to this requirement to address this concern. MOD-001-1 R5 along with R3.2 appears to be "fill in the blank standard" such that the TSP can use any counterflow percentage if they describe how they are accounting for counterflows in R3.2, then R5 is not applicable as it allows them to use their stated method. Therefore, either R5 should be strengthened to make it clear how counterflows and counter-schedules are to be accounted for, or TSP should be allowed to use their method of accounting for counterflows that is included in their ATCID per R3.2. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed. MOD-001-1 R6 - Minimum time of notification before implementing changes in ATCID should be included in this requirement. In addition, notification via electronic mail in parenthesis appears to be the only medium allowed which may not be reliable. Reference to electronic mail should either be removed or other mediums allowed for notification. Response: The Drafting Team has elected not to specify a minimum time of notification because, while reliability will be enhanced by advance notice of most changes, the team could envision rare cases where reliability could be impaired by the entity waiting for the notification period to expire before making the change. The parenthetical example was moved from the requirement to the measure and was clarified. MOD-001-1 R9.3 - Minimum frequency to update monthly ATC should be once a month rather than once a week.

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	Response: The majority of the commenters believed that once a week is an appropriate frequency so the Drafting Team left this unchanged. MOD-001-1 R10.12 - This requirement should be deleted as counterflows is not the data to be shared, these are percentage of reservations that are to be used for ATC calculations in a direction opposite to that of reservation that result in increase of the ATC/AFC values. Response: The SDT agrees and has removed the requirement. MOD-004-1 Effective Date should included "(MOD-001-1, MOD-004-1, MOD-008-1, MOD-028-1, MOD-029-1, and MOD-030-1)" between the words six and standards similar to other standards. Response: We have modified the language to make it consistent with the other standards, recognizing that the standards will now be posted for separate ballots. MOD-004-1 R1.3 - Words "request the" should be removed as there is no request for schedule, procedure for scheduling of energy is enough. Response: The drafting team did not want to imply that the LSE could actually schedule energy, and could only request that the BA schedule that energy on their behalf. MOD-004-1 R2 - The Transmission Service Provider needs to make the CBMID available only to the TOs, TSPs, RCs, TPs, and PCs that are in the TSP area or that are adjacent to its network and not to all TOs, TSPs, RCs, TPs, and PCs. Response: The standard has been modified to incorporate the suggested change. MOD-004-1 R3.1 - CBM is on a Posted Path basis or Flowgate basis whereas GCIR is on an entity basis, therefore either LSE should submit CBM on Posted Path basis or Flowgate basis (LSEs are not expected to know the impact on Posted Paths, or Flowgates of their GCIR, therefore they should preferably just request GCIR and leave calculation of CBM impact to TSP to be determined based on their CBMID under R1.2) which should be included in R3.1, or they can submit GCIR with additional information required in R3.1.1 and TSP shall allocate CBM on Posted Paths or Flowgates based on their CBMID. These requirements need to be made "either Posted Path or Flowgate basis or GCIR" rather than R3.1.1 as additional information required for submitting CBM request. Response: The SDT has modified the language slightly, but believes that as written, it is consistent with your intent. The requirements to specify the generation sources of GCIR in R3.1.1.4 allows the LSE to meet the concern you have expressed. MOD-004-1 R3.1.2 through R3.1.4 should be deleted or reworded as TSP is not a monitoring entity and they do not have any use for this information. LSE should have this information available for monitoring for compliance. Therefore, these requirements should be reworded accordingly. Response: The intent of this language is to allow the TSP 1.) to verify the information if they wish, and 2.) to be able to prove that they set the CBM correctly. The Transmission Service Provider has some responsibility to validate LSE requests, as described in paragraph 1077 of Order 693. The drafting team agrees with you that this information is needed for compliance and serves the responsibilities of both the TSP and the compliance monitor.

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	MOD-004-1 R3.2 "every thirty-one days" should be changed to "once a month". Response: The SDT chose the language "every thirty one days" do avoid the ambiguity associated with "once a month (e.g., the 1st of January, the 28th of February, etc…). MOD-004-1 R3.3 - Add "studies conducted in accordance with" between the words "and" and "verifiable". Response: The SDT has modified the standard to incorporate this change. MOD-004-1 R4.1.1 implies that LSE is going to request GCIR on each path which is not realistic for all methods. Since TSPs are required to allocate GCIR on each Posted Path based on their procedure included in CBMID, it should be reflected in this requirement. Response: The SDT has modified the requirement to address this concern by including the following language: "appropriate ATC Path(s)." MOD-004-1 R4.1.2 should be modified to be made similar to R4.1.1 such that entities using Flowgate methodology will allocate GCIR on Flowgates based on R1.2 in their CBMID. Response: The SDT has modified the language slightly, but believe that as written, it is consistent with both your and our intent. A cut off limit of 3% or greater for Distribution Factor is not substantiated and should not be included in the standard. TSPs may be required to include their cut off limit it in their CBMID. Response: The 3% threshold has been removed from the standard. MOD-004-1 R4.2.1 second bullet and R4.2.2 second bullet - since ATC is calculated after deducting the CBM, TRM and Existing Transmission Commitments from TTC, it is unclear which ATC has to be used as limit for allocating CBM. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. MOD-004-1 R 6.1 - This requirement should be split in two separate sub requirements, the first finishing after the first sentence, and the second sub requirement starts with "If…" and bullets should be made further sub requirements under this new sub requirement as these are applicable only to the situation "If less than the sum of all requests was established as the CBM for any period." Response: The SDT has modified the standard as suggested. System Impact Study is not a viable option; this should be changed to Facility Study. The drafting team thinks that neither term may be the correct term, and has modified R6. to address this concern. MOD-004-1 R7 - "within seven calendar days of their making a request" should also be applicable to sub requirements

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	R7.1, since there is no requirement for Transmission Operators to do anything with this data. They can request the data if they need it. Response: The SDT has incorporated the suggested change. MOD-004-1 R8 - There should be a limit for LSEs to be allowed to schedule only up to the limit of CBM set aside for them as FERC is requiring LSEs to pay for the CBM, if LSEs have not paid for the CBM, they should not be allowed to schedule against the CBM that has been set aside for others. If LSEs do not request enough GCIR and are later allowed to schedule it can adversely impact the reliability of the system. Response: FERC has indicated that this is to be treated as a margin, rather than as a transmission service product. Accordingly, the margin will be available for all entities to use, regardless of whether they requested it or not. MOD-004-1 R10 - This should be modified to limit the schedule up to the limit of the LSE's CBM reservation or impact of their GCIR on the CBM on the Posted Path or Flowgate. Setting aside CBM is like reserving the Firm Transmission Service, therefore an entity not reserving enough CBM to start with will impact the reliability of the system by overselling the Firm Transmission Service to others. Response: R10 has been changed to "The Transmission Service Provider shall approve any Arranged Interchange using CBM that is submitted by an Energy Deficient Entity under an EEA2 if the CBM is available." The amount of CBM set aside may not be the needed amount but the number one concern is to keep the lights on regardless of the request for CBM. MOD-008-1 R1.1 - It may not be possible to identify the impact of each of the uncertainties on each of its respective Posted Paths or Flowgates as included in this requirement. It should be sufficient to include method of coming up with TRM values in terms of percentage or MW taking into account the uncertainties included in this requirement. The language in this requirement should be reworded accordingly. Response: The TRM value resulting from the application of R1.1 can be a percentage or MW value developed through the use of the items listed under R1.1. Requirement R1.1 doesn't require the use of all the quantities listed, nor does is it require a single TRM for all paths. MOD-008-1 R2 - The first phrase covers the intent to only use the components of uncertainty from R1.1, the second phrase "and shall not include any of the components of Capacity Benefit Margin (CBM)" is redundant and should be deleted. Response: The drafting team agrees this statement is mostly redundant. However for two reasons the team decided to leave it in. The first is FERC order 890 was quite explicit on this point and so to leave it makes the compliance with that point quite explicit. It has also been pointed out in meetings and by commenters scenarios where there could be some overlap between CBM and TRM, so this is a catch all to point out that there is not supposed to be any overlap and the entity doing the TRM calculation is responsible for insuring that. MOD-008-1 R4 - Parenthesis around the parenthetical statement "within seven days….." should be removed.

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	Response: The SDT has corrected this typographical error. MOD-008-1 R5 - There is no justification for the 13 months frequency, it should be changed to once a year or 12 months to be more consistent with business cycles. Response: The standards does not preclude a yearly cycle. The intent of the team is that TRM should be calculated on a yearly basis, however not on a 365 day basis. Use of the term yearly or 12 month would cause some auditors to interpret that as 365 days. For example if the entity last reviewed the TRM on Dec 5th, it would have to review it by Dec 5th in the next year. So the next year it is done early on Nov 25th, on the following year it would have to be before that date. By going to 13 month duration the team believes it is encouraging a yearly review, without the entity having to be concerned about being a few days late, or do the task early and thereby "walking" the date for the next review. MOD-028-1 R1.1 - Word "may" should be replaced by the word "can" in last line. Response: The SDT has changed the words as suggested. MOD-028-1 R3 and R4- Insert a word "of" between "all" and "the" in third line. Response: The SDT has corrected this typographical error. MOD-028-1 R3.1 and 3.2 - Sub-requirements R3.1.1 through R3.1.3 are similar to the sub requirements R3.2.1 through R3.2.3 except using the Load Forecast for corresponding period. The only difference between R3.1 and R3.2 is that one is for the on-peak and the second is for the off-peak with very similar sub-requirements. These requirements should be combined into one requirement to simplify the standard and to be specific. Similar approach should be used for R4 to be merged into one requirement with R3 as the only difference is the period of calculation and to use corresponding Load forecasts. Response: The SDT believes providing explicit detail as we have done is clearer. MOD-028-1 R5.3 - Sub requirements for using the sources and sinks included as bullets should be converted into numbered sub requirements. Response: If sub requirements are used, the entity must satisfy all of the sub requirements. If bullets are used only those bullets that apply to the entity must be satisfied. In this specific requirement, only those bullets that apply to the specified condition will be used. MOD-028-1 R6.1 - Since forced outages during the week can impact Hourly and Daily TTCs, frequency of TTC calculations for hourly and Daily ATC calculations should be once a day rather than once a week. Response: The standard drafting team has added the following language, "6.3 Within 24 hours of the unexpected outage of a 500 kV or higher transmission Facility or a autotransformer with a low-side voltage of 200 kV or higher for TTCs in effect during the anticipated duration of the outage; provided such outage is expected to last 24 hours or longer in duration." MOD-028-1 R7 - It appears there is no consideration of contingencies in this process. Was this the intent of the SDT? If not, the incremental Transfer Capability should be changed to First Contingency Incremental Transfer Capability or

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	impact of contingencies should be included in the language of the requirement. Response: The drafting team believes reaching (respecting) SOL's incorporates contingencies into the process. MOD-028-1 R8 and R6.1 - If Transmission Operator calculates TTC once a week and provide those values to TSP within seven days of calculations, TTC used for Daily and hourly ATC calculations can be as old as 2 weeks, which is unrealistic. The time allowed to transfer TTC values from TO to TSP should be within one day of determination at the maximum, unless otherwise agreed to by the TSP. Response: The standard defines the minimum times. Entities are free to negotiate more frequent updates. MOD-028-1 R9 and R10 - Is Native Load included in NITS? If so, it should be included in the definition, otherwise, another term for Native Load should be included for ETC equation similar to that included in MOD-029-1 R5. Response: All Native Load is modeled in the base case used in determining the FCITC. However, only the portion of Native Load imported on paths that serve as interfaces with other Transmission Service Providers is included in NITS. MOD-028-1 R11 and R12 - Postbacks in these requirements refer to as defined in Business Practices, are these NAESB Business Practices or TSP Business Practices? It should be clarified. Response: The term Business Practices has been defined. MOD-028-1 R12 - Unscheduled Firm reservation need to be offered as non firm, if schedules are not received up to the scheduling deadline. Are these included in the postback definition? If not, these should be included in the equation for non firm ATC calculations. Response: This will be included in the Postbacks definition being developed by NAESB. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-029-1 R1.10 - "Extra High Voltage (EHV)" should be defined. Response: The SDT has eliminated this term from the requirement. MOD-029-1 R1.12 - "ACTID" is spelled incorrectly, it should be changed to "ATCID". Response: The SDT has corrected this typographical error. MOD-029-1 R2.7 - Regional Entity is indicated to have taken action to have the path rated using a different method. There is no requirement in NERC standards for Regional Entity to take action to rate the path, it should be clarified, or reference deleted. Response: The SDT has deleted the reference. MOD-029-1 R5 and R6 - Definitions of Native Load and NITS include "losses not otherwise included in TRM and CBM

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	standards". There are no such provision to separately include losses in TRM or CBM calculations in current versions of MOD-004-1 and MOD-008-1. The difference should be reconciled or reference removed from this requirement. Response: The SDT has re-ordered the items in the definition to make the statement more clear. MOD-029-1 R6 - There is no term for Native Load in this equation similar to that in R5. Is Native Load never served by a non-firm capacity reservation? If it can be served, the Native Load term should be included in R6 for consistency. Response: The SDT believes in this case, non-firm NITS would be used to serve that load. MOD-029-1 R7 and R8 - Postbacks use the term business practices with lower case in this standard. Which business practices this term refers to in this standard? Is it referring to the NAESB Business Practice Standards or TSP Business Practices? It should be clarified. If it means the same as in MOD-028-1 R11 and R12, it should be reconciled by capitalizing it and defining it. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. The SDT has also included a definition of Business Practices. MOD-030-1 R2.2 - Change "once per calendar quarter" to "once per calendar year" for the frequency of updating the list of Flowgates. Response: The drafting team agrees and changed the update period for internal flowgates to yearly. The drafting team has changed the update period for external flowgates to monthly. MOD-030-1 R3.4, R3.5, and R3.6 - The term "topology" should be replaced with "system topology" to reconcile it with the terms used in other NERC standards. Response: The SDT has incorporated the suggested change. MOD-030-1 R5.1 - Reword this requirement to allow the TSP to apply the outage rules defined in the TSP's ATCID and to include third party outage information "where available". It should read: "Include all expected generation and Transmission outages, additions, and retirements as modeled according to the Transmission Service Provider's outage rules defined in the ATCID during the period calculated for the Transmission Service Provider's area, and where available, for all adjacent Transmission Service Providers, and any Transmission Service Providers with which coordination agreements have been executed". Response: The Transmission Service Provider is required to include "known and expected" information, which we believe should address the concern. MOD-030-1 R5.2 - Reword this requirement to make it consistent with R2.1.3.1 by adding a statement on the threshold limit as follows: "For external (third-party) Flowgates with at least a 5% TDF, use any AFC for each specific Flowgate provided by that third party as the AFC for that flowgate." Response: The drafting team disagrees, and has clarified the requirement to clarify our intention. The requirement now states "For external Flowgates identified in R2.1.3, use any AFC for each specific Flowgate provided by that

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	Transmission Service Provider that calculates AFC for that Flowgate as the AFC " MOD-030-1 R6.1.4.2 - Reword to use TSP's rules defined in the ATCID as follows: "Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run, as they are expected to run as defined by the Transmission Service Provider's ATCID." Response: The SDT has incorporated this change as suggested. MOD-030-1 R6.3 and 6.4, R7.2 and R7.3 - Threshold of 3% is specified in the requirement with a foot note that TSPs may use a lower than 3% threshold, if desired. The threshold appears to be at the discretion of the TSP, therefore, it should be stated clearly as such. TSPs may be required to disclose it and include it in their ATCID for transparency purposes. Response: The SDT agrees, and has incorporated the suggestion into the standard. MOD-030-1 R8 - The capitalized term Business Practices used in Postback seems to refer to some defined Business Practices like NAESB or TSP business practices. Either the term should be defined under definitions, or it should be clarified in the requirement. Also, this term is not capitalized in R9, does it mean it is different business practices. The difference should be reconciled. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-030-1 R10 - To make this standard consistent with MOD-028-1 and MOD-029-1, there is no need to include an algorithm in this standard. In addition parenthetical "(and TFC to TTC)" should be deleted. The requirement can read "Transmission Service Provider shall convert or provide a tool to convert Flowgate AFCs to TTCs for Posted Paths by using appropriate distribution factors." and delete the remaining language from this requirement. In case this proposed change is not implemented by the SDT, Entergy proposes that the terms used in this requirement like OTDF Flowgate and PTDF Flowgate should either be defined or clarified. Response: Order 890, paragraph 211, requires that a clear methodology for converting AFCs into ATCs be provided. This requirement attempts to meet that directive. The drafting team has provided definitions for OTDF, PTDF, and Flowgate.
Response: Please see in-line responses.	
EPSA	
ERCOT	
Fall River Rural Electric Cooperative, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
FirstEnergy Corp.	1. MOD-001-1: - Applicability - Should include the Reliability Coordinator (RC). Per the NERC functional model, the RC is responsible

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	for the "coordination of ATC with Transmission Service Providers". Response: While the functional model does charge the RC with the "coordination of ATC with Transmission Service Providers," the drafting team did not find any applicable requirements for the RC with regard to the determination of ATC, TTC, AFC, or TFC. - R1 - The Transmission Operator (TOP) should not be responsible for choosing an ATC methodology; any methodology should be coordinated with the TOP, but the ultimate responsibility should fall onto the TSP. Also, it should be made clear that the use of the three methodologies must be in accordance with the "MOD" standards. Therefore, we propose a rewording of R1 as follows: "The Transmission Service Provider, in coordination with the Reliability Coordinator and Transmission Operator, shall choose an ATC methodology [footnote 1] (Area Interchange methodology, Rated System Path methodology, or Flowgate methodology in accordance with MOD-028, MOD-029, and MOD-030, respectively) for each Posted Path per time period for use in determining Transfer Capabilities of those Facilities within its Planning Coordinator's planning area". Response: The Transmission Operator is responsible for developing the SOLs that are a part of determining TTCs. As the development of TTC is not specifically assigned to any single entity in the Functional Model, the drafting team believed this to be the appropriate assignment. We suggest that any concerns with the Functional Model be brought to the team currently working to update the model. - R8 should not include the Transmission Operator. The TOP is not responsible for calculating the ATC, TTC, or AFC. Response: The Transmission Operator is responsible for developing the SOLs that are a part of determining TTCs. As the development of TTC is not specifically assigned to any single entity in the Functional Model, the drafting team believed this to be the appropriate assignment. We suggest that any concerns with the Functional Model be brought to the team currently working to update the model. 2. MOD-004-1: - R3 - This requirement should either be eliminated or specified under R1, as applicable to TSPs. Where R1 requires the TSP to have a procedure for LSEs to request CBM, R3 prescribes part of that procedure. If R1 is intended to give TSPs full liberty to develop its CBM procedure, then R3 is an unnecessary requirement. If instead R3 is an element of the procedure that must be common to all, then it should be added as a requirement for TSPs to include in their procedures. Response: R3 requires that LSEs provide certain information to the TSP when requesting CBM. It is not the obligation of the TSP to require this information; to ensure reliability, it is the obligation of the LSE who wants CBM to provide this information to the TSP. - R8 - This requirement should be included in a NAESB business standard. Any aspects of R8 as applicable to TSPs should remain. Response: Since the scheduling of CBM is a reliability based issue, the SDT believes it is appropriate to include some

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	requirements within the standard. - Effective Date: For consistency, the Effective Date section should be replaced to match what is in the other proposed standards under the Proposed Effective Date which references the other standards and is more complete that what is shown in MOD-004. Response: The effective date language has been modified and made consistent with the other standards, recognizing that the standards will now be posted for separate ballots. 3. MOD-008-1: - Applicability - Since TRM is a network-wide margin critical to calculating ATC, the TRM standard should also be applicable to the Reliability Coordinator (RC). Per the NERC functional model, the RC is responsible for the "coordination of ATC with Transmission Service Providers". Lastly, the RC must be included as an applicable entity as directed by FERC Order 693, Par. 1126. Response: "Applicability" is intended to indicate the entities that have been assigned requirements under the standard. The drafting team was unable to find any requirements that applied to the RC; therefore, the RC is not included in the applicability section. We do require in R3 that the RC be informed of the TRMID and supporting calculations used to determine TRM. - R1 - Since the Transmission Service Provider (TSP) is ultimately responsible for calculating and assuring proper ATC for its footprint, and since, per MOD-004-1 R1, the TSP is responsible for maintaining a CBMID, then it should follow that the TSP, and not the Transmission Operator (TOP), should be responsible for maintaining a TRMID. Plus, in R4 of MOD-008-1, the TSP has to make the TRMID available to other TSPs when requested. Wouldn't the process be smoother and more reliable if the TSP didn't first have to ask the TOP for the TRMID if the TSP already had and maintained its own TRMID? Therefore R1 should be reworded as follows: "Each Transmission Service Provider, in coordination with the Transmission Operator and Reliability Coordinator, shall prepare and keep current a TRM Implementation Document (TRMID) that includes, as a minimum, the following information:" Then, if R1 is changed as suggested, the following changes to other requirements to MOD-008-1 must be considered: - R2 & R3 - Replace "Transmission Operator" with "Transmission Service Provider" - R3.1 - Reword as follows: "The Transmission Operators with Facilities governed by the Transmission Service Provider". - R4 - Remove "used by its Transmission Operator(s)" - R5 - "Each Transmission Service Provider shall calculate, at least once every 13 months (in accordance with the definitions in its TRMID), a TRM value for the following time periods (on each Posted Path or Flowgate) and shall provide these TRM values to its Transmission Operator(s) and Transmission Planner(s) within seven calendar days of the calculation: Response: The SDT interprets the functional model to state that the Transmission Operator is responsible for the

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	situations that lead to needing TRM (e.g., emergency operations, developing contingency plans, etc…). As such, the SDT believes it is the responsibility of the TOP to determine TRM. However, the SDT also believes that the TSP is responsible for coordination with other entities; hence the exchange of information between the Transmission Operator and Transmission Service Provider. 4. MOD-030-1: - Applicability - Since Flowgates are points within the Transmission system through which Interchange Distribution Calculations are performed by the Reliability Coordinator, this standard should also be applicable to the Reliability Coordinator (RC). Also, per the NERC functional model, the RC is responsible for the "coordination of ATC with Transmission Service Providers". Response: While the functional model does charge the RC with the "coordination of ATC with Transmission Service Providers," the drafting team did not find any applicable requirements for the RC with regard to the determination of ATC, TTC, AFC, or TFC. Note that Flowgates used for congestion management are different from those used by ATC. - R2 - Although the Transmission Operator assists with gathering this information, this requirement should ultimately be the responsibility of the Transmission Service Provider (TSP), since the TSP prepares and maintains the Available Transfer Capability Implementation Document (ATCID). Also, the Reliability Coordinator should assist in gathering this data since this entity is closely monitoring Flowgate capacities in its area. Therefore, we suggest rewording R2 as follows: "The Transmission Service Provider, in coordination with the Transmission Operator and Reliability Coordinator, shall perform the following:" Response: Requirements in general must be assigned to a single functional entity. While that entity may seek assistance from other entities, language such as “in coordination with” implies a sharing of responsibility which does not in fact exist; therefore, we have chosen not to present it in this fashion. The Transmission Operator is responsible for developing the SOLs that are a part of determining TTCs. As the development of TTC is not specifically assigned to any single entity in the Functional Model, the drafting team believed this to be the appropriate assignment. - R3 - Incorrectly states that the Transmission Operator (TOP) determines the AFC. R3 should be reworded as follows: "The Transmission Operator, in coordination with the Reliability Coordinator, shall make available to the Transmission Service Provider a Transmission model to determine Available Flowgate Capability (AFC) that meets the following criteria:” Response: The SDT doesn’t recognize the role of the Reliability Coordinator for developing a Transmission model. R3 has been modified to remove the Transmission Operator from determining AFC.
Response: Please see in-line responses.	
Flathead	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.

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Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
FRCC	MOD 001: R9: This should be revised to indicate that updates are required only when data has changed. There are many entities whose ATC data may not change on a regular basis and requiring them to repost identical numbers on an hourly basis and maintain a log does not enhance reliability. Proposed wording "Each Transmission Service Provider shall update ATC at a minimum on the following frequency when the value has changed:" Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD-004-1: CBM: There does not seem to be a way to not have a CBMID even though the TSP policy is not to reserve CBM on any of its interfaces. Could the applicability be modified to exclude entities that do not use CBM? Response: We have modified the standard to address your concern and make it compliant with Order 890-A. MOD-008-1: TRM: The sub-requirements in R1.4 and R5 describe the ATC Operating, ATC Scheduling, and ATC Planning horizons as specified by FERC in Order 890 and should be identified by name to be consistent with the other MOD standards. Response: The horizons defined by FERC do not necessarily agree with those used in the industry and in other standards. As such, the SDT felt it would be more appropriate to specify the explicit times without the names. MOD-028-1: Area Interchange Methodology: R3 appears to require calculating TTCs for Posted Paths for intra-day and next day, on-peak and off-peak, R4 requires calculating TTCs for time periods beyond next day, and then R6 specifies frequencies that don't correspond. For example, R4.1.2 requires use of peak load forecast for the day being calculated, but R6.1 says calculate TTC for daily only once per week – which day's peak load forecast gets used? Response: R6 describes how often the Transmission Operator should perform the calculation. Depending on the timeframe of the TTC being calculated, R3 and R4 describe the appropriate data for the period that is being calculated.
Response: Please see in-line responses.	
Georgia Transmission Corporation	In MOD-008-1, R5, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. An error in calculating TRM does not change the resulting TTC or TFC; therefore an error in calculating TRM cannot be a Medium or Severe Violation Risk Factor. Response: As a result of the discussions subsequent to your comment, the drafting team split the old requirement R5 to two requirements (R4 and R5, the old R4 being deleted). This split allowed the team to review the criticality of recalculation of TRM and transmission of updated TRM values. The team determined that of the requirements, these

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	two are the most critical with regard to the capability of the electric system. Therefore the standard maintains a Medium VRF for both. In MOD-028-1, R2, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R2 can result in an TTC that is greater than the SOL or IROL Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system In MOD-028-1, R3, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a data different than that specified in R3 can result in a TTC that is greater than the SOL or IROL. The SDT also believe that not adhering to the time frames specified can lead to an inaccurate ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system MOD-028-1, R5 uses to the term "interface point" with the adjacent Transmission Service Provider; "interface point" is not defined. To meet MOD-028-1, R5 and MOD-030-1, R4, a Transmission Operator must define and simulate an artificial source or sink at the interface. The requirements should replace each occurrence of the phrase "use the interface point" with the phrase "use the adjacent Transmission Service Provider's area". We have modified the standard to address this concern. A representative example of the new language is as follows: use the immediately adjacent Balancing Authority associated with the Transmission Service Provider from which the power is to be received as the source. MOD-028-1, R8 is missing a Violation Risk Factor and a Time Horizon. They should be Violation Risk Factor: Lower and Time Horizon: Operations Planning. Response: The drafting team has added this section, chose to set the VRF and Time Horizon to Medium and Operations Planning. In MOD-028-1, R9, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: drafting team disagrees. A violation of R9 can create a situation where the service sold is in excess of the

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	TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-028-1, R11, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: drafting team disagrees. A violation of R11 can create a situation where the service sold is in excess of the TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R1, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R1 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R2, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not complying with R2 can result in a TTC that is greater than the SOL or IROL. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R5, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. A violation of R5 can create a situation where the service sold is in excess of the TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have

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	a negative effect on the reliability of the system. In MOD-029-1, R7, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. A violation of R7 can create a situation where the service sold is in excess of the TTC less the true ETC and other components, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R2, the Violation Risk Factor is listed as Lower; it should be listed as Medium. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. MOD-030-1, R2 requires that the TFC be less than the SOL; therefore MOD-030-1, R2 should have a Medium Violation Risk Factor. Response: The SDT has incorporated the suggested change. In MOD-030-1, R3, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R3 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. MOD-030-1,R4 uses the term "interface point" with the adjacent Transmission Service Provider; "interface point" is not defined. To meet MOD-028-1, R5 and MOD-030-1, R4, a Transmission Operator must define and simulate an artificial source or sink at the interface. The requirements should replace each occurrence of the phrase "use the interface point" with the phrase "use the adjacent Transmission Service Provider's area". Response: The SDT has modified the standard to address this concern. A representative example of the new language is as follows: use the immediately adjacent Balancing Authority associated with the Transmission Service Provider from which the power is to be received as the source. In MOD-030-1, R5, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be

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	Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not incorporating the information described in R5 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R6, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not implementing R6 correctly can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R9, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not implementing R9 correctly can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system.
Response: Please see in-line responses.	
Hydro One Networks	
Hydro-Québec TransÉnergie (HQT)	MOD-001 1. R1: The reference to the Planning Coordinator's planning area in R1 is not appropriate; the reference should be to the Transmission Operator's operating area. Response: The SDT has modified the standard to incorporate this change. 2. R3.3: Since this standard deals with short-term Transmission Service, the reference to Planning Coordinator should be removed from R3.3, R6.1 and R6.4 Response: Because ATC can impact months 12 and 13, the SDT believes the Planning Coordinator should be made aware of any such changes based on the descriptions in the functional model. 3. R3.3: This should be reworded to be clear that the TOP is providing input (TTC or TFC) to the TSP to perform

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	ATC calc. Also suggest removing reference to a 'tariff' since non-jurisdictional entities may not have a tariff. Suggest the following language: The identity of the Transmission Operators that provide data on each Posted Path for use by the Transmission Service Provider in calculating ATC. Response: The SDT has modified the standard to address your concerns. Acronyms TOP, TFC, and TSP need to be defined in the Background Information on p. 3. The abbreviation "calc." should be spelled out. Response: The Background Information will not become part of the Standards, and as such is not being revised. The Drafting Team believes TOP, TFC and TSP have been adequately defined in the Standards or the NERC Glossary of Terms. The Drafting Team could not find the abbreviation "calc." referred to. 4. R4 and R5 should reference both the terms counter-schedules and counterflow throughout the requirements Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. 5. R9 (or at a minimum the Measure for R9) must be modified to be clear that if TSP can demonstrate that no inputs to the ATC calculation have changed that an update of a 'timestamp' on an ATC value is not required. Suggested options for the language in R9: "Each TSP shall update ATC at a minimum on the following frequency, except that if all inputs to ATC are unchanged no update is required:" OR "Each TSP shall update ATC at a minimum on the frequencies listed below. However, if all inputs to ATC are unchanged no update is required." Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD-029 1. R1.10 refers to EHV without it being a defined term and different regions could define EHV to be different voltage levels; suggest one of the following actions be taken: (a) include the desired kV level of the BPS system in the standard, (b) remove the reference to EHV entirely, (c) add a NERC glossary term. EHV should be defined in the Background Information on p.3 and be understood to be applicable to and restricted to the BPS irrespective of that voltage level. That definition must also include the BPS voltage level it refers to. Response: The SDT has eliminated the reference to EHV. 2. R2 language could be interpreted that all N-2 contingencies must be considered in a TTC study. If the intent that the TTC study should consider all currently required planning criteria, a general reference should be made to the planning standards rather than try to summarize and reiterate those requirements here. Response: The SDT agrees and have modified R2.1, R2.1.1 & R2.1.2 to address your concerns by removing reference

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	to N-0, N-1 & N-2. 3. R2.1.5 contains a very specific consideration for EHV contingencies to be considered in the TTC. Is there a reliability need for ALL regions to consider EHVs in this manner? If not, we suggest removing this requirement from the NERC standard, where it can be added in a more detailed regional standard if required by a particular region. EHV should be defined in the Background Information on p. 3; the definition must include the BPS voltage level it refers to. Response: The SDT has eliminated this requirement in response to your concern.
Response: Please see in-line responses.	
IESO	MOD-001: - R1: We question the appropriateness of retaining the calculation of TTC within the MOD series standards rather than inclusion with the FAC series standards to assure consistency with the calculation of Total Transfer Capability (TC). While FERC did not explicitly direct the ERO to develop the TTC in FAC-012 as the NOPR had proposed, it nonetheless directed that the short and long-term calculations be consistent with TC to the extent possible (Order 693 @ P1039). To achieve such consistency, and to avoid virtually identical requirements in 2 standards, it is our view that TTC calculation should be part of the FAC-012 standard. Response: The SDT believes that that the inter-related nature of TTC and ATC requires that these two concepts be contained within one standard. To eliminate concerns with having virtually identical requirements in two standards, the SDT has proposed in the implementation plan the elimination of FAC-12. Further, we are unable to see the relevance of a Planning Coordinator's “planning area” in the TOP's determination of TTC and TSP's determination of ATC since the areas under the purview of a TOP, TSP and PC may differ among them. If an appropriate area needs to be included in the requirements then we would suggest the a Transmission Operator's area be specified for a TOP's determination of TTC, and a Transmission Service Provider's area be specified for a TSP's determination of ATC. Response: The SDT has modified the requirement to incorporate the suggested change. - R3: We do not agree that R3.1 to R3.6 are sub-requirements. They are attributes that need to be included (at a minimum) in the ATCID. The violation severity level of R3 would then depend on the number of these attributes not included in the ATCID. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-requirements. Additionally, the IRC is concerned with the drafting teams approach to explicitly defining the method (ATCID) to be used to consolidate the required information. While we may agree the ATCID may be conducive for audit purposes, requirements should only specify “what” is required and leave the “how” it is to be compiled to the responsible entity. Response: The development of the ATCID (and the CBMID and TRMID) is intended to create a single set of documentation that can be shared with neighboring entities for reliability coordination and understanding. It is also intended to facilitate coordination between the NERC and NAESB standards. The SDT does not believe it to be unnecessarily prescriptive, and if entities have other documents that contain this information, believes it would be acceptable to simply combine those documents under a single cover sheet.

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	- R6: We do not see the need to include Planning Coordinator in the list of entities to inform before a TSP implements a revised or new ATCID. Response: Because ATC can impact months 12 and 13, the SDT believes the Planning Coordinator should be made aware of any such changes based on the descriptions in the Functional Model. - R8: We suggest splitting this into two requirements - one for the TOP on TTC and one for TSP on ATC. Having a requirement to hold two entities to each comply with a specific part of it creates difficulties for developing violation risk factors, measures and violation severity level, and for compliance audit. Response: The SDT does not believe this structure creates any difficulties. Both entities are expected to comply, and each entity will be held responsible only for their own violations. - R9: There are markets which do not require reservations and hence it does not make sense that the ATC values should be reviewed or posted per this requirement because by the very nature of such market operations, the ATC/TTC values are pretty much static and only change when system conditions change and have a direct impact on the values. The requirement must be modified with a qualifier statement so that these values need to be reviewed and posted for the following conditions and the fact that these can be applied to areas with and without reservations. The following qualifier could be added: “The ATC shall be updated by the Transmission Service Provider if (a)The ATC/TTC values have changed since the last update and the TSP can provide documentation as to why these numbers had not changed until then and (b) The other TSP has changed the ATC/TTC values.” The main intention of the FERC Order 693 regarding the MOD standards was to ensure consistency, transparency, and communication and we believe that even though there is a mention of "frequency of posting" - section 1057, Order 693 - "...include a requirement that ATC be updated by all transmission providers on a consistent time interval..." the requirement, as is written now, is very prescriptive and the frequency of posting, especially the hourly postings/certifications is not required and is very cumbersome and extremely burdensome. The correct ATC/TTC values should always be posted on the appropriate website as this is a reliability consideration – this is what the standard requirement should capture - but the frequency of posting should be a NAESB requirement and not a “reliability standard”. Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. However, these standards do not refer to the posting of the data, only the calculation of it. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. R10: The requirement as written is difficult to understand. Suggest to delete the phrase "to each requester" to add clarify. Response: The Drafting Team has modified the language (including the deletion of the phrase “to each requester”) to add clarity; however, due to the nature of the requirement, it is a somewhat complex statement. The list of data that may be requested has been converted to a bulleted list to reflect the concept that not all the data has to be provided but only what has been requested out of that list. Further, similar to our comments on R3, R10.1 to R10.15 are the data to be provided. They are not sub-requirements. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-

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	requirements. MOD-004 - R1: R1.1 to R1.3 are elements to be included in the CBMID, they are not sub-requirements. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-requirements. - R2: The TSP should post the CBMID on the OASIS rather than making it available to the selected entities only. Response: The SDT does not disagree. However, for reliability purposes, only entities listed need to be aware of the changes. NAESB will deal with posting requirements. Note that posting the information on OASIS and giving the entities listed access to it would meet the requirement. - R5: We are unable to see the role of a Transmission Planner in setting the value of CBM. TP is a recipient of the CBM value for considering in its transmission planning process, not the setter. The TSP should be performing the tasks listed in R5 upon receiving requests from the LSEs. Response: Based on the Functional Model, the SDT believes that once the determination of CBM extends beyond the current year, the Transmission Planner must be involved in setting the value. - R7: Accordingly, the TP should not be responsible for providing supporting data used for allocating CBM. Response: Based on the Functional Model, the SDT believes that once the determination of CBM extends beyond the current year, the Transmission Planner must be involved in setting the value. MOD-008 - R1: R1.1 to R1.4 are elements to be included in the TRMID, they are not sub-requirements. R1.5 is a legitimate sub-requirement; it doesn't need to be changed. Response: The team discussed the difference between bullets and sub-requirements quite extensively. The team decided that bullet lists are appropriate for items that may or may not be included in something, a progression of steps, sequence of events or a listing of similar items. In the case of the TRM calculations, the items in 1.1 may or may not be included based on the entity's TRM method and are similar, therefore they are listed together. Sub-requirements 1.2,1.3 and 1.4 are not optional but must be performed. In addition items 1.2,1.3 and 1.4 do not have much in common in terms of structure and are rather too long to lend themselves to bulleted lists. However the team did clarify in the VSL listing that violation of more then one sub-requirement is not multiple violation, but a single violation with varying levels of severity depending on the number of sub-requirements not met. While the drafting team did not make the sub-requirements bullets, this change may satisfy your concern.

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	- R4: The TSP should post the TRMID and related information on the OASIS rather than making it available to the requesting TSPs only. Response: The SDT does not disagree. However, for reliability purposes, only entities listed need to be aware of the changes. NAESB will deal with posting requirements. Note that posting the information on OASIS and giving the entities listed access to it would meet the requirement. MOD-030 - R2.3 does not identify that TFC can be limited by an IROL but it should. Response: Based on current standards, all IROLs are inherently SOLs, so a requirement to honor SOLs includes IROLs. If selling transmission service really requires development of a reliability standard, R2.4 should be modified to require updating the TFC any time the underlying determinants, such as facility ratings, change. Response: The SDT added requirement R2.5.1 in MOD-030 to include that rating updates from the Transmission Owner require the TFC to reflect the change. - R3.4 requires that a TOP include all modeling and topology for Facilities in the Reliability Coordinator Area. For a small TOP within a large RC, this may be overkill. Response: The SDT feels that requiring the model to contain the facilities in the RC area will be required for consistent, reliable calculation of AFC. The standard drafting team feels that it will not be burdensome to supply such data even for a small TOP within a large RC. The team has added a statement saying, "Equivalent representation of radial lines and facilities161kV or below is allowed," which should help with the modeling. R3.5 arbitrarily requires a model to include 3 contiguous busses from the tie-line into synchronously connected systems and R3.6 requires at least an equivalent representation further in than that. These are not appropriate or acceptable methods for determining modeling detail level. There exist commercially available modeling packages that can be used to determine the impacts of the external system and how much detail should be kept. There should be a requirement(s) that establishes thresholds such as percent impact of flows on the TOP system for removal of facilities from the external footprint. If the impact exceeds that threshold, then the external facility should be modeled in detail. Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. This level of modeling detail provides some of the effects of the neighboring without burdening the Transmission Operator. However, additional modeling detail can be used. This standard should not include any requirements on the Transmission Operator. R2 should be a requirement on the Transmission Service Provider. Ultimately, they will have to work with the TOP to identify the flowgates and it is in the best interest of the TOP to help the TSP but the requirement should not apply to the TOP. This drafting team should work with the appropriate drafting team developing TOP requirements to ensure that there is a requirement for the TOP to communicate limits to the TP. Response: The SDT believes that the functional model indicates this requirement is the responsibility of the

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	Transmission Operator. R3 should not apply to the TOP. It should apply to the TSP. The TSP should use system limit inputs such as SOL and IROL given by the TOP to determine TFC. Ultimately, R3 should be a simple requirement for the TSP to use the system limits determine by the TOP per FAC standard to define the TFC. No sub-requirements are then required. Response: The SDT believes that the functional model indicates this requirement is the responsibility of the Transmission Operator. MOD-028 - R2.2 is not clear - modeling "beyond Reliability Coordination Areas" may not be feasible in many cases, especially when entire second or third tier RCs have to be modeled - adjacent RC area modeling is a must but modeling of beyond adjacent RC areas should be at the discretion of the Transmission Operator. Also, R2.1 through R2.3 are model parameters and not requirements per se. Response: By allowing for “equivalent representation” of these areas, the entire second or third tier RCs area is not required to be modeled; we are allowing for significant flexibility in this requirement. MOD-029 - R2.1.5 is worded inconsistently with the rest of the bullet points. It should read as: "System disturbances for stability studies by a three-phase-to-ground fault on all modeled “Extra High Voltage (EHV)” buses adjacent to the major interconnection point of the modeled Posted Path should not render the system unstable". Response: The SDT has deleted this requirement in response to your comment..
Response:	
ISO/RTO Council (IRC)	For MOD-001: - R1 - We question the appropriateness of retaining the calculation of TTC within the MOD series standards rather than inclusion with the FAC series standards to assure consistence with the calculation of Total Transfer Capability (TC). While FERC did not explicitly direct the ERO to develop the TTC in FAC-012 as the NOPR had proposed, it nonetheless directed that the short and long-term calculations be consistent with TC to the extent possible (Order 693 @ P1039). To achieve such consistency, and to avoid virtually identical requirements in 2 standards, it is the IRC’s view TTC calculation should be part of the FAC-012 standard. Response: The SDT believes that that the inter-related nature of TTC and ATC requires that these two concepts be contained within one standard. To eliminate concerns with having virtually identical requirements in two standards, the SDT has proposed in the implementation plan the elimination of FAC-12. Further, we are unable to see the relevance of a Planning Coordinator's “planning area” in the TOP's determination of TTC and TSP's determination of ATC since the areas under the purview of a TOP, TSP and PC may differ among them. If an appropriate area needs to be included in the requirements then we would suggest the a Transmission Operator's

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	area be specified for a TOP's determination of TTC, and a Transmission Service Provider's area be specified for a TSP's determination of ATC. Response: The SDT has modified the requirement to incorporate the suggested change. - R3: We do not agree that R3.1 to R3.6 are sub-requirements. They are attributes that need to be included (at a minimum) in the ATCID. The violation severity level of R3 would then depend on the number of these attributes not included in the ATCID. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-requirements. Additionally, the IRC is concerned with the drafting teams approach to explicitly defining the method (ATCID) to be used to consolidate the required information. While we may agree the ATCID may be conducive for audit purposes, requirements should only specify "what" is required and leave the "how" it is to be compiled to the responsible entity. Response: The development of the ATCID (and the CBMID and TRMID) is intended to create a single set of documentation that can be shared with neighboring entities for reliability coordination and understanding. It is also intended to facilitate coordination between the NERC and NAESB standards. The SDT does not believe it to be unnecessarily prescriptive, and if entities have other documents that contain this information, believes it would be acceptable to simply combine those documents under a single cover sheet. - R6: We do not see the need to include Planning Coordinator in the list of entities to inform before a TSP implements a revised or new ATCID. Response: Because ATC can impact months 12 and 13, the SDT believes the Planning Coordinator should be made aware of any such changes based on the descriptions in the Functional Model. - R8: We suggest splitting this into two requirements - one for the TOP on TTC and one for TSP on ATC. Having a requirement to hold two entities to each comply with a specific part of it creates difficulties for developing violation risk factors, measures and violation severity level, and for compliance audit. Response: The SDT does not believe this structure creates any difficulties. Both entities are expected to comply, and each entity will be held responsible only for their own violations. - R9: There are markets which do not require reservations and hence it does not make sense that the ATC values should be reviewed or posted per this requirement because by the very nature of such market operations, the ATC/TTC values are pretty much static and only change when system conditions change and have a direct impact on the values. The requirement must be modified with a qualifier statement so that these values need to be reviewed and posted for the following conditions and the fact that these can be applied to areas with and without reservations. The

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	following qualifier could be added: “The ATC shall be updated by the Transmission Service Provider if (a)The ATC/TTC values have changed since the last update and the TSP can provide documentation as to why these numbers had not changed until then and (b) The other TSP has changed the ATC/TTC values.” The main intention of the FERC Order 693 regarding the MOD standards was to ensure consistency, transparency, and communication and we believe that even though there is a mention of "frequency of posting" - section 1057, Order 693 - "...include a requirement that ATC be updated by all transmission providers on a consistent time interval..." the requirement, as is written now, is very prescriptive and the frequency of posting, especially the hourly postings/certifications is not required and is very cumbersome and extremely burdensome. The correct ATC/TTC values should always be posted on the appropriate website as this is a reliability consideration – this is what the standard requirement should capture - but the frequency of posting should be a NAESB requirement and not a “reliability standard”. Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. However, these standards do not refer to the posting of the data, only the calculation of it. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. - R10: The requirement as written is difficult to understand. Suggest to delete the phrase "to each requester" to add clarify. Response: The Drafting Team has modified the language (including the deletion of the phrase “to each requester”) to add clarity; however, due to the nature of the requirement, it is a somewhat complex statement. The list of data that may be requested has been converted to a bulleted list to reflect the concept that not all the data has to be provided but only what has been requested out of that list. Further, similar to our comments on R3, R10.1 to R10.15 are the data to be provided. They are not sub-requirements. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-requirements. MOD-004 - R1: R1.1 to R1.3 are elements to be included in the CBMID, they are not sub-requirements. Response: Each of these items is required, and therefore the SDT believes they should be enumerated as sub-requirements. - R5: We are unable to see the role of a Transmission Planner in setting the value of CBM. TP is a recipient of the CMB value for considering in its transmission planning process, not the setter. The TSP should be performing the tasks listed in R5 upon receiving requests from the LSEs. Response: Based on the Functional Model, the SDT believes that once the determination of CBM extends beyond the

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	current year, the Transmission Planner must be involved in setting the value. - R7: Accordingly, TP should not be responsible for providing supporting data used for allocating CBM. Response: Based on the Functional Model, the SDT believes that once the determination of CBM extends beyond the current year, the Transmission Planner must be involved in setting the value. MOD-008 - R1: R1.1 to R1.4 are elements to be included in the TRMID, they are not sub-requirements. R1.5 is a legitimate sub-requirement; it doesn't need to be changed. MOD-29 - R1.6. We suggest this bullet be deleted. This is already addressed in R2 wherein the modeling process is dictated. In the RSP methodology, "peak load forecasts" are not used to stress the system; rather, load and generation are simulated to stress the system to its greatest capacity. There are cases when the highest forecasted load may not stress the system to its greatest utilization – which is the goal of the R2 under the RSP. Response: The SDT has removed the requirement for "peak" load forecasts, but believe load forecasts in general sill provide value. - R2.3 We suggest correcting "…as determined by R1.2.1…" to read "…as determined by R2.1." Response: The SDT has corrected this typographical error. - R5. The language describing Native Load should be changed from "reserved" to "encumbered." Encumbered is the word most frequently used in conjunction with OASIS to describe this condition. The same change should apply to GF sub F. Response: The SDT has elected to use the term "set aside" in response to this comment. The language describing Grandfathered capacity includes the defined terms "Firm" and "Transmission Service." Use of these words as defined terms is inconsistent throughout the proposed standards. They should either be changed here to a lower case or all applicable areas in each proposed standard should be changed to the defined term. Response: The SDT aggress and has made the changes for consistency. MOD-030 - R2.3 does not identify that TFC can be limited by an IROL but it should. Response: Based on current standards, all IROLs are inherently SOLs, so a requirement to honor SOLs includes IROLs. If selling transmission service really requires development of a reliability standard, R2.4 should be modified to require updating the TFC any time the underlying determinants, such as facility ratings, change. Response: The SDT added requirement R2.5.1 in MOD-030 to include that rating updates from the Transmission

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	Owner require the TFC to reflect the change. - R3.4 requires that a TOP include all modeling and topology for Facilities in the Reliability Coordinator Area. For a small TOP within a large RC, this may be overkill. Response: The SDT feels that requiring the model to contain the facilities in the RC area will be required for consistent, reliable calculation of AFC. The standard drafting team feels that it will not be burdensome to supply such data even for a small TOP within a large RC. The team has added a statement saying, "Equivalent representation of radial lines and facilities161kV or below is allowed," which should help with the modeling. R3.5 arbitrarily requires a model to include 3 contiguous busses from the tie-line into synchronously connected systems and R3.6 requires at least an equivalent representation further in than that. These are not appropriate or acceptable methods for determining modeling detail level. The two involved TSPs for the given transmission system and adjacent transmission system should determine the appropriate level of modeling detail needed in the adjacent transmission system. Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. This level of modeling detail provides some of the effects of the neighboring without burdening the Transmission Operator. However, additional modeling detail can be used. This standard should not include any requirements on the Transmission Operator. R2 should be a requirement on the Transmission Service Provider. Ultimately, they will have to work with the TOP to identify the flowgates and it is in the best interest of the TOP to help the TSP but the requirement should not apply to the TOP. This drafting team should work with the appropriate drafting team developing TOP requirements to ensure that there is a requirement for the TOP to communicate limits to the TSP. Response: The SDT believes that the functional model indicates this requirement is the responsibility of the Transmission Operator. R3 should not apply to the TOP. It should apply to the TSP. The TSP should use system limit inputs such as SOL and IROL given by the TOP to determine TFC. Ultimately, R3 should be a simple requirement for the TSP to use the system limits determine by the TOP per FAC-014-1 standard to define the TFC. No sub-requirements are then required. Response: The SDT believes that the functional model indicates this requirement is the responsibility of the Transmission Operator. - R10 requires that all TSPs convert their AFCs and TFCs to ATC and TTC values. The IRC supports an allowance for entities whose tariffs do not use ATC and TTC to meet this requirement through a tool rather than manual calculations. There is no value added to the customer to have ATC and TTC values for transmission service that is sold on an AFC

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	and TFC basis. Therefore these TSPs should not be burdened with the added expense and effort to convert the values manually. The IRC proposes the following language, "The Transmission Service Provider shall convert or provide a tool to convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths." Response: The language as written does not prohibit the use of a tool to perform this calculation.
Response: Please see in-line responses.	
Manitoba Hydro	R.3.5 of MOD-030-1, arbitrarily requiring modeling data and topology for at least three contiguous busses is too prescriptive. Standards should set out goals and use measures to determine if these goals were achieved. How the goals are best achieved are best determined by the Transmission Owner/Operator. If the goal is to improve loop flow, then the measure should be developed that ascertains loop flow improvement. A prescriptive number of busses does not insure that loop flow is appropriately captured.
Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. This level of modeling detail provides some of the effects of the neighboring without burdening the TO. However, additional modeling detail can be used.	
MidAmerican Energy Electric Trading	
Midwest ISO	MOD-001-1: - R.3.3 of MOD-001-1 should read "The identity or a link to the identity of the Planning Coordinator…associated with each Flowgate…". Reasoning: Common practice is to include flowgates rather than all facilities. Also, the list of Flowgates may get updated often (monthly). We suggest including a link to the Flowgates. Having this link will reduce the burden of having to update the ATCID on a monthly basis. Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. MOD-004-1: - R4.2 of MOD-004-1 should be reworded as: "…simultaneously, or a methodology to meet resource adequacy criteria that assumes an aggregated need for CBM, or all firm ATC or AFC has been allocated…" Reasoning: Assuming each LSE (or group of LSE) submits its GCIR based on 1day/10year criteria, preserving the "sum" of all such requests is equal to planning according to such 1day/10year emergency happens in all LSEs (or groups of LSE) at the same time. In a large capacity sharing pool such as MISO, this is to plan way beyond 1day/10year criteria. We recognize the right of LSE having special requirement based on state requirement. However, the original lingual doesn't allow MISO to continue its current methodology ("max" instead of "sum") even if all LSEs agree to do so. An alternative could be allowed by the standard such that regional TSPs like ISO/RTOs that develop a consensus method with stakeholders of evaluating CBM needs on a regional basis may base CBM on LSE load forecasts and firm generation commitments, and have the CBM calculated by the TSP as necessary to ensure resource reliability criteria. Response: The drafting team has modified the standard to include the concept of a Planned Resource Sharing Group.

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	- R4.1.2.2 of MOD-004-1 should read "As a minimum standard, classify … greater than 3% on an OTDF Flowgate or 5% on a PTDF Flowgate as a significant impact". Response: The drafting team has eliminated this requirement from the standard. - For R4.2.2. of MOD-004-1, since AFC is determined from CBM, CBM for each Flowgate should not be dependent on AFC. CBM can be big enough to drive AFC to zero or negative. This simply means that resource adequacy criteria can't be met, and no capacity will be available on that Flowgate (which is what the original wording of this requirement was trying to do anyway). Therefore we believe CBM should not be set to AFC, it should be left at whatever value was calculated. Suggestion language: For Flowgates, Entities may use a static number, which requires its CBMID describe the procedure of utilizing CBM, or set the CBM for each Flowgate equal to the lesser of: - For R4.3 and R5.3 of MOD-004-1, see the comment for R4.2.2. The same argument applies to these requirements. - For R5.2 of MOD-004-1, see the comment for R4.2. The same rewording is recommended. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. MOD-030-1: - MOD-030-1, R2 should read "…Transmission Operator or Transmission Service Provider…" After hearing some industry comment that including this "or" (as we have in multiple comments) may not be possible in a standards requirement, we look to the team to determine how best to include some flexibility in which entity is required to meet the standard, to respect the varying distribution of work across these regions. Response: The SDT believes that the NERC functional model indicates this to be the responsibility of the Transmission Operator. - R3 of MOD-030-1 should read "The Transmission Service Provider shall use a Transmission model to determine…" And then an additional criteria bullet could be added that states "Contains data provided by the Transmission Operator, to the extent that it is available." the wording on this comment is very draft Response: R3 has been modified to remove the TOP from determining AFC and R5.1 has been modified for the TSP to use the models provided by the Transmission Operator. - R.3.5 of MOD-030-1, arbitrarily requiring modeling data and topology for at least three contiguous busses is too prescriptive. This requirement could be rewritten to as "Contains modeling data and topology agreed upon by each adjacent Reliability Coordinator Area and the Transmission Operator or the Transmission Service Provider." However it is worded, somehow the requirement has to be set based on the intention of improving loop flows, not getting to a certain number of busses.

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	Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. This level of modeling detail provides some of the effects of the neighboring without burdening the TO. However, additional modeling detail can be used. - R4. of MOD-030-1 needs to be rewritten. First, we believe NERC standard shouldn't intervene with how TSP treats PTP reservations. TSP has the best knowledge of their system and knows what treatment gives the best AFC forecast. Second, if this treatment has to be discussed anyway, we believe that having some flexibility is better than requiring the use of source/sink. For example, one transaction going across multiple OASIS will have the same source/sink along the path. Using source/sink could result in double-counting, triple counting, etc. Another example is that, in large TSP area such as MISO, OASIS POR/POD or Source/Sink can't represent real-time market central dispatch. Reservations/schedules only determine overall MISO interchange, not interchange for MISO internal BAs. In other cases, some other method may be more desirable. If getting the most accurate calculation (while not hindering transparency) is the intent of the team, then the way in which the reservation is modeled should not solely depend on the information in the request, but rather on a methodology that can be reviewed by everyone. Suggested language? (maybe in the same line as "a methodology that can be reviewed by everyone" Response: The SDT believes that the requirement gives significant flexibility based on the model used to analyze the reservations. Note that "the market" could be an equivalence, depending on how the word is interpreted. The SDT has modified the language in 6.2, 6.3, 7.1, and 7.2 to address concerns with "double counting." For R10. of MOD-030-1, the text describing "P" should read: "…as a minimum standard, a Flowgate is considered 'impacted' by a path if the Distribution Factor for that path is greater than 3% on an OTDF Flowgate or 5% on a PTDF Flowgate". Response: The SDT believes that an OTDF or PTDF greater than 3% is appropriate.
Response: Please see in-line responses.	
Modesto Irrigation District	MID supports the comments submitted by SMUD on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
MRO	- MOD-001, R1, should read "…Transmission Operator or Transmission Service Provider…" After hearing some industry comment that including this "or" (as we have in multiple comments) may not be possible in a standards requirement, we look to the team to determine how best to include some flexibility in which entity is required to meet the standard, to respect the varying distribution of work across these regions. Response: The SDT believes that the NERC functional model indicates this to be the responsibility of the Transmission Operator. - MOD-001-1 R1: The requirement to select one method for each path needs to be clarified. Some MRO members use the rated system path method for CA-CA hard-tie calculations and then use the flowgate method facilities expected to be congested. The requirement to translate AFC to ATC for each path could result in a conflict if the CA-CA path limit is based upon the rated path method when a flowgate limits the path rating when AFCs are converted to ATCs. The MRO recommends that the SDT clarify the requirement as necessary to explain how this conflict will be

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	resolved. Response: The SDT believes that Transmission Operators and Transmission Service Providers will need to come to this determination on their own. It is the hope of the SDT that both numbers could be expected to be reasonably close. However, in any case, the SDT would expect that entities would use the most conservative value to maintain reliability of the system. - MOD-001-1 R.3.3 should read "The identity or a link to the identity of the Planning Coordinator and Transmission Operator…associated with each Flowgate…". Reasoning: Common practice is to include flowgates rather than all facilities. Also, the list of Flowgates may get updated often (monthly). We suggest including a link to the Flowgates. Having this link will reduce the burden of having to update the ATCID on a monthly basis. Response: This requirement has been modified to eliminate the reference to facilities. - MOD-001-1 R3.6: The MRO does not understand what “allocation” is. The MRO asks that the SDT clarify this word in the standard. Response: The SDT has clarified the meaning of “allocation” by in its requirement for detail about it within the ATCID in MOD-001. An example of allocation is the use of “Available Share of Total Flowgate Capability,” as is done as part of the PJM/MISO Joint Operating Agreement. - MOD-001-1, R6, the method of notification should include an option for public posting such as OASIS. Response: The intent of this requirement is to require the entity making the change to inform the entities affected by the change. Simply posting the information on OASIS does not meet this intent. Note that we are making this requirement more generic, and will allow methods other than e-mail. - MOD-001-1, R10. 14 days can be too short when there are multiple requests pending. There should be a queue process. It is reasonable to request a response time for the first request in the queue, but not on all simultaneous requests. Response: The time has been changed from 14 days to 30 days. Note that providers need not wait to build their data exchange systems until the data is requested; the intent of the 30 days is to allow for any necessary coordination details and access approvals to be taken care of prior to the beginning of the data exchange. - MOD-001-1 R10: The extent of data to be provided upon request is potentially too extensive to be workable or justified. Response: The SDT does not believe the data to be too extensive or not justified. - MOD-001-1 R10: The requirement should be to only provide your own data. Otherwise there can be issues of confidentiality with providing third party data. Response: The SDT has incorporated the suggested change. - MOD-001-1 R10: There should be a restriction that it is only required to provide data used in AFC calculations. This may be implied but it should be made clear.

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	Response: The requirement now references that this is data "to be used in ATC calculations." - MOD-001-1 R10.1: The need to provide transmission "additions and retirements" should be restricted to only those used in AFC calculations. The open planning process is the correct venue to request info on planned facilities, not the ATC standards. Response: The SDT believes that all additions and retirements within an area may have a legitimate impact on ATC/AFC, and should be disclosed. This is not intended to circumvent any planning process. - MOD-001-1 R10.4" "details" needs to be expanded upon. The MRO does not understand what this means. Response: The SDT has eliminated the requirement for the details. -MOD-001-1, R10.12. Since there is a requirement to provide this information in 14 days, this needs to be clarified to say that information that must be provided is the rules for calculating counterflow used in the calculation of ATCs, not the actual MW values because the MW would be too much data to provide in 14 days. Response: The SDT has eliminated this requirement. - MOD-004-1 does not seem to provide for those Transmission Service Providers who have a practice of maintaining zero CBM due to reserve sharing arrangements in which little outside assistance has been assumed in developing their historical generation reserve requirements. The MRO recommends that a requirement be added to MOD-004-1 outlining what descriptions must be provided in the CBMID to describe zero CBM practices such as under R3.1. For the SDT's information, MAPP historically has self provided its reserve requirements without outside assistance and therefore has historically set CBM to zero. Response: Based on this comment, as well as the recent FERC Order 890A, the SDT has clarified the applicability of this requirement such that entities who do not use CBM need not comply. - MOD-004, R3 and R4, A monthly value is extremely difficult to administrate and implement in the ATC calculation. Such a requirement will subject the TSP to significant increases in cost (the vendor has to provide new code and the frequency of TSP updates would drastically increase). GCIR calculation part has to do a lot more studies. Midwest ISO suggests leaving it to each region to decide on the time intervals. Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. We are requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been modified to clarify the intent of that section. - MOD-004, R3.1 – This section should be updated to clarify what is meant to be requested. For example, it states "requested for each month for each year for the next ten year period." Do you really want 120 months worth of requests, or 12 monthly requests and 9 yearly? Suggested wording "for each month for the first 12 months and for each year for the remainder of the ten year period" Response: The SDT has modified the language to of the requirement to be more clear.

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	- MOD-004, R3.2 – Why should LSE update every month if CBM is only calculated once per year? We suggest that these timelines be clarified. Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. We are requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been modified to clarify the intent of that section. - MOD-004-1 R4.2 should be reworded as: "…simultaneously, or a methodology to meet Resource Adequacy criteria that assumes an aggregated need for CBM, or all firm ATC or AFC has been allocated…" Reasoning: Assuming each LSE (or group of LSE) submits its GCIR based on 1day/10year criteria, preserving the "sum" of all such requests is equal to planning according to such 1day/10year emergency happens in all LSEs (or groups of LSE) at the same time. In a large capacity sharing pool such as MISO, this is to plan way beyond 1day/10year criteria. We recognize the right of LSE having special requirement based on state requirement. However, the original lingual doesn't allow MISO to continue its current methodology ("max" instead of "sum") even though all LSEs agree to do so. Response: The SDT chose this course of action because of potential conflicts with state or local regulations. If a state mandates that entity X rely on 200MW worth of external resources for generation adequacy, and mandates entity Y rely on 200MW as well, these two entities may make separate requests to the TSP, each requesting 200MW. If the TSP only grants 200MW of CBM, and a capacity emergency occurs that impacts both entities, then there will not be enough CBM. Rather than put the TSP and LSEs in this position, we are requiring the TSP grant what he is asked for, and giving LSEs the opportunity to make joint requests, directly or through a third party, so that aggregations such as you describe can occur – but only with the LSEs knowledge and consent. The SDT has modified the language to explicitly allow planned resource sharing groups which we believe will address your concern. - MOD-004-1 R4.1.2.2 should read "As a minimum standard, classify … greater than 3% on an OTDF Flowgate or 5% on a PTDF Flowgate as a significant impact". Response: The SDT has deleted this section of the requirement to address your concern. - MOD-004-1 R4.2.2. - since AFC is determined from CBM, CBM for each Flowgate should not be dependent on AFC. CBM can be big enough to drive AFC to zero or negative. This simply means that resource adequacy criteria can't be met, and no capacity will be available on that Flowgate (which is what the original wording of this requirement was trying to do anyway). Therefore we believe CBM should not be set to AFC, it should be left at whatever value was calculated. Suggestion language: For Flowgates, Entities may use a static number, which requires its CBMID describe the procedure of utilizing CBM, or set the CBM for each Flowgate equal to the lesser of: - MOD-004-1 R4.3 and R5.3 - , see the comment for R4.2.2. The same argument applies to these requirements. - MOD-004-1 R5.2 - see the comment for R4.2. The same rewording is recommended.

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	Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. - MOD-008-1 R1.1 indicates that one uncertainty that can be considered is "Aggregate Load forecast uncertainty (not included in determining generation reliability requirements)." The MRO understands that a concern is making sure that items are not double covered by CBM and TRM, however, this sub requirement is incorrect and needs to be modified because the same load forecast uncertainty will result in uncertainty in generation planning that may require a CBM amount--in other words we have to allow for additional transmission capacity to deliver generation reserves in an emergency when loads are higher. But that same load forecast uncertainty will result in uncertainty in the loadings on transmission facilities and will impact the need for having a margin to cover for loads on the system at all times. The MRO recommends that the SDT either delete the words "(not included in determining generation reliability requirements)" from the item or else revise the words to say something like the following which better describes what should be excluded, that is "(TRM is not to include impacts of load forecast uncertainty on CBM.)" Response: The drafting team believes these to be two distinct values. TRM is based on the belief that the transmission system will be differently utilized due to variations in dispatch based on loads that are significantly deviating from forecasted values. In other words, it is likely that these impacts will be due to more internal generation being turned on to serve load. However, CBM is much more explicit, and is related to the need to import generation due to a capacity deficiency. In this case, the path that will be impacted may be significantly different than those impacted by a deviation in load forecast. To clarify, we have changed the wording slightly: "not included in determining generation reliability requirements for CBM." There is nothing in the MOD 008 standard that precludes an entity for having different TRM's on different paths, or from excluding certain factors from TRM. If an entity's TRM method and CBM method would result in double counting in a manner not accounted not explicitly addressed in Mod 8, there is nothing that would prevent the entity from modifying its TRM method to eliminate the double counting. - MOD-008-1 R1.2: The need to state that consistent assumptions are used for TRM as is used in the planning process needs to be clarified. The SDT should clarify that short-term TRM should be consistent with operational planning while long-term TRM should be consistent with long-term planning. The MRO recommends that the language here be modified to be similar to R8 of MOD-001-1 to say, "A statement to confirm that it shall use assumptions in calculating TRM that are consistent with those assumptions that are used in ANY ASSOCIATED OPERATIONS STUDIES OR PLANNING STUDIES FOR THE TIME PERIOD STUDIED." The words in caps are the new words that are added in place of the words in the draft standard for that part of R1.2. Response: The SDT has included the suggested wording. - MOD-008, R1.5: "If TRM is zero for any of the time periods listed…..". Response: The SDT has modified this requirement to indicate that if TRM is not used, a statement of that practice should be included. - MOD-008-1 R3. and R4 call for certain responsible entities to provide information in seven days. This is not enough

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	time to allow for delays due to vacations and other absences. In smaller utilities, especially this seven days is not realistic. The MRO asks that the SDT increase this time and suggests 30 days as a more reasonable number. Response: The team reviewed this requirement. Based on your comments and others the team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient. #3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. - MOD-030-1, change R1 language to affect M1 regarding criteria used by Transmission OwnerR1, TSP should not be responsible for actively notifying changes made to criteria set by TO. Suggested wording is "… shall include … (ATCID) the practice or a link to the practice the TSP uses for adding Flowgates". Response: The Transmission Service Provider is responsible for interacting with the Transmission Operator to ensure this information is available. The SDT did not restrict using a link to the TOP criteria for selection of Flowgates. - MOD-030-1 R2.1 has a typo, the word "for" should be deleted from the requirement. Response: The SDT has corrected this typographical error. - MOD-030-1 R2.1.2 is too limiting in requiring that "at a minimum the first three limiting Elements/Contingency combinations within the Transmission Operator's system are included as Flowgates." The MRO believes there are smaller Transmission Operators with surrounding larger utilities with higher loaded facilities where this requirement would unnecessarily result in the establishment of additional flowgates. The MRO is not sure an across-NERC requirement for flowgate criteria is required; however, if the SDT gets comments to the contrary, the MRO suggests that the Transmission Provider be required to have documentation which includes an explanation for not using any of the three limitations. In this way, there is not a lot of needless work yet there is a provision which will result in protecting reliability. If TPs develop the documentation, if there are reliability issues, it will be obvious and the TPs will act to create the new flowgates. Response: The requirement could create some unneeded flowgates, but the SDT feels that this is not overly burdensome to those using the flowgate methodology. In order to maintain reliability the SDT believes that the minimum of the first three limiting Elements/Contingency combinations within the Transmission Operator's system

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	being included as Flowgates is required. - MOD-030-1, R2 should read "…Transmission Operator or Transmission Service Provider…" After hearing some industry comment that including this "or" (as we have in multiple comments) may not be possible in a standards requirement, we look to the team to determine how best to include some flexibility in which entity is required to meet the standard, to respect the varying distribution of work across these regions. Response: The SDT believes that the NERC functional model indicates this to be the responsibility of the Transmission Operator. - MOD-030-1, requirement R.2.1.1. is redundant with the definition of Flowgate given in the "definitions" section. This requirement should be removed, or at least reworded to read "…may be a Flowgate." Response: The SDT agrees. We agree. R.2.1.1 has been modified. - MOD-030-1, R2.1.2, the phrase "first three limiting" is too prescriptive and should be removed. For example, if the most limiting first contingency transfer is a large value, say 10,000, adding first three limiting elements/contingency combinations is not necessary. If the requirement can't be deleted, we suggest adding wording that sets a transfer level such that the first three constraints that cause the FCITC to fall under that level will be captured. Also, "source sink combinations" needs to be further defined as a calculation entity of any size could have thousands of these possible combinations. Also, if this in-depth study is required, the frequency in R2.2 should be decreased (as this is a minimum standard). Response: The requirement could create some unneeded flowgates, but the SDT feels that this is not overly burdensome to those using the flowgate methodology. In order to maintain reliability the SDT believes that the minimum of the first three limiting Elements/Contingency combinations within the Transmission Operator's system being included as Flowgates is required. The SDT has modified R2.1.1. and R2.1.2 to include the phrase, "up to the path capability". The source sink has been changed to POR POD in R2.1.2. The frequency in R2.2 has been modified to annually. The source sink has been changed to POR POD in R2.1.2. The frequency in R2.2 has been modified to annually. - MOD-030-1 R2.1.3: Before the first "OR" the MRO recommends that a qualifier like "experiencing at least 24 instances of congestion" and "expected to be a congested facility in the planning horizon" to limit the instances in which parties have to post a flowgate. If a facility has TLR because of some weird system condition not expected to occur again, it would be waste of time to post a flowgate for that. Response: R2.1.3 has been modified to add "….and for which such invocation of an Interconnection-wide congestion management procedure is expected to reoccur within the next 12 months." - MOD-030-1 R2.2 requires that the list of Flowgates be updated on a quarterly basis. Yet R2.4 requires that TFC only be updated on an annual basis. The MRO recommends that R2.2 be changes to updating on an annual basis. The quarterly basis is needless extra work. Response: The drafting team agrees and changed the update period for internal flowgates to yearly. The drafting

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	team has changed the update period for external flowgates to monthly. - MOD-030-1, R2.3 rating issues, refer to comments from SRC, which says "MOD-030-1, R2.3 does not identify that TFC can be limited by an IROL but it should. If selling transmission service really requires development of a reliability standard, R2.4 should be modified to require updating the TFC any time the underlying determinants, such as facility ratings, change.". Response: By definition, all IROLs are SOLs, and are therefore covered by the existing requirements. - MOD-030-1 R2.3: The MRO is aware of some processes that require that regional groups to approve new flowgate TTCs prior to posting so as to have a regional reliability and equity review prior to posting the new flowgate TTCs. If a flowgate line rating increases, there can be a time-lag until the regional groups approve the new operating study and operating guide required before the new TTC can be posted. Some words are needed to allow for the time lag for regional review since it benefits reliability and equity. Response: The SDT does not believe the time limits specified preclude any entity from doing such peer review prior to updates or changes. Note that "determination" is defined by the Transmission Operator; if such determination requires approvals prior to effectiveness, this is acceptable. - MOD-030-1 R3 should read "The Transmission Service Provider shall use a Transmission model to determine…" And then an additional criteria bullet could be added that states "Contains data provided by the Transmission Operator, to the extent that it is available." Response: The SDT has modified the standard to address this concern. - MOD-030-1 R.3.5, arbitrarily requiring modeling data and topology for at least three contiguous busses is too prescriptive. This requirement could be rewritten to as "Contains modeling data and topology agreed upon by each adjacent Reliability Coordinator Area and the Transmission Operator or the Transmission Service Provider." However it is worded, somehow the requirement has to be set based on the intention of improving loop flows, not getting to a certain number of busses. Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas.. This level of modeling detail provides some of the effects of the neighboring without burdening the TO. - MOD-030-1 R4 needs to be rewritten. First, we believe NERC standard shouldn't intervene with how TSP treats PTP reservations. TSP has the best knowledge of their system and knows what treatment gives the best AFC forecast. Second, if this treatment has to be discussed anyway, we believe that having some flexibility is better than requiring the use of source/sink. For example, one transaction going across multiple OASIS will have the same source/sink along the path. Using source/sink could result in double-counting, triple counting, etc. Another example is that, in large TSP area such as MISO, OASIS POR/POD or Source/Sink can't represent real-time market central dispatch. Reservations/schedules only determine overall MISO interchange, not interchange for MISO internal BAs. In other cases, some other method may be more desirable. If getting the most accurate calculation (while not hindering transparency) is the intent of the team, then the way in which the reservation is modeled should not solely depend on the information in the request, but rather on a methodology that can be reviewed by everyone. Suggested language? (maybe in the same line as "a methodology that can be reviewed by everyone" Response: The SDT believes that the requirement gives significant flexibility based on the model used to analyze the

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	reservations. Note that "the market" could be equivalence, depending on how the word is interpreted. We have modified the language in 6.2, 6.3, 7.1, and 7.2 to address concerns with "double counting." - MOD-030-1 R5.1 indicates that the TSP is to include all expected outages, additions, and retirements in effect in the TSP's area, adjacent TSPs, and any TSPS with coordination agreements have been executed. The MRO believes this is a nice goal but the TSP cannot be liable for a penalty for failing to include all expected outages, additions, and retirements that it hasn't been told about. The MRO recommends that "and known" be added to the requirement. Response: The SDT has incorporated the suggested word into the requirement. - MOD-030-1, R5.1. This is not always the best practice. For example, while using PSS/E model, some outage remote to the TSP service area can cause the case to not solve and the TSP has to either use DC power flow solution or ignore the outage. The impact from ignoring a remote outage on the accuracy of AFC is much smaller than that from using DC power flow. The TSP has to temporarily block the outage to achieve overall better accuracy. Suggestion wording is "… have been executed, to the extent it helps improve the AFC calculation accuracy." Understanding that the ability to measure deviations may become an issue, the wording could be adjusted to state "… have been executed, except for any outages that, if included, would force the calculation into a less accurate solution technique." We realize that the suggested wording is not perfect, but we're hoping that the team understands our intention and can adjust it accordingly. Response: R5 has been revised to provide additional flexibility. Language has been added to allow for outage processing rules to be specified in the ATCID. - MOD-030-1 R5.1: The word "all" should be deleted. Only the one included in the calculation should be required. Response: The SDT has modified the language to reference the limits of the model. Also, same comment on the "additions and retirements" language. The need to provide transmission "additions and retirements" should be restricted to only those used in AFC calculations. The open planning process is the correct venue to request info on planned facilities, not the ATC standards. Response: The SDT has modified the language to reference the limits of the model. This is not intended to circumvent the planning process, but to ensure the ATC process respects the planning efforts underway. - MOD-030-1, R5.2. should add "to the extent they are available" to the end. Not all MISO third parties have that data available. Response: The SDT believes that by including the phrase "as provided," we have allowed for entities to not use information they have not been provided. - MOD-030-1 R6.1.3.1.1: Peak load forecast for the first 31 days needs to be clarified. The MRO is aware of some that prepare a peak load forecast only for the next 7-10 days. In such cases the load used in projections for days 11-31 is the monthly value. The accuracy of daily forecasts beyond the next 7-10 is questionable. Maybe the language should specifically allow this.

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	Response: This standard would require that those entities begin producing daily load forecasts for all 31 days. To accomplish this, they could provide days 8-30 with an identical load forecast based on that monthly value. Note that the SDT has removed the requirement for the forecast used to be a "peak" forecast, which may also address your concerns. - MOD-030-1 R6.2: "impact" needs to be defined a bit more. Some MRO members define impact as something like 85% of positive impacts, 100% if the flowgate has had firm TLR. Also, "expected to be scheduled" should be clarified because some Transmission Providers include all reservation impacts in AFCs. The "expected" language adds a complexity that will be hard to meet and for that reason the language should be deleted. Response: By "impact," the SDT means the amount of energy expected to flow on the flowgate due to the effects of the scheduled generation. The SDT has modified the "expected" language to clarify what is meant, which is the elimination of double counting due to partial path reservations. - MOD-030-1 R6.3 and R6.4 provide a 3% but do not define what it is 3% of. The MRO recommends that the SDT add language to explain how it is calculated --what is the calculated in terms of percent of what. This also applies to R7.2 and R7.4 of the same standard. Response: The SDT has modified the language to be clearer referring to distribution factor. - MOD-030-1 R7.1: Again "impact" needs some more definition. Some presently use something like 50% counterflow in non-firm AFCs. Response: By "impact," the SDT means the amount of energy expected to flow on the flowgate due to the effects of the scheduled generation. Also, the language states that non-firm AFCs should only bring in non-firm reservations. The MRO believe this is wrong. Firm reservations NEED to be considered in non-firm AFCs. Response: The language states that Non-firm ETC consists of only non-firm reservations (and other non-firm uses). However, the formula for determining AFC includes both the firm and non-firm ETCs, which the SDT believes addresses your concern. - MOD-030-1 R8 refers to postbacks but no definition is provided. The SDT should either provide a NERC definition, repeat the NAESB definition, or paraphrase a definition. Without it, the MRO and other responsible entities are not sure what is the requirement. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. - MOD-030-1, R8 and R9, "ATC" should be "AFC". Response: The SDT has corrected this typographical error. -MOD-030-1 R10 is not understandable. The MRO has no idea what is meant by this Requirement and how to

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	implement the requirement. The SDT should substantially increase the words that explain this requirement. Response: The SDT has attempted to clarify the equations by incorporating the "P" term. However, the SDT believes this requirement as written to be the clearest way to express the requirement. -MOD-030-1 R10., the text describing "P" should read: "…as a minimum standard, a Flowgate is considered 'impacted' by a path if the Distribution Factor for that path is greater than 3% on an OTDF Flowgate or 5% on a PTDF Flowgate". Response: The SDT believes that a OTDF or PTDF greater than 3% is appropriate. - MOD-030-1 R10: In addition to the comments already supplied, explicit consideration of the concern raised above regarding those cases where a party uses CA-CA path limits to set hard tie limits and yet also posts flowgate limits where AFCs need to be converted to ATCs. The requirement to translate AFC to ATC for each path could result in a conflict if the CA-CA path limit is based upon the rated path method when a flowgate limits the path rating when AFCs are converted to ATCs. The MRO recommends that the SDT clarify the requirement as necessary to explain how this conflict will be resolved. Response: The SDT believes that Transmission Operators and Transmission Service Providers will need to come to this determination on their own. It is the SDT's hope that both numbers could be expected to be reasonably close. However, in any case, the SDT would expect that entities would use the most conservative value to maintain reliability of the system.
Response: Please see in-line responses.	
New Brunswick System Operator	
NorthWestern Energy (NWMT)	See comments below.
Response: Please see response below.	
NPCC Regional Standards Committee	MOD-001 1. R1: The reference to the Planning Coordinator's planning area in R1 is not appropriate; the reference should be to the Transmission Operator's operating area. Response: The SDT has modified the standard to incorporate this change. 2. R3.3: Since this standard deals with short-term Transmission Service, the reference to Planning Coordinator should be removed from R3.3, R6.1 and R6.4 Response: Because ATC can impact months 12 and 13, the SDT believes the Planning Coordinator should be made aware of any such changes based on the descriptions in the functional model. 3. R3.3: This should be reworded to be clear that the TOP is providing input (TTC or TFC) to the TSP to perform ATC

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	calc. Also suggest removing reference to a 'tariff' since non-jurisdictional entities may not have a tariff. Suggest the following language: The identity of the Transmission Operators that provide data on each Posted Path for use by the Transmission Service Provider in calculating ATC. Response: The SDT has modified the standard to address your concerns. Acronyms TOP, TFC, and TSP need to be defined in the Background Information on p. 3. The abbreviation "calc." should be spelled out. Response: The Background Information will not become part of the Standards, and as such is not being revised. The Drafting Team believes TOP, TFC and TSP have been adequately defined in the Standards or the NERC Glossary of Terms. The Drafting Team could not find the abbreviation "calc." referred to. 4. R4 and R5 should reference both the terms counter-schedules and counterflow throughout the requirements Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. R9 (or at a minimum the Measure for R9) must be modified to be clear that if TSP can demonstrate that no inputs to the ATC calculation have changed that an update of a 'timestamp' on an ATC value is not required. Suggested options for the language in R9: "Each TSP shall update ATC at a minimum on the following frequency, except that if all inputs to ATC are unchanged no update is required:" OR "Each TSP shall update ATC at a minimum on the frequencies listed below. However, if all inputs to ATC are unchanged no update is required." Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD-029 1. R1.10 refers to EHV without it being a defined term and different regions could define EHV to be different voltage levels; suggest one of the following actions be taken: (a) include the desired kV level of the BPS system in the standard, (b) remove the reference to EHV entirely, (c) add a NERC glossary term. EHV should be defined in the Background Information on p.3 and be understood to be applicable to and restricted to the BPS irrespective of that voltage level. That definition must also include the BPS voltage level it refers to. Response: The SDT agrees, and has eliminated the use of EHV in the requirement. 2. R2 language could be interpreted that all N-2 contingencies must be considered in a TTC study. If the intent that the TTC study should consider all currently required planning criteria, a general reference should be made to the planning standards rather than try to summarize and reiterate those requirements here. Response: The SDT agrees and has modified R2.1, R2.1.1 & R2.1.2 to address your concerns by removing reference

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	to N-0, N-1 & N-2. 3. R2.1.5 contains a very specific consideration for EHV contingencies to be considered in the TTC. Is there a reliability need for ALL regions to consider EHVs in this manner? If not, we suggest removing this requirement from the NERC standard, where it can be added in a more detailed regional standard if required by a particular region. EHV should be defined in the Background Information on p. 3; the definition must include the BPS voltage level it refers to. Response: The SDT has eliminated this requirement in response to your concern.
Response: Please see in-line responses.	
NYISO	The NYISO joins in, and supports, the comments submitted by the ISO/RTO Council ("IRC") in response to this question. The NYISO also supports the comments submitted by the NPCC. In particular, the NYISO strongly supports the NPCC's request that requirement R9 under MOD-01 be revised to clearly establish that ATC values need not be updated when the inputs to the ATC calculation have not changed. The NYISO also supports the NPCC's proposed revisions to the language of R9. Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. The NYISO also has concerns on MOD-028 R3, R4 and R6 regarding the frequency of TTC calculations when inputs have not changed. Response: The SDT believes the suggested time periods are not onerous, even if inputs have not changed. Except as noted by the IRC and NPCC, the NYISO does not believe that any of the proposed ATC standards are technically incorrect, so long as they are interpreted with sufficient flexibility to accommodate transmission providers that do not offer physical reservation transmission service.
Response: Please see in-line responses.	
PacifiCorp	- PacifiCorp supports the WECC MIC MIS ATC Drafting Team December 14, 2007 comments suggested redraft language of R10 as follows: - "R10. Upon request from another Transmission Service Provider, Planning Coordinator or Reliability Coordinator, each Transmission Service Provider shall provide from the below specified list, only that data requested and only that data already in existence and in the possession of the Transmission Service Provider from which that specified data is requested. Provision of all data is subject to confidentiality and security requirements." In addition, PacifiCorp suggests that the following sentence be added to the above proposed language that states "The requirements of R10.1-R10.15 should not be interpreted as a comprehensive list of what is required to be included in an ATC calculation."
Response: Please see WECC MIC MIS ATC Drafting Team response. The SDT believes that the individual MOD standards themselves describe the information that is to be used in an ATC calculation. R10 only	

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describes information to be shared with other entities.	
PJM Interconnection LLC	The requirements in MOD 1 to meet the update periods are not required to meet the reliability aspects of ATC implementation. Response: We have modified the requirements in a way that may address your concern. We believe that a requirement to keep ATC numbers up-to-date and accurate is a reliability concern. The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD 4: PJM disagrees with the essence of the proposed Mod 4-CBM standard. As currently constructed, the requirements treat CBM as if it is an energy quantity as opposed to a reliability margin. The proposed standard reads more like a procedure manual applicable to a single vertically integrated utility. The majority of load served in the US does not use the CBM as a product construct. PJM will suggest modifications that will better reflect CBM as a margin, not a commercial product, used to preserve the reliability of multiple LSEs through various reliability agreements. The suggested changes will preserve the ability of a single LSE to treat CBM as a product, but will refocus the discussion to better articulate the concepts used in a market environment. Provisions need to be made to allow the flexibility of LSEs to aggregate and allow the planning to be handled by an ISO. There are conflicts with the PJM Reliability Assurance Agreement Amongst Load Serving Entities. The GCIR definition recognizes the aggregation of LSEs and the requirements in MOD 4 do not. For example R1.1 specifies LSE as a single entity. The requirements do not provide for other methods of managing CBM both in planning and operationally. It is recognized that multiple LSEs may aggregate but the procedural requirements of R3 for instance are on a LSE specific basis. The standards must recognize FERC accepted practices for instance the definition and methods of addressing GCIR should recognize that the net CBM for an aggregate of LSEs may be less than the sum of the CBM needed for each LSE. GCIR definition should recognize that the net CBM for an aggregate of LSEs may be less than the sum of the CBM needed for each LSE. If these standards are to be as procedural/process specific as they are now written then alternate applications of CBM are necessary. Some examples include but are not limited to: R1.1 The drafting team would need to add language to recognize processes such as PJM's IRM study as satisfying requirements to determine import requirements. For the group of LSEs with an aggregated need for CBM. Language must be changed in the standard allowing flexibility to LSEs and Balance Authorities to apply different methods and procedures for instance: R1.3 Remove the words "for a Load Serving Entity to request" would allow other entities or agents to act on behalf of LSEs. R3 through R10 contain timeframes that would not apply when CBM is determined on differing intervals. This standard is too specific to processes implemented in specific regions. The GCIR and CBM may not change on these

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	intervals and these requirements would be inappropriate. These requirements do not recognize the practice implemented by groups of LSEs acting through a stakeholder process in the determination of area wide CBM and reserve margins. Response: The SDT has made some modifications to address your and other entities concerns. The drafting team believes that the standards now will allow for the majority of the flexibility you describe while at the same time establishing a minimum requirement for other entities. MOD - 008 R1.3 The TRM allocation method may include a process contained in the AFC or ATC calculator that overrides the base TRM value. Response: The SDT does not see this statement to be in conflict with the standard. R1.6 There is a need to implement a requirement for cases where the TRM applied differs from the calculation. Such a number should be provided to the RC with sufficient documentation for the RC to approve the TRM prior to implementation. These instances should be documented in the TRMID. Response: As a calculation method has not been specified in the standard, the SDT does not believe this requirement to be necessary. If the number differs for the calculation, then the TRM methodology should incorporate the possibility of making such adjustments.
Response: Please see in-line responses.	
Progress Energy, Carolinas	MOD-28-1 R7, MOD-030-1 R2.1.3.1 The distribution factor/impact value used in the analysis of ATC impacting calculations should be consistent in all related processes. The value used in the process to approve transmission service should provide at least as accurate/granular results as the TLR process that is used to relieve congestion. The current TLR process uses a 5% impact, but there is discussion of using a 3% impact for non-firm curtailments. The ATC processes should not use an impact/distribution factor above 3%. The 3% value is in MOD-004 -1 4.1.2.2, MOD-030-1 – R6.3, R6.4, R7.2, R7.4 and R10. A 5% value is used in MOD-028-1 R7, MOD-030-1 R2.1.3.1. The 5% impact or distribution values used in the Standards should be changed to 3% to be consistent across processes and Standard requirements, and to support the TLR process.
Response: The drafting team has discussed the distribution factors extensively and set them to appropriate levels.	
Public Service Commission of SC	
Public Utility District #2 of Grant County, Washington	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.

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Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Puget Sound Energy	See comments below.
Response: Please see response below.	
Salmon River Electric Cooperative	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Salt River Project	Please refer to answers to question Q6 for examples
Response: Please see Q6 for response.	
Santee Cooper	MOD028 R3.1 should read "For …, and next-day on-peak TTCs". Remove intra-peak after next day.
Response: The SDT has corrected this typographical error.	
SERC ATCWG	MOD-028, Requirement R5 and MOD 030, Requirement R4, refer to the term "interface point" with the adjacent TSP. To meet this requirement, an entity must simulate an artificial source/sink at the interface point. It should utilize the adjacent TSP area as the source/sink. Response: The SDT has modified the standard language to address this concern. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL (which are defined in other standards, e.g., IRO-004-1 and IRO-005-1). Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1, and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. The following Violation Risk Factors listed as Medium in the proposed MOD-028-1, MOD-029-1, and MOD-030-1 should be listed as Lower: MOD-028-1, R2; MOD-028-1, R3; MOD-028-1, R9; MOD-028-1, R11; MOD-029-1, R1; MOD-029-1, R2; MOD-029-1, R5; MOD-029-1, R7; MOD-030-1, R3; MOD-030-1, R5; MOD-030-1, R6; and MOD-030-1, R9. For clarity, the risk factor for each requirement is suggested below: In MOD-028-1, R2, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R2 can result in an TTC that is greater than the SOL or IROL Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system In MOD-028-1, R3, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL.

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	Response: The drafting team disagrees. The SDT believes that using a data different than that specified in R3 can result in a TTC that is greater than the SOL or IROL. The SDT also believe that not adhering to the time frames specified can lead to an inaccurate ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system In MOD-028-1, R9, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: drafting team disagrees. A violation of R9 can create a situation where the service sold is in excess of the TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-028-1, R11, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: drafting team disagrees. A violation of R11 can create a situation where the service sold is in excess of the TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R1, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R1 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R2, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not complying with R2 can result in a TTC that is greater than the SOL or IROL. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system.

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	In MOD-029-1, R5, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. A violation of R5 can create a situation where the service sold is in excess of the TTC less the true ETC, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-029-1, R7, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. A violation of R7 can create a situation where the service sold is in excess of the TTC less the true ETC and other components, resulting in over-scheduling of the path. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R2, the Violation Risk Factor is listed as Lower; it should be listed as Medium. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The SDT has incorporated the suggested change. In MOD-030-1, R3, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that using a model that does not meet the criteria specified in R3 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R5, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations

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	and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not incorporating the information described in R5 can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R6, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not implementing R6 correctly can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system. In MOD-030-1, R9, the Violation Risk Factor is listed as Medium; it should be listed as Lower. TTC or TFC calculations and values can only be Medium or Higher Violation Risk Factors if the resulting TTC or TFC is greater than the SOL or the IROL. Therefore, the only requirements in the proposed MOD-028-1, MOD-029-1 and MOD-030-1 that should be Medium are MOD-028-1, R7, MOD-029-1, R4, and MOD-030-1, R2 which require that the TTC or the TFC be less than the SOL. Response: The drafting team disagrees. The SDT believes that not implementing R9 correctly can result in an ATC that does not represent an accurate estimate of the state of the system once scheduled. Accordingly, the SDT believes a violation can have a negative effect on the reliability of the system.
Response: Please see in-line responses.	
Sierra Pacific Resources Transmission	(All standards should be checked for consistency in the use of the terms “calendar days” and “days.” In addition, these terms may differ between the Requirements and the corresponding VSLs. E.g. MOD-4, R4 specifies “calendar days” whereas the VSL for this requirement stipulates “days.” Response: The SDT has made this language consistently use “calendar” days. MOD-001 - R1. and R2 States “…for each Posted Path per time period…” and “…values for the time periods listed…” respectively. The terms “time period” should be changed to “time horizon.” This locks the time window to a prescribed window and negates the ability to assign a random “time period.” The use of the term "horizon" as used with the Violation Risk Factors is confusing because of the way "horizon" is used

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	to calculate ATC. Always qualifying the horizon with ATC Horizon or VRF Time Horizon would help clarify the way this term is used. Response: The SDT has intentionally avoided the use of the term "horizon" to avoid confusion with the compliance time horizons. R3.3. This requirement needs to be broken into to different requirements and a change to the term Facility needs to be made as follows: (New) R3.3 "The identity of the Planning Coordinator responsible for assessing the long term reliability of each path where ATC is calculated under the Transmission Provider's tariff." (New) R3.X "The identity of the Transmission Operator responsible for the real time operating reliability of each path where ATC is calculated under the Transmission Provider's tariff." Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. R3.6. The format of this sub-requirement does not match that of the other five sub-requirements ahead of it making the meaning unclear. Suggest the following: "R3.6. A description of the methodology(ies) used to allocate ATC among multiple lines or sub-paths within a larger Posted Path, including where applicable, any methodology(ies) used to allocate ATC among multiple owners of a single path." Response: The Drafting Team has clarified this requirement, incorporating the concepts suggested. R4 and R5. "Counterflows" Requirements R4 and R5 should be cut and counterflows should be addressed as subcomponents in MOD-028, R11 AND R12; MOD-029, R7 and R8; MOD-030, R8 and R9. Counterflows should be pasted into the MOD-028, MOD-029 and MOD-030 as the last element of requirements. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. R6 E-Mail requirement when ATCID, TRMID, or CBMID are made

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	Recommend this be sent to NAESB to develop a place on OASIS for posting when changes are made. Response: This requirement is for notification to reliability entities when something that may impact them is changing, not disclosure to the public. NAESB will be addressing the latter; this requirement addresses the former. R9 - "Update ATC" Recommend R9 be removed and let NAESB handle ATC updates/postings in the NAESB standards. Response: NAESB will be addressing the postings, but this requirement is intended to address the actual changing of the value that is used both internally and for coordinating with neighbors. NAESB may require more or less frequent updates. If not removed, ATC should only need to be reviewed and updated if necessary. Change wording to "shall review and update if necessary…" Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. R10. Making Requested Data Available Needs to be reworded and clearly state only data that already exists can be requested or must be provided and should have points broken down into sub requirements. Suggested rewording: "R10. Upon request from another Transmission Service Provider, Planning Coordinator or Reliability Coordinator, each Transmission Service Provider shall only provide requested data from the specified list below, and only that data already in existence and in the possession of the Transmission Service Provider. Provision of all data is subject to confidentiality and security requirements. Each Transmission Service Provider providing information pursuant R10 shall do so: RXX.1 Within fourteen days of a request RXX.2 On the interval specified by the requesting entity, not to exceed more frequently than once per hour unless mutually agreed upon by the requestor and provider. RXX.3 In the format in which the data exists at the time of the request, unless otherwise agreed upon by the requestor and provider. Rxx.4 For the requested time period up to 13 months in the future." Response: The requirement has been broken into subrequirements and the possible list of data has been converted to bullets. The requirement (currently R8) was reworded to improve the clarity (phrases such as “its own current data”, “in the format maintained by the Transmission Service Provider” have been added). Note that the posted standard required TFC and AFC only for “Flowgates considered by the Transmission Service Provider when selling transmission service” and this limitation has been retained. R10.4. List of Data Elements that can be requested for NITS is too vague. Recommend changing to:

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	(New) R10.4 "Network Integration Transmission Service capacity on an aggregated basis." Response: The SDT has incorporated the suggested language. R10.13. There is a stray right parenthesis after the word “Margin.” Response: The SDT has corrected this typographical error. MOD-004 - R1.3. Scheduling Over CBM states that the Transmission Provider shall have a procedure that would allow a Load-Serving Entity (LSE) to request and schedule energy over (could be taken as in excess of the amount) that it has set-a-side for CBM. This requirement would be inconsistent and contradictory with the requirements that R3 has placed on the LSE with regards to the information that an LSE must provide prior to CBM being evaluated and set-a-side by the Transmission Provider if interpreted as such. Therefore a LSE should never be allowed to schedule energy over the amount of Transfer Capability set aside as CBM and suggest "over" to be changed to "on". Response: The SDT has changed the words as suggested. R2 CBMID Availability The acronym “CBID” should be changed to “CBMID.” Response: The SDT has corrected this typographical error. Requires a seven day turnaround time on providing the CBMID or other related information to requesting parties. We suggest a 14 day time period in which to allow the Transmission Provider to supply such information to requesting parties. Response: The SDT has adjusted the standard to allow for thirty days, R3 LSE Requirements for Requesting CBM Describes the requirements placed on the LSE that is requesting CBM. In being consistent with the rest of the MOD there needs to be specific timelines that the LSE must adhere to if there application is deemed insufficient and requires the LSE to submit additional information to the Transmission Provider. We suggest a 14 day requirement, or clarification that if an LSE's application is deemed insufficient it shall be immediately rejected and the LSE shall be removed from the queue. Response: There is no queue required in the standards for these requests. Timing requirements for responding to a request are provided. The SDT has modified the language to require that TSPs will need to include in their CBMID (as specified in R1.1) the disposition and handling of deficient requests. R4.3. States that if during an evaluation of monthly ATC, additional firm capacity becomes available, the capacity shall be granted to CBM customers first. This requirement would appear to give CBM a preferential queue position over Conditional Firm, which appears to be a stark contrast to the requirements set forth in FERC Order 890 with regards to Conditional Firm queue position and the availability of new monthly firm ATC. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a

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	description of that choice to be included in the CBMID. R6 and Measure M9 Both give the Transmission Provider only five days to provide information to requesting parties, we recommend both sections be changed to ten business days or 14 calendar days. Response: This requirement is simply the amount of time the provider has from the time the CBM is calculated to notify the requester. We believe five days is sufficient. The SDT has modified the language to reference calendar days. R7.1. and R7.2. Refer to seven calendar days, we suggest that both requirements be changed to fourteen calendar days. Response: The SDT have modified the standard to allow for thirty days. MOD-029 - R1.6. Suggest this bullet be deleted. This is already addressed in R2 wherein the modeling process is dictated. Please note in the Rated System Path methodology, “peak load forecasts” are not used to stress the system; rather, load and generation are simulated to stress the system to its greatest capacity. There are cases when the highest forecasted load may not stress the system to its greatest utilization – which is the goal of the R2 under the Rated System Path. Response; The SDT has eliminated the word “peak” from the requirement to address this concern. R2 The performance criteria defined in R2 might, at some point be at odds with the proposed TPL standard. While the drafting team may not want to have references to another standard, the risk in not doing so would be that either standard would get modified and possibly create a contradiction that could be impossible to meet. Hence, MOD-029-1 should reference TPL for purposes of performance criteria. Response: The SDT agrees and has modified R2.1, R2.1.1 & R2.1.2 to address your concerns by removing reference to N-0, N-1 & N-2. R2.1.3. Seems to contradict R2.1.2 regarding the facility ratings clause. All of R2.1 concerns n-0, 1 & 2 outages. R2.1.1 specifically refers to n-0 outages and R2.1.2 with n-1 & 2 outages. Further, R.2.1.2 requires "no Transmission Element modeled above its emergency rating" following an outage; R.2.1.1 requires no “Transmission Element above 100% of its continuous rating" for n-0. Then along comes R2.1.3 which basically says no element above its rating ever! I suggest striking R2.1.3. It's contradictory and excessive. Response: The SDT has deleted this requirement. R2.3 Suggest correcting “…as determined by R1.2.1…” to read “…as determined by R2.1.” Response: The SDT has corrected this typographical error. R2.1.5. stating that a three-phase fault should be modeled on "all" busses could imply simultaneous faults at every point around a path. The intent is one fault at a time, on all surrounding busses. Replacing "all" with "each" would

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	make the intent clear. The SDT has removed this requirement. R5. The language describing Native Load should be changed from "reserved" to "allocated." Allocated is the word most frequently used in conjunction with OASIS to describe this condition. The same change should apply to GF sub F. The SDT has modified the standard to use the word "set aside." The language describing Grandfathered capacity includes the defined terms "Firm" and "Transmission Service." Use of these words as defined terms is inconsistent throughout the proposed standards. They should either be changed here to a lower case or all applicable areas in each proposed standard should be changed to the defined term. Response: The SDT agrees and has made the changes for consistency. MOD-030 - An entity using both MOD-030 for some paths and MOD-029 for other paths that are adjacent to entities using MOD-029 need not study Flowgates beyond the intersecting cut plane of its interface as the ATC at the interface does not fall under MOD-30 but MOD-29. To prevent seams issues and unnecessary analysis the Team suggests the following rewrite(s): MOD-30, R2.1.2. All first Contingency transfer analyses from all adjacent Balancing Authority source/sink combinations either: a) to at least the first three limiting Elements / Contingency combinations within the Transmission Operator's system or b) to the interface of the adjacent Balancing Authority where the Transmission Operator utilizes the Rated System Path methodology whichever is applicable. If adopted, this same concept would be applied to: MOD-30, R3.5, R3.6, R5.1, R7.2 and R7.4. Response: The SDT changed R2.1.2 to reflect the requested change. With respect to R3.5 and R3.6, the SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. R6.1, R6.3, R6.4, R7.2, R7.4 have been addressed by adding the stipulation that impacts of other neighboring systems only have to be used if they're impact is greater than what is used in the regional congestion management procedure. This allows for sparse networks that do not get impacted by neighboring transactions to ignore them.
Response: Please see in-line responses.	
Snohomish PUD	MOD -001 R3.2 – "counter-schedules" should be deleted and "counterflows" should be capitalized with the definition supplied above [Counterflow: the impact of schedules, reservations, or actual energy flows in the direction opposite to the constraint Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and

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	we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. With this approach we do not believe that a definition of counterflow is required. R3.3 – We agree with BPA about removal of this requirement, as it would require extensive modification to existing databases without serving a great need. Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. In addition we support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Response: Please see WEC MIC MIS ATC Drafting Team responses.
Response: Please see in-line responses.	
The Southeast Coalition	Please see list below. Counterflow: MOD-001 (R4, R5.1). Requirements R4 and R5.1 of MOD-001 set the impact of counterflow to 0% in the calculation of firm ATC/AFC based on reservations and/or schedules, and calculation of non-firm ATC/AFC based on reservations. These requirements are not only technically incorrect because they do not provide any justification for the 0% counterflow setting and do not require Transmission Service Providers (TSPs) to provide any analyses, work papers, statistical scheduling data, etc. to justify a 0% counterflow or any other setting in their ATC/AFC calculations, they are also inadequate because they do not meet Order 890 Cite 293. The Standard should ensure consistent modeling of counterflows and require TSPs to provide a justification, along with work papers and analyses, for the counterflow percentage used in their calculations of firm and non-firm ATC/AFC. Additionally, a measurement to ensure that TSPs comply with providing justification for their counterflow settings should be added to the Standard. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. Updating of ATC Models: MOD-030 (R3). Requirement 9.3 of MOD-001 states that, at a minimum, monthly ATC values should be updated once a week. However, requirement 3.3 of MOD-030 states that the monthly models used for calculating monthly ATCs should be updated at least once per month. Requirement 3.3 is inconsistent with requirement 9.3 because monthly models should be updated at the same frequency as the monthly ATC values are updated, i.e. once a week. Otherwise, monthly ATC values may be inaccurate. Consistent with Cite 301 of Order 890, the Standard must “require ATC to be recalculated by all transmission providers on a consistent time interval and in a manner that closely reflects the actual topology of the

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	system, e.g., generation and transmission outages, load forecast, interchange schedules, transmission reservations, facility ratings, and other necessary data. This process must also consider whether ATC should be calculated more frequently for constrained facilities". The Standard, as proposed, is silent in regards to updating models and ATC values when a serious event such as the unplanned outage/return of a major transmission line occurs or a serious modeling error in ATC calculations is uncovered. In these situations, TSPs should be required to update models and ATC values as soon as practical rather than waiting for the scheduled update. Response: The update time periods have been adjusted. Adjacent Systems Representation: MOD-030 (R3.5, R3.6). Requirements 3.5 & 3.6 establish the scope of adjacent systems to be included in ATC calculations. These requirements do not specifically require that adjacent systems be represented in a realistic manner or updated at the same frequency as the TSP system. Including three contiguous buses of the adjacent systems, as R3.5 requires, will not ensure an accurate representation of adjacent systems in the AFC models. These requirements fail to satisfy Order 890 at Cite 311 "to produce accurate determinations of ATC…". Furthermore, the Standard does not have a measure to assess the validity of adjacent systems representation and limits itself to only check that adjacent systems are included in the model (MOD-030, M7). In order to produce accurate ATCs, it is not enough to merely check that adjacent systems are included in the model. Instead, it is critical to validate the performance of these models on an on-going basis and ensure that adjacent systems are being properly updated in TSP models with data such as: load, generation profile, net interchange, transactions, and outages, provided by adjacent system entities. Response: The SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. This level of modeling detail provides some of the effects of the neighboring without burdening the TO. MOD-001 provides the exchanging of data with external areas. These standards assume accurate models and data are being exchanged. The validation of models and load forecast does not belong in this standard. Use of PTDF term: MOD-030 (R2.1.3.1) Requirement 2.1.3.1 refers to generators that have at least a 5% Power Transfer Distribution Factor (PTDF) impact on a flowgate. Rather than PTDF, the proper term in this circumstance is Transfer Distribution Factor (TDF) because the flowgate could be either a PTDF or OTDF flowgate. The TDF term covers both cases. Response: The SDT has modified the requirement to include both PTDF and OTDF.
Response: Please see in-line responses.	
Southern Company Transmission	
SPP	No comment.
Tacoma Power	Tacoma Power supports the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.

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Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Tri-State Generation and Transmission Association	
WECC MIC MIS ATC TF Drafting Team	General Comments All standards should be checked for consistency in the use of the terms “calendar days” and “days.” Of note, these terms may differ between the Requirements and the corresponding VSLs. E.g. MOD-4, R4 specifies “calendar days” whereas the VSL for this requirement stipulates “days.” Response: The SDT has clarified that all days are to be “calendar days.” MOD-01 R1. and R2. State “…for each Posted Path per time period…” and “…values for the time periods listed…” respectively. The term “time period” should be changed to “time horizon.” This makes the language consistent with 890. Response: The Drafting Team did not use the phrase “time horizon” because that is a term that is used by NERC in the Standards to indicate how much time is available for mitigating a violation to the requirements, and could thus cause confusion. The Drafting Team did remove the reference to time period in R2 and specifically referenced R2 in R1 in an attempt to address your concern. R3.3. The Team and those listed above suggest breaking the “R” into two pieces for clarity. The existing wording of being “associated” with each Facility is overly vague. Response: The SDT has done as suggested. (New) R3.3 “The identity of the Planning Coordinator responsible for assessing the long term reliability of each Facility under the Transmission Provider’s tariff.” (This verbiage comes from the NERC Functional Model. As an alternative to the word "Facility", "Posted Path" should be considered.) Response: The SDT has eliminated the Planning Coordinator, based on the intent of the requirement. (New) R3.X “The identity of the Transmission Operator responsible for the real time operating reliability of each Facility under the Transmission Provider’s tariff.” (This verbiage comes from the NERC Functional Model. As an alternative to the word "Facility", "Posted Path" should be considered.) Response: The SDT has modified this requirement to more clearly describe the intent. R3.6 The format of this sub-requirement does not match that of the other five sub-requirements ahead of it making

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	the meaning unclear. The Team and those listed above suggest the following rewording: "R3.6. A description of the methodology(ies) used to allocate ATC among multiple lines or sub-paths within a larger Posted Path, including where applicable, any methodology(ies) used to allocate ATC among multiple owners of a single path." Response: The SDT incorporated the suggested language, but changed "ATC" to "transfer capacity" to cover ATC, TTC, AFC, and TFC. Additionally, the SDT also added the phrase "or Flowgate." R4 and R5. These describe how counterflows are to be dealt with even though counterflows as a subcomponent of ETCs are addressed in MOD-28, R11 and R12; MOD-29, R7 and R8, and MOD-30, R8 and R9. The Team and those listed above suggest MOD-01, R4/R5 should be "cut" from MOD-01 and "pasted" into each of the MODs 28, 29 and 30 so that the reader / Applicable Entity can see the self-contained algorithm requirements in each of those three methodologies rather than having to cross reference (hunt and peck) between 28/29/30 and MOD-01. Since counterflows are always the last element mentioned in 28/29/30, the Team and those listed above would suggest pasting the MOD-01 counterflow requirement into each standard as the last requirement in each. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. R10. The wording is difficult to follow and could be clearer as to which entity must provide what information. The Team and those listed above suggest the following rewrite without doing damage to the substance. Suggested redraft: "R10. Upon request from another Transmission Service Provider, Planning Coordinator or Reliability Coordinator, each Transmission Service Provider shall provide from the below specified list, only that data requested and only that data already in existence and in the possession of the Transmission Service Provider from which that specified data is requested. Provision of all data is subject to confidentiality and security requirements. R10.1 et al Keep the list of data as drafted except for R10.4. which is overly vague. Change R10.4 to read: (New) R10.4 "Network Integration Transmission Service capacity on an aggregated basis." ADD AN ADDITIONAL REQUIREMENT FOR CLARITY; BREAK THE EXISTING R10 INTO TWO PIECES: RXX. Each Transmission Service Provider providing information pursuant R10 shall do so: RXX.1 Within fourteen days of a request RXX.2 On the interval specified by the requesting entity, not to exceed more frequently than once per hour unless mutually agreed upon by the requestor and provider. RXX.3 In that format in which the data exists at the time of the request, unless otherwise agreed upon by the

Commenter	3. Comments on Requirements
	requestor and provider. Rxx.4 For the requested time period up to 13 months in the future. Response: The SDT has redrafted the requirement to improve clarity, and has modified the language to incorporate the "aggregated" concept. The requirement has been broken into subrequirements and the possible list of data has been converted to bullets. R10.13 There is a stray right parenthesis after the word "Margin." Response: The SDT has corrected this typographical error. MOD-04 R2 The acronym "CBID" should be changed to "CBMID." Response: The SDT has corrected this typographical error. MOD-29 R1.6. The Team and those listed above suggest this bullet be deleted. This is already addressed in R2 wherein the modeling process is dictated. In the RSP methodology, "peak load forecasts" are not used to stress the system; rather, load and generation are simulated to stress the system to its greatest capacity. There are cases when the highest forecasted load may not stress the system to its greatest utilization – which is the goal of Order 890 as addressed in R2 under the RSP. Response: The SDT has eliminated the word "Peak" from the requirement. R2.3 The Team and those listed above suggest correcting "…as determined by R1.2.1…" to read "…as determined by R2.1." Response: The SDT has corrected this typographical error. R5. The language describing Native Load should be changed from "reserved" to "allocated." Allocated is the word most commonly used in conjunction with OASIS to describe this condition. The same change should apply to GF sub F. Response: The SDT has modified the standard to use the phrase "set aside." The language describing Grandfathered capacity includes the defined terms "Firm" and "Transmission Service." Use of these words as defined terms is inconsistent throughout the proposed standards. They should either be changed here to a lower case or all applicable areas in each proposed standard should be changed to the defined term. Response: These terms have been made consistently lower case. MOD-30 MOD-01 allows an entity to select multiple methodologies to determine ATC. For example, an entity may elect to use Flowgates inside their affected area whereas they may also elect to use the Rated System Path methodology at the interface of their affected area. Under this scenario, the applicable entity need not study Flowgates beyond the

Commenter	3. Comments on Requirements
	intersecting cut plane of its interface as the ATC at the interface falls not under MOD-30 but MOD-29. To prevent seams issues and unnecessary analysis the Team and those listed above highly recommend the following rewrite(s): MOD-30, R2.1.2. All first Contingency transfer analyses from all adjacent Balancing Authority source/sink combinations either: a) to at least the first three limiting Elements / Contingency combinations within the Transmission Operator's system or b) to the interface of the adjacent Balancing Authority where the Transmission Operator utilizes the Rated System Path methodology. This concept also applies to: MOD-30, R3.5, R3.6, R5.1, R7.2 and R7.4. Response: The SDT changed R2.1.2 to reflect the requested change. With respect to R3.5 and R3.6, the SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. R6.1, R6.3, R6.4, R7.2, R7.4 have been addressed by adding the stipulation that impacts of other neighboring systems only have to be used if they're impact is greater than what is used in the regional congestion management procedure. This allows for sparse networks that do not get impacted by neighboring transactions to ignore them.
Response: Please see in-line responses.	
WestConnect Transfer Capability Workgroup	General In General the WestConnect Teams agrees with the WECC Comments. In addition the WestConnect Team adds the following comments. All of the MODs should be reviewed for consistency in terminology. In particular the terms "day" and "calendar days". Response: The SDT has reviewed for consistency and specified all days as calendar days. MOD-01 R4. and R5. Address how counter flows are dealt with in determining ATC. In MODs 28, 29 and 30 the use of counter flows are again addressed in the determining ATC. This leads to having to refer to two different documents when addressing counter flows. The WestConnect Team suggests using the WECC suggestion. WECC suggestion is "The Team suggests MOD-01, R5 should be "cut" from MOD-01 and "pasted" into each of the MODs 28, 29 and 30 so that the reader / applicable entity can see the self-contained algorithm requirements in each of those three methodologies rather than having to cross reference (hunt and peck) between 28/29/30 and MOD-01. Since counterflows are always the last element mentioned in 28/29/30, the team would suggest pasting the MOD-01 counterflow requirement into each standard as the last requirement in each." Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. Requirement R10. should be rewritten to clarify that Transmission Service Provider is required to provide only the data requested and only the existing data that the Transmission Service Provider has possession of and in the format that

Commenter	3. Comments on Requirements
	this existing data is in. Response: The requirement has been reworded to improve the clarity as requested. Change R10.4 so that the Transmission Service Provider provides Network Integration Transmission Service details on an aggregated basis. Response: The SDT has changed the language as suggested. MOD-04 The Team suggest changing R2. to "within seven days of the effective day of a change." Response: The drafting team believes that the entities should be notified prior to any change is implemented and the standard has been modified accordingly. MOD-08 For a system where the Rated System Path method is used to determine ATC, the Transmission Operator for a path with multiple owners only operates the path. The Transmission Owner gets its contractual share of the TTC. In addition it is responsible for all the ATC calculation and determining the TRM associated with it contractual share of the path. In MOD-08 as currently written the Transmission Operator is responsible for requirements R1., R2., R4. and R5.. The Team recommends that requirements R1., R2., R4. and R5. be rewritten to make this the responsibility of the Transmission Owner for entities using Rated System Path. Response: The way entities are currently organized and the functional model do not always align due to the variety of organizational structures and the developmental state of the Functional Model and revising the functional model is beyond the scope of this team. There has been much discussion by the team on what part of the functional model is assigned to what requirements, and while the team would not claim to have found the perfect fit, the team does believe it has found the best fit for the current model. Based on the model as currently written the team believes the Transmission Operator is the correct party. There is nothing in this requirement or the functional model that precludes the Transmission Operator from contracting with the Transmission Owners to provide the method, calculation, values and representation on this issue. R.5 the Team suggest change "shall calculate" to "shall review and recalculate as necessary " Response: As a result of the discussions subsequent to your comment the drafting team has split the old requirement R5 to two requirements (R4 and R5, the old R4 being deleted). This split allowed the team to review this item in more detail. The agreed to phrasing was “Each Transmission Operator using TRM shall recalculate TRM values in accordance with the TRMID at least once every 13 months.” Many utilities expressed the same concern you have on the phrase recalculation. A simple example may best express the teams standpoint on the phrase recalculation. Suppose a utility uses a formula in a spreadsheet to determine the TRM based on certain inputs. They perform their review and determined the inputs have not changed and therefore

Commenter	3. Comments on Requirements
	the output value has not changed. In that case the report explaining the lack of change in inputs and a copy of the spreadsheet with an updated date would likely be sufficient. MOD-29 R1.6. The bullet should be deleted. In the Rated System Path methodology "peak load forecast are not used to stress the system; rather, load and generation are simulated to stress the system. This is already addressed in R.2. Response: The SDT agrees and has removed peak load forecast and replaced it with load forecast.
Response: Please see in-line responses.	
Western Area Power Administration – RMR	General Comments All standards should be checked for consistency in the use of the terms “calendar days” and “days.” Of note, these terms may differ between the Requirements and the corresponding VSLs. E.g. MOD-4, R4 specifies “calendar days” whereas the VSL for this requirement stipulates “days.” Response: The SDT has clarified that all days are to be “calendar days.” The documentation overall is very wordy - starting with the "Proposed Effective Date." - need to cut down language throughout. Response: The drafting team believes that in general, the language is appropriate, and accurately conveys the intention of the requirements. We have simplified where possible. MOD-01 Posted Path Definition - "Any BA to BA interconnections." Most TPs in the Western Interconnection do not post BA-BA interconnections as "paths". Is the intent here to be interpreted as "if you post BA-BA paths" vs. you shall post all interconnections? Response: A new term, ATC Path, has been defined for use in the NERC standards to avoid conflicting with a term presently defined by FERC and this term has been removed from the definition. R1. and R2. State “…for each Posted Path per time period…” and “…values for the time periods listed…” respectively. The terms “time period” should be changed to “time horizon.” This locks the time window to a prescribed window and negates the ability to assign a random “time period.” Response: The Drafting Team did not use the phrase “time horizon” because that is a term that is used by NERC in the Standards to indicate how much time is available for mitigating a violation to the requirements, and could thus cause confusion. The Drafting Team did remove the reference to time period in R2 and specifically referenced R2 in R1 in an attempt to address your concern.

Commenter	3. Comments on Requirements
	R3.3. The Team suggests breaking the "R" into two pieces for clarity. The existing wording of being "associated" with each Facility is overly vague. Response: The SDT has done as suggested. (New) R3.3 "The identity of the Planning Coordinator responsible for assessing the long term reliability of each Facility under the Transmission Provider's tariff." (As an alternative to the word "Facility", "Posted Path" should be considered.) Response: The SDT has eliminated the Planning Coordinator, based on the intent of the requirement. .(New) R3.X "The identity of the Transmission Operator responsible for the real time operating reliability of each Facility under the Transmission Provider's tariff." (As an alternative to the word "Facility", "Posted Path" should be considered.) Response: The SDT has modified this requirement to more clearly describe the intent. R3.6 The format of this sub-requirement does not match that of the other five sub-requirements ahead of it making the meaning unclear. The Team suggests the following rewording: "R3.6. A description of the methodology(ies) used to allocate ATC among multiple lines or sub-paths within a larger Posted Path, including where applicable, any methodology(ies) used to allocate ATC among multiple owners of a single path." Response: The SDT incorporated the suggested language, but changed "ATC" to "transfer capacity" to cover ATC, TTC, AFC, and TFC. Additionally, the SDT also added the phrase "or Flowgate." R4 and R5. These describe how counterflows are to be dealt with even though counterflows as a subcomponent of ETCs are addressed in MOD-28, R11 and R12; MOD-29, R7 and R8, and MOD-30, R8 and R9. The Team suggests MOD-01, R5 should be "cut" from MOD-01 and "pasted" into each of the MODs 28, 29 and 30 so that the reader / applicable entity can see the self-contained algorithm requirements in each of those three methodologies rather than having to cross reference (hunt and peck) between 28/29/30 and MOD-01. Since counterflows are always the last element mentioned in 28/29/30, the team would suggest pasting the MOD-01 counterflow requirement into each standard as the last requirement in each. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. R10. The wording is difficult to follow and could be clearer as to which entity must provide what information. The Team suggests the following rewrite without doing damage to the substance.

Commenter	3. Comments on Requirements
	Suggested redraft: "R10. Upon request from another Transmission Service Provider, Planning Coordinator or Reliability Coordinator, each Transmission Service Provider shall provide from the below specified list, only that data requested and only that data already in existence and in the possession of the Transmission Service Provider from which that specified data is requested. Provision of all data is subject to confidentiality and security requirements. R10.1 et al Keep the list of data as drafted except for R10.4. which is overly vague. Change R10.4 to read: (New) R10.4 "Network Integration Transmission Service capacity on an aggregated basis." ADD AN ADDITIONAL REQUIREMENT FOR CLARITY; BREAK THE EXISTING R10 INTO TWO PIECES: RXX. Each Transmission Service Provider providing information pursuant R10 shall do so: RXX.1 Within fourteen days of a request RXX.2 On the interval specified by the requesting entity, not to exceed more frequently than once per hour unless mutually agreed upon by the requestor and provider. RXX.3 In the format in which the data exists at the time of the request, unless otherwise agreed upon by the requestor and provider. Rxx.4 For the requested time period up to 13 months in the future. R10.13 There is a stray right parenthesis after the word “Margin.” Response: The SDT has redrafted the requirement to improve clarity, and has modified the language to incorporate the “aggregated” concept. The requirement has been broken into subrequirements and the possible list of data has been converted to bullets. D1.3 - data retention - why not make it all the same time period - say two years? Response: These data retention requirements are driven by the requirements of the NERC compliance program. MOD-04 R2 The acronym “CBID” should be changed to “CBMID.” Response: The SDT has corrected this typographical error. R4.2.1 - Western interconnection puts reserve sharing requirements in TRM, not CBM. Response: TRM is used for operating reserve and CBM is used for planning reserve and no double counting should occur.

Commenter	3. Comments on Requirements
	MOD-29 R1.6. The Team suggests this bullet be deleted. This is already addressed in R2 wherein the modeling process is dictated. In the RSP methodology, "peak load forecasts" are not used to stress the system; rather, load and generation are simulated to stress the system to its greatest capacity. There are cases when the highest forecasted load may not stress the system to its greatest utilization – which is the goal of the R2 under the RSP. Response: The SDT has eliminated the word "Peak" from the requirement. General comment/question - does R.2 conflict with FAC-012? Response: As part of the implementation, FAC-012 will be retired. R2.3 The team suggests correcting "…as determined by R1.2.1…" to read "…as determined by R2.1." Response: The SDT has corrected this typographical error. R5. The language describing Native Load should be changed from "reserved" to "encumbered." Encumbered is the word most frequently used in conjunction with OASIS to describe this condition. The same change should apply to GF sub F. Response: The SDT has modified the standard to use the phrase "set aside." The language describing Grandfathered capacity includes the defined terms "Firm" and "Transmission Service." Use of these words as defined terms is inconsistent throughout the proposed standards. They should either be changed here to a lower case or all applicable areas in each proposed standard should be changed to the defined term. Response: These terms have been made consistently lower case. R6 - what is "non-firm capacity reserved for NITS"? Response: This refers to network service from undesignated resources (i.e., Priority 6 non-firm Network). D1.3 - why not require one retention time period - say two years? Response: These data retention requirements are driven by the requirements of the NERC compliance program. MOD-30 MOD-01 allows an entity to select multiple methodologies to determine ATC. For example, an entity may elect to use Flowgates inside their affected area whereas they may also elect to use the Rated System Path methodology at the interface of their affected area. Under this scenario, the applicable entity need not study Flowgates beyond the intersecting cut plane of its interface as the ATC at the interface falls not under MOD-30 but MOD-29. To prevent

Commenter	3. Comments on Requirements
	seams issues and unnecessary analysis the Team suggests the following rewrite(s): MOD-30, R2.1.2. All first Contingency transfer analyses from all adjacent Balancing Authority source/sink combinations either: a) to at least the first three limiting Elements / Contingency combinations within the Transmission Operator's system or b) to the interface of the adjacent Balancing Authority where the Transmission Operator utilizes the Rated System Path methodology. If adopted, this same concept would be applied to: MOD-30, R3.5, R3.6, R5.1, R7.2 and R7.4. Response: The SDT changed R2.1.2 to reflect the requested change. With respect to R3.5 and R3.6, the SDT has changed this requirement to be consistent with MOD-028, which requires the modeling or equivalencing of adjacent Reliability Coordinator areas. R6.1, R6.3, R6.4, R7.2, R7.4 have been addressed by adding the stipulation that impacts of other neighboring systems only have to be used if they're impact is greater than what is used in the regional congestion management procedure. This allows for sparse networks that do not get impacted by neighboring transactions to ignore them.

4. The drafting team has proposed a set of measures and compliance elements for the standards. If there is a measure or compliance element that you believe is incorrect, please identify this for us, being as specific as possible with a suggestion for revising the language so it is correct.

Summary Consideration: The majority of comments received were either corrections or clarifications. The SDT also made conforming changes in response to comments received in the other questions.

Some entities requested clarification that zero was an acceptable value for use in many of the calculations, The drafting team clarified this in the measures.

Some entities requested clarification regarding VSLs related to the use of facility ratings. The SDT clarified in the VLS that "an inaccurate Facility Rating is a single violation, regardless how many times that Facility Rating has been utilized."

The SDT made other minor corrections and clarifications as needed.

Commenter	4. Comments on Measures or Compliance Elements
Alberta Electric System Operator	
Ameren Services	MOD-004-1 M8. "CBM has been used to determine a margin" should be reworded. CBM is a margin. Suggest eliminating "to determine a margin". Response: The measure has been reworded such that this concern has been addressed. D.1.3. R1 refers to CBMID not ATCID. Response: The SDT has corrected this typographical error.
Response: Please see in-line responses.	
American Transmission Company	
Arizona Public Service Co.	Arizona Public Service Co. is in agreement with the WestConnect Comments and in general agreement with the WECC Comments. Response: Please see the WECC MIC MIS ATC Drafting Team and WestConnect responses. In addition the Arizona Public Service Co. adds the following comment. MOD-001 The use of Counter Schedules to create firm ATC is of concern to APS. This practice could result in unreliable conditions to the interconnection if the counter flows do not occur. Due to the reliability concerns there should be a requirement for the Transmission Provider to provide documentation of actions that it will take if the Counter Flows do not occur. Response: The standard no longer requires the use of counterschedules to create firm or non-firm ATC.

Commenter	4. Comments on Measures or Compliance Elements
Response: Please see in-line comments.	
Avista Corporation	
Bonneville Power Administration	a. MOD-01 i. M9 – There is an unnecessary word "the" following the word "show" in the second line of the measure. Response: The SDT has corrected this typographical error. Additionally, the timeline(s) for responding to a request for data in R10 and M9 should be made consistent with one another – is it a requirement to respond to the request for data w/in 14 days or to begin to respond? Response: The intent is for the TSP to make the first set of data available within 30 calendar days of a request and to update it on the scheduled frequency. ii. VSL for R4 – The word "Firm" should be inserted before the word ATC as R4 only refers to Firm ATC. iii. VSL for R5 – The word "Non-Firm" should be inserted before the word ATC as R5 only refers to Non-Firm ATC. Response: R4 and R5 have been removed. b. MOD-04 i. M1 – Suggested rewording: "Each Transmission Service Provider shall produce its CBMID evidencing inclusion of all specified information in R1." This approach should also be taken at M1 for MOD-08. Response: The standards have been modified as suggested. ii. M5 – line 3 states "…they it has based its CBM…" Please change to "…that it has based its CBM…" Response: The SDT has corrected this typographical error. iii. VSL for R2 – The acronym "CBID" should be changed to "CBMID." Response: The SDT has corrected this typographical error.. iv. VSL for R10 – The VSL is unclear. The Team suggests it be rewritten to state, "The Transmission Service Provider failed to approve an Interchange Transaction Tag for CBM submitted by an Energy Deficient Entity under an EEA2 when CBM was available." Response: The standard has been modified as suggested. v. D1.3 Data Retention – For clarity, the phrase "three calendar years" in the second through fifth bullets should be changed to "most recent three calendar years plus the current year." Response: The standard has been modified as suggested. c. MOD-08 i. M5 – M5 is missing he right parenthesis after the word "data" on the first line. Response: The SDT has corrected this typographical error. ii. VSL for R1 – In the Moderate Level column, change the phase "changes been" to "changes that have been". Response: The SDT has corrected this typographical error. d. MOD-29 i. M1 – M1 inaccurately calls for production of "models" used to derive TTC. As there are multiple conditions under MOD-29, R2 where a model does not dictate the predicate for TTC, M1 should be reworded to state "…shall produce the models, contracts, nomograms, reports or study results…" – this corresponding to: 1. Models in R2.1, R2.2. and R2.5 2. Contracts in R.2.3 and R2.6 3. Nomograms in R2.4

Commenter	4. Comments on Measures or Compliance Elements
	4. Reports or studies in R2.7 and R2.8 Response: The drafting team has changed the measure to require "any" model used, which should address the concern expressed. Adding the items suggested would not be an appropriate change, as R1 does not require these items. ii. M1.3 – The Team suggests correcting M1.3 from "…as stated in R1.1 through R.12…" to "…as stated in R1.1 through R1.12…" Response: The SDT has corrected this typographical error. iii. M4 – If "M1" above is adopted, M4 is duplicative of M1 and should be deleted. Response: M4 has not been deleted because the change to M1 was not made as suggested. iv. VSL for R4 – An SOL does not exist for every Posted Path. This VSL should be amended by changing the words "the SOL" in the High and Severe columns to read "any SOL". This makes the wording of the Requirement consistent with the wording of the Measure. Response: The wording has been changed to "any associated" SOL. v. VSL R5, R6, R7, R8 – These VSLs call for only a "severe" determination. They also mandate that the TSP "use" all the elements defined. However, the TSP will not "use" all the defined elements if they are not applicable. Thus, if a TSP does not "use" all elements defined because all the elements were not applicable – the TSP is in violation for not including null elements in its calculation. The Team suggests these be rewritten to state: "The Transmission Service Provider did not use all affected elements as defined in…." This approach should help clarify that "zero" as an integer is an acceptable entry and that only those variables "affected" need be reported or acted upon. Response: The SDT agrees, and all standard have had their measures modified to indicate the use of a zero is not by itself a violation.
Response: Please see the detailed in-line responses.	
British Columbia Transmission Corporation	1. MOD-029-1, M4 and Compliance, 1.3 Data Retention, 4th bullet - The reference to R2.7 should be R2.6 (i.e. should be R2.1 through R2.6). There are no models, reports, or study results required by R2.7. Therefore, there is no point in having a Measure and a Compliance Process looking to see if models, reports, or study results have been produced and retained. Response: We have modified the measure to address this concern. 2. MOD-029-1, M7 - Should the reference be to R7 and R8? R6 does not require the use of TTC. Response: Yes. The reference has been changed. 1. MOD-029-1, M7 - The reference to R.1.2 is not clear. Should this reference be to R2? Response: Yes – Yes. The reference has been changed.
Response: Please see detailed in-line responses.	
Clearwater Power Company	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
ColumbiaGrid, Inc.	[Intentionally left blank.]
Consumers Power, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.

Commenter	4. Comments on Measures or Compliance Elements
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Duke Energy	- MOD-001-1, M8 should say "recalculated" rather than "updated". Response: The measure has been changed as suggested. - MOD-001-1, VSLs for R10 should increase based upon increasing the time allowed to 30 days for making data available under R10 (see comment 3 above). Suggest Moderate VSL of 30 - 45 days, High VSL of 47 - 75 days, and Severe VSL of more than 75 days. Response: The timing in the requirement has been changed from 14 days to 30 days and the VSLs have been changed accordingly.
Response: Please see detailed in-line responses.	
Entergy Services Inc.	MOD-001-1 M5 - copies of dated electronic email for notification does not ensure that the email has been received by the receiving party. Other mediums should be included or receipt of the email notification should be required as a measure. Response: "Dated electronic mail message" has been removed from the requirement and listed as an example in what is currently M4. MOD-001-1 M6 - Reference to "such as demonstration" is unclear as to what is included in "demonstration" so parenthetical reference should be deleted. Response: The intent is to allow the provider to show the fact that the document has been made available. MOD-001-1 M9 - Extra "the" from line 2 between the words "show" and "its" should be deleted. Response: The SDT has corrected this typographical error. MOD-004-1 M3 - The measure should also include group of LSEs with aggregated need for CBM as provided in R3. Response: The measure has been changed as suggested. MOD-004-1 First bullet under Data Retention should refer to CBMID rather than ATCID. Response: The SDT has corrected this typographical error. MOD-004-1 Violation Risk Factors - Correct typos in row for R2 "CBID" to be changed to "CBMID". Response: The SDT has corrected this typographical error. MOD-008-1 M2 - In case SDT removes reference to CBM as Entergy suggested above, SDT should remove reference to CBMID in this measure also. Response: The team did not adopt the earlier proposal, therefore the Measure is not adopted. MOD-008-1 M5 - In case SDT changes frequency or TRM calculation to 12 months as Entergy suggested above, SDT should make corresponding change in M5. Response: The team did not adopt the earlier proposal, therefore the Measure is not adopted. MOD-028-1 M9 - Correct typo in line 3 from "its" to "it". Response: The SDT has corrected this typographical error. MOD-029-1 M2 - Correct typo in line 3 from "ACTID" to "ATCID".

Commenter	4. Comments on Measures or Compliance Elements
	Response: The SDT has corrected this typographical error. MOD-030-1 Violation Risk Factors - Correct typo in cells under Lower VSL, Moderate, and High VSL for R2 to change from "is" to "it" in last paragraph. Response: The SDT has corrected this typographical error.
Response: Please see detailed in-line responses.	
EPSA	
ERCOT	
Fall River Rural Electric Cooperative, Inc.	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
FirstEnergy Corp.	1. MOD-001-1: Measure M2 - Change typographical error at the end of the measure that currently reads "(R1)" to "(R2)". Response: The SDT has corrected this typographical error. 2. MOD-001-1: Measure M7 should not include the Transmission Operator. The TOP is not responsible for calculating the ATC, TTC, or AFC. Response: MOD-028 Area Interchange Methodology and MOD-029 Rated System Path Methodology assign responsibility for calculating TTC to the Transmission Operator. 3. MOD-001-1: VSL-Severe for R2 incorrectly includes the Transmission Operator. This requirement is only applicable to the Transmission Service Provider. Response: The Drafting Team has incorporated this change. 4. Per our rewording suggestions in Question 3 and Question 6, several measures and compliance elements must be reviewed and revised by the SDT. - E.g., MOD-030-1: Measure M7 - Per our rewording suggested in Question 3 for Requirement R3, M7 should be reworded as follows: "The Transmission Operator shall provide evidence (such as written documentation, logs, models, and data) that the Transmission model used to support the AFC calculated by the Transmission Service Provider contains the information specified in R3." Response: The Drafting team has ensured that the Measures are consistent with the final Requirements.
Response: Please see detailed in-line responses.	
Flathead	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	

Commenter	4. Comments on Measures or Compliance Elements
FRCC	MOD 001: M8 (referencing R9) should be revised to require proof of updates only when the information posted needs to be changed. For Example: "The Transmission Service Provider shall provide evidence (such as logs or data) that it has updated the hourly, daily and monthly ATCs on at least the minimum frequencies specified in R9 when those ATC values have changed.
Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation.	
Georgia Transmission Corporation	MOD-001-1, R9, Lower VSL says "For Hourly, not calculated within 5hrs". MOD-001-1, R9, Medium VSL says "For Hourly, not calculated in more than 5 hours but not more than 10 hours". This language appears to allow a TSP to not calculate for 4:59 hours, while not calculating for 5 hours is a Lower VSL and more than 5 hours is a Medium VSL. We suggest that the MOD-001-1, R9, Lower VSL should be re-written to say "For Hourly, not calculated in more than 2 hours but not more than 5 hours". Response: The language has been modified to address this concern. MOD-028-1, M5 requires Transmission Operators to "provide copies of contracts" without stating the entities that can receive (potentially) commercially sensitive "copies of contracts". MOD-028-1, M5 should state "The Transmission Operator shall make available, only to authorized individuals that have executed a Confidentiality Agreement and that are performing official RRO audit activities, copies of contracts that contain requirements to allocate TTCs to show that any contractual allocations of TTC were respected as required in R5.2. Transmission Operators may redact the copies of the contracts to omit commercially sensitive information." Response: This measure is related only to compliance, and all standard confidentiality agreements would apply.
Response: Please see detailed in-line responses.	
Hydro One Networks	
Hydro-Québec TransÉnergie (HQT)	1. VSL for MOD-028 R2 and R3 are is not clear if the 'errors' that are allowed are for a given TTC study or the allowed cumulative 'errors' since the last audit? (this language should also be clarified on comparable VSLs in MOD-029 and MOD-030). Response: The "errors" would apply for the period being audited. The SDT has clarified in MOD-028 and MOD-030 that "An inaccurate Facility Rating is a single violation, regardless how many times that Facility Rating has been utilized." "Are is" in the first sentence needs to be corrected. The SDT has corrected this typographical error. 2. If suggestions in Question 3 and 6 are accepted, the associated Measures and VSLs will also need to be updated accordingly. Response: The SDT has reviewed the Measures and VSLs and update them as appropriate.
Response: Please see in-line comments.	
IESO	MOD-001: If the SDT accepts our comments in (3) above, then the following Measures should be revised:

Commenter	4. Comments on Measures or Compliance Elements
	M1: changed to reflect new requirement language accordingly. M7: Split this measure into two to reflect the split of R8 into two requirements. M10: This measure needs to be reworded for clarity, as follows: "The Transmission Service Provider shall provide a copy of the dated request for ATC data as well as evidence to show it responded to that request (such as logs or data) within fourteen calendar days of receiving a request, and the requested data items were made available in accordance with R10." Response: M1 has been changed to reflect the change in R1. The former R8 (currently R6) was not split, therefore no change has been made to the former M7 (currently M6). The former M10 (currently M9) has been reworded as requested. MOD-004: Assuming the above comments are accepted, M2: Need to be changed to reflect posting on the OASIS. M7: Need to change Transmission Planner to Transmission Service Provider. M9: Remove Transmission Planner from this measure. VSL for R1 should be changed to be associated with the number of elements (R1.1 to R1.3) not included. Response: M2, M7, M9 - The above comments were not accepted. VSL for R1 – The VSL has been modified to address your concern. MOD-008: Assuming the above comments are accepted, M4: Need to be changed to reflect posting on the OASIS. VSL for R1 should be changed to be associated with the number of elements (R1.1 to R1.4) not included. Response: M4 - The above comments were not accepted. VSL for R1 – The VSL has been modified to address your concern. MOD-030 The Violation Risk Factor for R3, R5, R6, and R8 should be changed from Medium to Lower. In order for these requirements to have a medium VRF, according to the VRF criteria in Drafting Team Guidelines, they would have to directly affect the electrical state or capability of the bulk electric system or ability to effectively monitor and control the bulk electric system or in the planning time frame, or if violated, could under emergency, abnormal or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state of capability of the bulk electric system. There is no direct link from this requirement because selling transmission service does not affect actual flows. The transmission service would have to be scheduled by the customer which he may not do and then the schedule has to be approved by all TPs on the path, and source and sink BA. These entities have tools that allow them to determine if a schedule should flow and the Reliability Coordinator acts as a backstop. When the RC issues a TLR, Interchange Distribution Calculator even reallocates and halts new schedules during regardless of how long ago the transmission service was sold. Thus, several other activities have to occur or fail to occur to impact directly the BES and thus, there is no direct link.

Commenter	4. Comments on Measures or Compliance Elements
	Response: The SDT believes there is a direct link. Overselling of the system can lead to an SOL violation. While it is true that there are steps to mitigate such violations, this does not change the fact that an inaccurate ATC can increase the risk of those situations occurring.
Response: Please see in-line responses.	
ISO/RTO Council (IRC)	For MOD-001: If the SDT accepts our comments in (3) above, then the following Measures should be revised: M1: changed to reflect new requirement language accordingly. M7: Split this measure into two to reflect the split of R8 into two requirements. M10: This measure needs to be reworded for clarity, as follows: "The Transmission Service Provider shall provide a copy of the dated request for ATC data as well as evidence to show it responded to that request (such as logs or data) within fourteen calendar days of receiving a request, and the requested data items were made available in accordance with R10." Response: M1 has been changed to reflect the change in R1. The former R8 (currently R6) was not split, therefore no change has been made to the former M7 (currently M6). The former M10 (currently M9) has been reworded as requested. MOD-004: Assuming the above comments are accepted, M7: Need to change Transmission Planner to Transmission Service Provider. M9: Remove Transmission Planner from this measure. VSL for R1 should be changed to be associated with the number of elements (R1.1 to R1.3) not included. Response: M7, M9 - The above comments were not accepted. VSL for R1 – The VSL has been modified to address your concern. MOD-008: Assuming the above comments are accepted, VSL for R1 should be changed to be associated with the number of elements (R1.1 to R1.4) not included. Response: The VSL has been modified to address your concern. MOD-29 M1. M1 inaccurately calls for production of "models" used to derive TTC. As there are multiple conditions under MOD-29, R2 where a model does not dictate the predicate for TTC, M1 should be reworded to state "…shall produce the models, contracts, nomograms, reports or study results…" Corresponding to: 1) Models in R2.1, R2.2. and R2.5; 2) Contracts in R.2.3 and R2.6; 3) Nomograms in R2.4; 4) Reports or studies in R2.7 and R2.8.

Commenter	4. Comments on Measures or Compliance Elements
	Response: The drafting team has changed the measure to require "any" model used, which should address the concern expressed. Adding the items suggested would not be an appropriate change, as R1 does not require these items. M1.3 We suggest correcting M1.3 from "…as stated in R1.1 through R.12…" to "…as stated in R1.1 through R1.12…" Response: The SDT has corrected this typographical error. M4. If "M1" above is adopted, M4 is duplicative of M1 and should be deleted. Response: M4 has not been deleted because the change to M1 was not made as suggested. VSL R5, R6, R7, R8 These VSLs call for only a "severe" determination. They also mandate that the TSP "use" all the elements defined. However, the TSP will not "use" all the defined elements if they are not applicable. Thus, if a TSP does not "use" all elements defined because all the elements were not applicable – the TSP is in violation for not including null elements in its calculation. We suggest these be rewritten to state: "The Transmission Service Provider did not use all affected elements as defined in…." This approach should help clarify that "zero" as an integer is an acceptable entry and that only those variables "affected" need be reported or acted upon. Response: The SDT agrees, and all standard have had their measures modified to indicate the use of a zero is not by itself a violation. MOD-030 The Violation Risk Factor for R3, R5, R6, and R8 should be changed from Medium to Lower. In order for these requirements to have a medium VRF, according to the VRF criteria in Drafting Team Guidelines, they would have to directly affect the electrical state or capability of the bulk electric system or ability to effectively monitor and control the bulk electric system or in the planning time frame, or if violated, could under emergency, abnormal or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state of capability of the bulk electric system. There is no direct link from this requirement because selling transmission service does not affect actual flows. The transmission service would have to be scheduled by the customer which he may not do and then the schedule has to be approved by all TSPs on the path, and source and sink BA. These entities have tools that allow them to determine if a schedule should flow and the Reliability Coordinator acts as a backstop. When the RC issues a TLR, the Interchange Distribution Calculator even reallocates and halts new schedules regardless of how long ago the transmission service was sold. Thus, several other activities have to occur or fail to occur to impact the BES and thus, there is no direct link. Response: The SDT believes there is a direct link. Overselling of the system can lead to an SOL violation. While it is true that there are steps to mitigate such violations, this does not change the fact that an inaccurate ATC can increase the risk of those situations occurring.
Response: Please see in-line responses.	
Manitoba Hydro	
MidAmerican	

Commenter	4. Comments on Measures or Compliance Elements
Energy Electric Trading	
Midwest ISO	
Modesto Irrigation District	MID supports the comments submitted by SMUD on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
MRO	
New Brunswick System Operator	
NorthWestern Energy (NWMT)	The use of the term "horizon" in the violation risk labels has caused some confusion because of its use in ATC horizons (different time periods for which ATC is calculated in a specific manner).
Response: This terminology has been used consistent with NERC's compliance definitions, which are beyond the scope of this drafting team to change.	
NPCC Regional Standards Committee	1. VSL for MOD-028 R2 and R3 are is not clear if the 'errors' that are allowed are for a given TTC study or the allowed cumulative 'errors' since the last audit? (this language should also be clarified on comparable VSLs in MOD-029 and MOD-030). Response: The "errors" would apply for the period being audited. The SDT has clarified in MOD-028 and MOD-030 that "An inaccurate Facility Rating is a single violation, regardless how many times that Facility Rating has been utilized." "Are is" in the first sentence needs to be corrected. Response: The SDT was unable to find the reported error. 2. If suggestions in Question 3 and 6 are accepted, the associated Measures and VSLs will also need to be updated accordingly. Response: The SDT has reviewed the Measures and VSLs and update them as appropriate.
Response: Please see in-line comments.	
NYISO	The NYISO joins in, and supports, the comments submitted by the IRC in response to this question. The NYISO also supports the comments submitted by the NPCC. Except as noted by the IRC and NPCC, the NYISO does not believe that any of the proposed measures or compliance elements are incorrect based on its expectation that NERC will interpret the ATC standards in a way that accommodates the needs of transmission providers that do not offer physical reservation transmission service. If, however, NERC were to interpret the standards in a manner that was inconsistent with the use of FERC-approved non-physical forms of transmission service then the proposed compliance and sanction requirements would be inappropriate, inequitable, and unlawful. The NYISO does not believe that this is NERC's intent. In any event, NERC should not develop standards, or interpret them in a way, that would expose transmission providers to enforcement action for implementing tariffs that have been approved by FERC, and that Order No. 890 does not require be changed, simply because their tariffs differ from the standard Order No. 890 model.

Commenter	4. Comments on Measures or Compliance Elements
Response: Paragraph 160 of Order 890 provides ISOs and RTOs the means through which they can request to be exempted from the requirements of the Order, and NERC has similar provisions through which exemptions from the requirements of this standard may be pursued. These standards do not address the selling of service, and instead only apply to the determination of ATC.	
PacifiCorp	
PJM Interconnection LLC	Violation Severity Levels NERC Standards should be developed to assure reliability. Standard business practices related to fair market practices should be developed and implemented by NAESB. PJM supports the IRC comment that in order for "requirements to have a medium VRF, according to the VRF criteria in Drafting Team Guidelines, they would have to directly affect the electrical state or capability of the bulk electric system or ability to effectively monitor and control the bulk electric system or in the planning time frame, or if violated, could under emergency, abnormal or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state of capability of the bulk electric system." Further, a Violation Severity Level should be a measure of the potential impact to reliability. If a violation does not impact reliability, there should not be a VSL assigned at all. PJM agrees with SERC comments that violation levels for TFC should only be moderate or higher if they exceed an SOL or IROL. Response: The SDT disagrees. Errors in the determination of AFC or ATC can result in unintentional oversecheduling, which can result in violations of SOLs. The VSLs set in the MOD standards are not consistent with the definitions the VSL definition in the Violation Severity Limit Definitions Table in Figure 1 of "Violation Severity Levels Development Guidelines Criteria October 10, 2007" (VSL Guidelines). The definition in the VSL Guidelines defines a Moderate Violation (VSL 2) as "non-compliant with respect to one significant element within the requirement." For example, MOD-030-1 sets the Severe VSL for R3 as "The Transmission Operator did not update the Transmission model per the schedule specified in R3," which is based on a violation of a single significant element. This clearly falls under the definition of a moderate VSL per the VSL Guidelines. The entire set of Violation Severity Levels in the MOD standards needs to be revised per the VSL Guidelines. Response: The VSL guidelines are intended to serve as guidelines, not requirements. The drafting team has endeavored to make the VSLs consistent with the guidelines while at the same time ensuring an accurate accounting of the violation severity.
Response: Please see detailed in-line responses.	
Progress Energy, Carolinas	
Public Service Commission of SC	
Public Utility District #2 of Grant County,	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.

Commenter	4. Comments on Measures or Compliance Elements
Washington	
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Puget Sound Energy	The use of the term "horizon" in the violation risk labels has caused some confusion because of its use in ATC horizons (different time periods for which ATC is calculated in a specific manner).
Response: This terminology has been used consistent with NERC's compliance definitions, which are beyond the scope of this drafting team to change.	
Salmon River Electric Cooperative	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Salt River Project	Please refer to answers to question Q6 for examples
Response: Please see Q6 for response.	
Santee Cooper	
SERC ATCWG	Revise MOD-028-1, M5 to the following: The transmission operator shall describe in its ATCID the requirement to allocate TTC and show that any allocations of TTC were respected as required in R5.2.
Response:	
Sierra Pacific Resources Transmission	The SPR companies are in support of lowering the Violation Risk Factors and Violation Severity Levels as specifically commented on by SERC. At best all Violation Risk Factors should be LOW, as none of these requirements pose risk to the reliability of the interconnected Bulk Electric System, and are only commercial in nature. (Please refer to the response to Q5 below regarding the lack of applicability of these Standards to the reliability of the BES.) Specific: MOD-01 M9 There is an unnecessary word "the" following the word "show" in the second line of the measure. Response: The SDT has corrected this typographical error. VSL for R4. The word "Firm" should be inserted before the word ATC as R4 only refers to Firm ATC. Response: R4 has been deleted. VSL for R5. The word "Non-Firm" should be inserted before the word ATC as R5 only refers to Non-Firm ATC. Response: R5 has been deleted. MOD-04 M1 Suggested rewording: "Each Transmission Service Provider shall produce its CBMID evidencing inclusion of all specified information in R1." This approach should also be taken at M1 for MOD-08. Response: The measure has been changed as suggested. M5

Commenter	4. Comments on Measures or Compliance Elements
	M5, line 3 states "…they it has based its CBM…" Please change to "…that it has based its CBM…" Response: The SDT has corrected this typographical error. VSL for R2 The acronym "CBID" should be changed to "CBMID." Response: The SDT has corrected this typographical error. VSL for R10 The VSL is unclear. We suggest that it be rewritten to state, "The Transmission Service Provider failed to approve an Interchange Transaction Tag for CBM submitted by an Energy Deficient Entity under an EEA2 when CBM was available." Response: The VSL has been changed as suggested. D1.3 Data Retention For clarity and consistency, the phrase "three calendar years" in the second through fifth bullets should be changed to "most recent three calendar years plus the current year." Response: The suggested change has been implemented. MOD-08 M5 M5 is missing the right parenthesis after the word "data" on the first line. Response: The SDT has corrected this typographical error. VSL for R1 In the Moderate Level column, change the phrase "changes been" to "changes that have been". Response: The SDT has corrected this typographical error. MOD-29 M1. M1 inaccurately calls for production of "models" used to derive TTC. As there are multiple conditions under MOD-29, R2 where a model does not dictate the predicate for TTC, M1 should be reworded to state "…shall produce the models, contracts, nomograms, reports or study results…" Corresponding to: 1) Models in R2.1, R2.2. and R2.5; 2) Contracts in R.2.3 and R2.6; 3) Nomograms in R2.4; 4) Reports or studies in R2.7 and R2.8. Response: The drafting team has changed the measure to require "any" model used, which should address the concern expressed. Adding the items suggested would not be an appropriate change, as R1 does not require these items. M1.3 The Team suggests correcting M1.3 from "…as stated in R1.1 through R.12…" to "…as stated in R1.1 through R1.12…" Response: The SDT has corrected this typographical error. M4. If "M1" above is adopted, M4 is duplicative of M1 and should be deleted. Response: M4 has not been deleted because the change to M1 was not made as suggested VSL for R4. An SOL does not exist for every Posted Path. This VSL should be amended by changing the words "the SOL" in the

Commenter	4. Comments on Measures or Compliance Elements
	High and Severe columns to read “any SOL”. This makes the wording of the Requirement consistent with the wording of the Measure. Response: The wording has been changed to “any associated” SOL. VSL R5, R6, R7, R8 These VRFs call for only a “severe” determination. They also mandate that the TSP “use” all the elements defined. However, the TSP will not “use” all the defined elements if they are not applicable. Thus, if a TSP does not “use” all elements defined because all the elements were not applicable – the TSP is in violation for not including null elements in its calculation. The SPR companies suggest these be rewritten to state: “The Transmission Service Provider did not use all affected elements as defined in….” This approach should help clarify that “zero” as an integer is an acceptable entry and that only those variables “affected” need be reported or acted upon. Response: The SDT agrees, and all standard have had their measures modified to indicate the use of a zero is not by itself a violation.
Response: Please see detailed in-line responses.	
Snohomish PUD	We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
The Southeast Coalition	
Southern Company Transmission	MOD-028 M5 is inappropriate. There is no reliability need to provide copies of contracts which may in themselves be difficult to interpret. R1.3 should be changed to read as follows. "Any provisions for calculating allocations of TTC." M5 should be changed to read as follows. "The Transmission Service Providers’ ATCID includes provisions for the allocation of TTC."
Response: The SDT believes that it is important that the details of the allocation contracts be understood such that the allocations can be verified as being respected.	
SPP	No comment.
Tacoma Power	Tacoma Power supports the comments of the WECC MIC MIS ATC Drafting Team in regard to this question.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
Tri-State Generation and Transmission Association	
WECC MIC MIS ATC TF Drafting Team	General: The Team and those listed above are in support of changing the Violation Risk Factors as specifically commented on by SERC. Response: Please see responses to SERC. Specific:

Commenter	4. Comments on Measures or Compliance Elements
	MOD-01 M9 There is an unnecessary word “the” following the word “show” in the second line of the measure. Response: The SDT has corrected this typographical error. VSL for R4. The word “Firm” should be inserted before the word ATC as R4 only refers to Firm ATC. Response: R4 has been deleted VSL for R5. The word “Non-Firm” should be inserted before the word ATC as R5 only refers to Non-Firm ATC. Response: R5 has been deleted. MOD-04 M1 Suggested rewording: “Each Transmission Service Provider shall produce its CBMID evidencing inclusion of all specified information in R1.” This approach should also be taken at M1 for MOD-08. Response: The measure has been reworded as suggested. M5 M5, line 3 states “…they it has based its CBM…” Please change to “…that it has based its CBM…” Response: The SDT has corrected this typographical error. VSL for R2 The acronym “CBID” should be changed to “CBMID.” Response: The SDT has corrected this typographical error. VSL for R10 The VSL is unclear. The Team suggests it be rewritten to state, “The Transmission Service Provider failed to approve an Interchange Transaction Tag for CBM submitted by an Energy Deficient Entity under an EEA2 when CBM was available.” Response: The VSL has been rewritten as suggested. D1.3 Data Retention For clarity and consistency, the phrase “three calendar years” in the second through fifth bullets should be changed to “most recent three calendar years plus the current year.” Response: The change has been implemented. MOD-08 M5 M5 is missing the right parenthesis after the word “data” on the first line. Response: The SDT has corrected this typographical error. VSL for R1 In the Moderate Level column, change the phrase “changes been” to “changes that have been”. Response: The SDT has corrected this typographical error. MOD-29 M1. M1 inaccurately calls for production of “models” used to derive TTC. As there are multiple conditions under MOD-29, R2 where a model does not dictate the predicate for TTC, M1 should be reworded to state “…shall produce the

Commenter	4. Comments on Measures or Compliance Elements
	models, contracts, nomograms, reports or study results…" Corresponding to: 1) Models in R2.1, R2.2. and R2.5; 2) Contracts in R.2.3 and R2.6; 3) Nomograms in R2.4; 4) Reports or studies in R2.7 and R2.8. Response: The drafting team has changed the measure to require "any" model used, which should address the concern expressed. Adding the items suggested would not be an appropriate change, as R1 does not require these items. M1.3 The Team suggests correcting M1.3 from "…as stated in R1.1 through R.12…" to "…as stated in R1.1 through R1.12…" Response: The SDT has corrected this typographical error. M4. If "M1" above is adopted, M4 is duplicative of M1 and should be deleted. Response: M4 has not been deleted because the change to M1 was not made as suggested. VSL for R4. An SOL does not exist for every Posted Path. This VSL should be amended by changing the words "the SOL" in the High and Severe columns to read "any SOL". This makes the wording of the Requirement consistent with the wording of the Measure. Response: The wording has been changed to "any associated" SOL. VSL R5, R6, R7, R8 These VSLs call for only a "severe" determination. They also mandate that the TSP "use" all the elements defined. However, the TSP will not "use" all the defined elements if they are not applicable. Thus, if a TSP does not "use" all elements defined because all the elements were not applicable – the TSP is in violation for not including null elements in its calculation. The Team and those listed above suggest these be rewritten to state: "The Transmission Service Provider did not use all affected elements as defined in…." This approach should help clarify that "zero" as an integer is an acceptable entry and that only those variables "affected" need be reported or acted upon. Response: The SDT agrees, and all standard have had their measures modified to indicate the use of a zero is not by itself a violation.
Response: Please see detailed in-line responses.	
WestConnect Transfer Capability Workgroup	The WestConnect Team is in support of lowering the VRFs as proposed in the SERC comments.
Response: Please see response to SERC comments.	
Western Area Power	General: The Team is in support of lowering the VSLs as specifically commented on by SERC.

Commenter	4. Comments on Measures or Compliance Elements
Administration – RMR	Response: Please see responses to SERC. Specific: MOD-01 M9 There is an unnecessary word “the” following the word “show” in the second line of the measure. Response: The SDT has corrected this typographical error. VSL for R4. The word “Firm” should be inserted before the word ATC as R4 only refers to Firm ATC. Response: R4 has been deleted VSL for R5. The word “Non-Firm” should be inserted before the word ATC as R5 only refers to Non-Firm ATC. Response: R5 has been deleted. M5 - R5 is incorrect reference. Response: The SDT has corrected this typographical error. MOD-04 M1 Suggested rewording: “Each Transmission Service Provider shall produce its CBMID evidencing inclusion of all specified information in R1.” This approach should also be taken at M1 for MOD-08. Response: The measure has been reworded as suggested. M5 M5, line 3 states “…they it has based its CBM…” Please change to “…that it has based its CBM…” Response: The SDT has corrected this typographical error. VSL for R2 The acronym “CBID” should be changed to “CBMID.” Response: The SDT has corrected this typographical error. VSL for R10 The VSL is unclear. The Team suggests it be rewritten to state, “The Transmission Service Provider failed to approve an Interchange Transaction Tag for CBM submitted by an Energy Deficient Entity under an EEA2 when CBM was available.” Response: The VSL has been rewritten as suggested. D1.3 Data Retention Why not require one retention timeframe - say two years? Response: These timeframes are based on NERC Compliance criteria, which varies based on the entities being

Commenter	4. Comments on Measures or Compliance Elements
	discussed. MOD-08 M5 M5 is missing the right parenthesis after the word “data” on the first line. Response: The SDT has corrected this typographical error. VSL for R1 In the Moderate Level column, change the phrase “changes been” to “changes that have been”. Response: The SDT has corrected this typographical error. MOD-29 M1. M1 inaccurately calls for production of “models” used to derive TTC. As there are multiple conditions under MOD-29, R2 where a model does not dictate the predicate for TTC, M1 should be reworded to state “…shall produce the models, contracts, nomograms, reports or study results…” Corresponding to: 1) Models in R2.1, R2.2. and R2.5; 2) Contracts in R.2.3 and R2.6; 3) Nomograms in R2.4; 4) Reports or studies in R2.7 and R2.8. Response: The drafting team has changed the measure to require “any” model used, which should address the concern expressed. Adding the items suggested would not be an appropriate change, as R1 does not require these items. M1.3 The Team suggests correcting M1.3 from “…as stated in R1.1 through R.12…” to “…as stated in R1.1 through R1.12…” Response: The SDT has corrected this typographical error. M4. If “M1” above is adopted, M4 is duplicative of M1 and should be deleted. Response: M4 has not been deleted because the change to M1 was not made as suggested M1.2 and M1.3 are redundant - remove one. Response: M1.3 has been changed to not be redundant with M1.2. M7 - reference to R.1.2 seems incorrect. Response: The SDT has corrected this typographical error. M8.1 and M9.1 are redundant - remove one. Response: While the language appears redundant, it applies to different requirements. VSL for R4. An SOL does not exist for every Posted Path. This VSL should be amended by changing the words “the SOL” in the High and Severe columns to read “any SOL”. This makes the wording of the Requirement consistent with the

Commenter	4. Comments on Measures or Compliance Elements
	wording of the Measure. VSL R5, R6, R7, R8 These VSLs call for only a "severe" determination. They also mandate that the TSP "use" all the elements defined. However, the TSP will not "use" all the defined elements if they are not applicable. Thus, if a TSP does not "use" all elements defined because all the elements were not applicable – the TSP is in violation for not including null elements in its calculation. The Team suggests these be rewritten to state: "The Transmission Service Provider did not use all affected elements as defined in…." This approach should help clarify that "zero" as an integer is an acceptable entry and that only those variables "affected" need be reported or acted upon. Response: The SDT agrees, and all standard have had their measures modified to indicate the use of a zero is not by itself a violation.
Response: Please see in-line responses.	

5. Are you aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement?

Summary Consideration: Most comments did not see any conflicts.

Some entities expressed concern with the impact that CBM will have with regard to rates. The drafting team modified the standards to allow for more flexibility, but in general did not agree that the requirements specified had impacts on rate-making.

Some market operators requested clarification that the standards were not forcing any particular market design. The SDT agreed and clarified this, and in some cases provided examples how a market operator and its customers would comply with the standards.

Some entities disagreed with the assertion that these standards have reliability impact. The SDT responded consistent with the responses to those entities that made similar comments in Q3.

Some entities pointed out that the SDT had not addressed the FERC directive to create methods for addressing situations where TSRs from a specific generator exceed the capability of that generator. The drafting team discussed this requirement in detail, and was unable to find a clear-cut practice that would not either 1.) harm open access by denying service, or 2.) harm reliability by ignoring the impact of potential schedules.

The SDT made other minor corrections and clarifications as needed.

Commenter	Yes	No	5. Comments on Conflicts
Alberta Electric System Operator			
Ameren Services		☑	
American Transmission Company		☑	
Arizona Public Service Co.		☑	
Avista Corporation			
Bonneville Power Administration		☑	This response, however, is based on the understanding that BPA's statutory requirements to serve the load of other federal entities (i.e. the Corp of Engineers and the Bureau of Reclamation) are sufficiently accommodated within the GF or OS components of the ETC calculation in MOD-029 and the GF component of the ETC calculations in MOD-030. If these variables were not intended to accommodate non-contracted statutory obligations of this nature, please modify the ETC calculations to accommodate these obligations (see suggested modifications provided in earlier comments).
Response: The SDT believes you are correct, and that the GF and OS terms will address your needs.			
British Columbia Transmission		☑	

Commenter	Yes	No	5. Comments on Conflicts
Corporation			
Clearwater Power Company		☑	
ColumbiaGrid, Inc.			[Intentionally left blank.]
Consumers Power, Inc.		☑	
Duke Energy	☑		As proposed, MOD-004-1 would require monthly updates of CBM requests, and monthly reallocation of CBM upon changes that affect the amount of CBM available. Paragraphs 257 and 258 from FERC Order No. 890 require that CBM set-aside be reflected in rates for point-to-point transmission service, such that point-to-point customers do not subsidize CBM for other customers. CBM values will have to be "locked down" to develop and make the rate filing, which FERC may take 60 days to approve. This defines a timing issue which suggests that CBM updates be made significantly less frequently than monthly, perhaps annually. Also, R6.1 includes a provision to request a system impact/facilities study, which suggests customers could pay for upgrades to create CBM. However CBM is a margin and not a transmission service as defined by FERC, so there is no clearly defined mechanism for charging customers for such upgrades. Detailed observations and comments on MOD-004-1 are as follows: Observations: 1. CBM requests should be evaluated in queue order, along with other OASIS requests for service and should be evaluated comparable with other firm requests (NAESB is developing these business practices). Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. 2. In order to manage Rate filings to accommodate Order 890 paragraphs 257 and 263, CBM values must, at some point, be “locked in” prior to the filing. Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC’s directives. This seems to be no different than the variability of the sale of Firm service. 3. Rates should not take effect until FERC approval is received, and at least 60 days should be set aside for the FERC to grant approval. Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC’s directives. This seems to be no different than the variability of the sale of Firm service. 4. Rates should not change within a month (i.e., rates should be applied to all PTP reservations in full month intervals).

Commenter	Yes	No	5. Comments on Conflicts
			Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC's directives. This seems to be no different than the variability of the sale of Firm service. 5. The tariff defines procedures for studies of firm point-to-point requests (Section 19) and of network integration transmission service requests (Section 32). These procedures are aligned with respect to response and study times, which are outlined below: a. After receiving request for service, TSP has 30 days to tender a System Impact Study (SIS) agreement b. Customer has 15 days execute SIS agreement and return it c. TP has 60 days to complete SIS or, if unable, TSP must contact customer and provide estimated completion date and reason for delay d. If all or part of the service can be accommodated, customer has 15 days to execute service agreement or request that it be filed unexecuted e. If additional upgrades are needed, TSP has 30 days to tender a Facilities Study (FS) agreement f. Customer has 15 days to execute and return the FS agreement g. TP has 60 days to complete FS or, if unable, TSP must contact customer and provide estimated completion date and reason for delay h. Customer provides letter of credit or other security equivalent to the cost of the new facilities or upgrades i. Customer has 30 days to execute a service agreement or request that it be filed unexecuted 6. The procedure outlined in #5 is for transmission service, but CBM is a margin and not a transmission service. FERC has not provided a mechanism in the pro-forma tariff to charge customers for CBM and, also, FERC did not establish CBM as a separate service in Order 890. As such, there is no clearly defined mechanism for charging customers for transmission system upgrades specifically set aside for CBM. Response: The SDT has modified the requirement to offer the requester options including studies, but not specifically require a System Impact Study to be offered. 7. MOD-004-1 establishes 14 days for setting CBM associated with monthly requests (R4.) and 60 days for setting CBM yearly requests (R5.). Requirement R6. establishes a procedure for requesting a system impact study after CBM has been established under Requirements R4. and R5. 8. It is impossible to apply the evaluation timing rules for both R4. and R5. whenever a single modification changes both monthly and yearly values (e.g., LSE submits an update that requests increase of the monthly value 3 months from now and also requests increase of the yearly values for all subsequent years). Response: R6 is intended to address this. The standard allows for the initial request to be split into two pieces (shorter-term and longer-term), which can be processed separately (like two requests). R6 then requires notification when each piece has been processed. 9. TPs must make rate filings to accommodate Order 890 paragraphs 257 and 263, CBM values must, at some point, be "locked in" prior to the filing. Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC's directives. This

Commenter	Yes	No	5. Comments on Conflicts
			seems to be no different than the variability of the sale of Firm service. 10. Rates should not take effect until FERC approval is received, and at least 60 days should be set aside for the FERC to grant approval. Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC's directives. This seems to be no different than the variability of the sale of Firm service. 11. Rates should not change within a month (i.e., rates should be applied to all PTP reservations in full month intervals). Response: The SDT believes there may be some complexity in the implementation of the rate, but our standards do not attempt to address the rate issues associated with FERC's directives. This seems to be no different than the variability of the sale of Firm service. Recommendations: The following changes are requested so that Transmission Service Providers may meet Order 890 requirement for filing Point-to-Point rates that do not include the cost of the CBM set-aside: 1. Monthly requests should be submitted for the current year and the following two years. (NERC) a. This should constitute one request type which is only permitted to use available transmission capability (no upgrades). (NERC) b. Evaluation shall be performed commensurate with reservation response timing rules for monthly firm Point-to-Point requests (NAESB) c. During the evaluation of Monthly CBM requests, CBM requests should be assigned the same reservation priority as yearly firm PTP and designated network service. (NAESB) This will assure that these requests will be evaluated in queue order and will not be superseded by higher priority requests. d. The TSP shall establish in its CBMID rules for queuing of monthly CBM requests in order to accommodate the TP's tariff filing needs (each TSP shall establish when Monthly CBM requests are no longer permitted to change). (NERC) 2. Yearly requests should be submitted for the remaining years of the 10 year period.(NERC) a. This constitutes a second request type which is only permitted to use available transmission capability (no upgrades).(NERC) b. Yearly requests shall be updated at least yearly, but may be submitted more frequently. (NERC) c. During the evaluation of Yearly CBM requests, CBM requests should be assigned the same reservation priority as yearly firm PTP and designated network service. (NAESB) This will assure that these requests will be evaluated in queue order and will not be superseded by higher priority requests. d. Evaluation shall be performed commensurate with reservation response timing rules for yearly firm Point-to-Point requests (NAESB) e. The TSP shall establish in its CBMID any rules for queuing of yearly CBM requests in order to accommodate the TP's tariff filing needs (each TSP shall establish when Yearly CBM requests are no longer permitted to change). (NERC) 3. At no time shall the Monthly requests overlap the yearly requests. If overlap does occur, the

Commenter	Yes	No	5. Comments on Conflicts
			monthly request shall take precedence over the overlapping yearly request. (NERC) 4. NERC should remove the last bullet in R6.1 (The option to request a system impact study.). This will streamline the evaluation process and simplify the Standards approval process (and subsequent FERC proceeding). NERC will not be forced to 1) develop a procedure similar to #5 in Duke Observations (above) or 2) defend why the proposed procedure is different. Response: The SDT has modified the requirement to offer the requester options including studies, but not specifically require a System Impact Study to be offered.
Response: Please see in-line responses.			
Entergy Services Inc.		☑	
EPSA			
ERCOT			
Fall River Rural Electric Cooperative, Inc.		☑	
FirstEnergy Corp.		☑	
Flathead		☑	
FRCC		☑	
Georgia Transmission Corporation		☑	
Hydro One Networks			
Hydro-Québec TransÉnergie (HQT)		☑	We would like confirmation from the Drafting Team that our interpretation of how the MOD-004 requirements can apply in areas that employ competitive wholesale markets in a manner that does not conflict with approved tariffs. In ISO/RTO markets where resource adequacy is performed by the ISO/RTO (i.e., an independent Balancing Authority), and by virtue of the market, the Transmission Service Provider does not offer transmission service in advance of physical flow, there is no ability for the LSE to 'request' CBM as defined in the standards. However, the reliability need for CBM by the LSE is satisfied by the market rules and associated tariffs. As such, the entities' CBMID would describe how the reliability needs of the LSEs, as relates to securing CBM is met and why there is no need for the LSE to 'request' CBM in the manner described in the standards. We would like confirmation from the Drafting Team that documentation of CBMID in this manner – i.e., through specifying that an LSE need not "request" any particular transmission service – would satisfy the reliability requirements of MOD-004. LSE, and CBMID should be defined in the Background Information on p. 3.
Response: The SDT believes it has modified the standard in a way that meets your needs. The SDT expects that a market such as you describe would have a CBMID that describes that LSEs have designated the Market Operator to act on their behalf. When LSEs were asked to show compliance, the SDT believes they could reference the CBMID as well. As long as the timeframes described in the standard are met,			

Commenter	Yes	No	5. Comments on Conflicts
compliance should not be problematic. Note that the SDT has modified the standard such that if you do not use CBM, you do not have to offer it, which may also address your concerns.			
IESO	☑		Selling transmission service is not really a reliability issue. It is a commercial issue. Additionally, FERC is very clear in its 693 Order that the primary purpose of ordering these changes to the reliability standards is to create transparency, eliminate undue discrimination, and ensure consistency. If existing standards were contributing to these problems, ordering these changes would be appropriate. However, using the reliability standards to effect these goals is an inappropriate use. Do we want to say anything like that here or let it go?
Response: These standards do not address the selling of transmission service. Rather, they address the issue of identifying the amount of capability available on the system in a consistent way such that all Transmission Service Providers have a more accurate understanding of whether or not expected use of the transmission system (their own and their neighbors) is going to result in a reliability concern. While the SDT anticipates that this more accurate information will have an impact on the sale of service, the issues of transparency and discrimination to be addressed by NAESB.			
ISO/RTO Council (IRC)	☑		MOD-030 Selling transmission service is not a reliability issue. It is a commercial issue. Additionally, FERC is very clear in its 693 Order that the primary purpose of ordering these changes to the reliability standards is to create transparency, eliminate undue discrimination, and ensure consistency. If existing standards were contributing to these problems, ordering these changes would be appropriate. However, using the reliability standards to effect these goals is an inappropriate use because they do not affect reliability.
Response: These standards do not address the selling of transmission service. Rather, they address the issue of identifying the amount of capability available on the system in a consistent way such that all Transmission Service Providers have a more accurate understanding of whether or not expected use of the transmission system (their own and their neighbors) is going to result in a reliability concern. While the SDT anticipates that this more accurate information will have an impact on the sale of service, the issues of transparency and discrimination to be addressed by NAESB.			
Manitoba Hydro		☑	
MidAmerican Energy Electric Trading	☑		Standard MOD-001-1 Requirement R1, footnote 1 A primary intent of these related standards to is promote consistency among Transmission Service Providers in the calculation of ATC. This goal of consistency is violated by the provisions of footnote 1, which would permit a single Transmission Service Provider to use different methodologies on the same Posted Path at different points in time. MidAmerican also feels that there is absolutely no way each of the three methodologies would yield consistent and equivalent results. While we acknowledge that Order No. 693 found that it is "not necessary to require a single industry-wide ATC calculation methodology" (Order No. 693, Paragraph 1030), the Commission's intent was that ATC be calculated in a manner that "provides predictable and sufficiently accurate, consistent, equivalent, and replicable ATC calculations regardless of the methodology used by the region" (Order No. 693, Paragraph 1034). Only under unusual conditions would there be a reason for a single Transmission Service Provider to use differing ATC methodologies on different Posted Paths, and only rarely would there be a reason to use different methods on the same Posted Path at different points in time. Permitting these deviations would make it essentially impossible to verify the calculations of

Commenter	Yes	No	5. Comments on Conflicts
			the Transmission Service Provider, because it would be difficult to determine what methodology was in effect on which Posted Path at which point in time. In addition, these deviations would permit manipulation of ATC calculations.
Response: Entities are required to disclose in the ATCID "Information describing how the selected methodology (or methodologies) has been implemented, in such detail that, given the same information used by the Transmission Service Provider, the results of the ATC calculations can be validated." The SDT believes this requirement will address your concern, and require the provider to make clear what methodologies are used at which times.			
Midwest ISO		☑	
Modesto Irrigation District		☑	MID supports the comments submitted by SMUD on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see the WECC MIC MIS ATC Drafting Team response.			
MRO		☑	
New Brunswick System Operator		☑	
NorthWestern Energy (NWMT)	☑		Throughout, these standards assert that the calculation of ATC is a reliability matter. This is incorrect. ATC is a commercial product, a commodity that is offered by transmission service providers, sold to transmission customers, and sometimes traded amongst transmission customers. FERC requires jurisdictional transmission providers to calculate and post ATC. 18 CFR Part 37.6 contains the standards of ATC calculation and posting. It is not reasonable to be subject both to FERC enforcement of the CFRs and to NERC enforcement of these overlapping standards. In the west, reliability is not impacted by the miscalculation, posting, or sale of ATC. It is when transactions are scheduled that reliability is potentially impacted. Improper TTCs impact reliability. Failure to evaluate proposed transactions and their impacts to the transmission system impact reliability. It is reasonable that NERC reliability standards cover the calculation of TTC, and some aspects of CBM and TRM.
Response: These standards do not address the posting of ATC. They also provide significant more detail than the CFR with regard to the requirements related to calculation of ATC. The drafting team does not believe there is overlap. The SDT agrees that failure to evaluate proposed transactions and their impacts to the transmission system impact reliability, and therefore require that, through these standards, all Transmission Service Providers have an accurate understanding of how both proposed transactions and those to which the Transmission Service Provider has already committed will affect the transmission system.			
NPCC Regional Standards Committee		☑	We would like confirmation from the Drafting Team that our interpretation of how the MOD-004 requirements can apply in areas that employ competitive wholesale markets in a manner that does not conflict with approved tariffs. In ISO/RTO markets where resource adequacy is performed by the ISO/RTO (i.e., an independent Balancing Authority), and by virtue of the market, the Transmission Service Provider does not offer transmission service in advance of physical flow, there is no ability for the LSE to 'request' CBM as defined in the standards. However, the reliability need for CBM by the LSE is satisfied by the market rules and associated tariffs. As such, the entities' CBMID would

Commenter	Yes	No	5. Comments on Conflicts
			describe how the reliability needs of the LSEs, as relates to securing CBM is met and why there is no need for the LSE to 'request' CBM in the manner described in the standards. We would like confirmation from the Drafting Team that documentation of CBMID in this manner – i.e., through specifying that an LSE need not "request" any particular transmission service – would satisfy the reliability requirements of MOD-004. LSE, and CBMID should be defined in the Background Information on p. 3.
Response: The SDT believes it has modified the standard in a way that meets your needs. The SDT expects that a market such as you describe would have a CBMID that describes that LSEs have designated the Market Operator to act on their behalf. When LSEs were asked to show compliance, the SDT believes they could reference the CBMID as well. As long as the timeframes described in the standard are met, compliance should not be problematic. Note that the SDT has modified the standard such that if you do not use CBM, you do not have to offer it, which may also address your concerns.			
NYISO		☑	The NYISO joins in, and supports, the comments submitted by the IRC in response to this question. The NYISO also supports the comments submitted by the NPCC. Except as noted by the IRC and NPCC, the NYISO does not believe that there will be any conflict between the proposed ATC standards and anything in the NYISO's tariffs, the NYISO market design, or any FERC order related to them, provided that NERC interprets the standards with reasonable flexibility. So long as NERC takes this kind of approach, the NYISO expects to be able to apply its chosen NERC-approved ATC calculation methodology consistent with its use of a FERC-approved financial reservation transmission service model. The NYISO believes that NERC can interpret the standards with reasonable flexibility without reducing their technical accuracy or diminishing their effectiveness. Transmission providers that offer financial reservation transmission service would still be required to comply with all standards to the extent that they are applicable, exactly like transmission providers that offer physical reservation service. By way of background, under the NYISO's financial reservation model, customers schedule transmission service "implicitly" when they submit energy schedules via the spot markets or arrange for bilateral transactions. There are no express reservations of physical transmission service and customers may schedule transactions between any two points, so long as doing so is not inconsistent with a security-constrained economic dispatch. All desired uses of the grid are scheduled to the extent that customers are willing to pay congestion charges, which can be hedged using financial rights. Stated differently, customers' ability to schedule transactions within New York is not limited by a pre-defined amount of ATC. Instead, the entire capacity of the New York State Transmission System is made available for both firm and non-firm service prior to the start of each market cycle. ATC is calculated and posted based on the transactions accepted in the day-ahead and real-time market. Consequently, the information conveyed by the NYISO's ATC postings is different than what is conveyed under physical reservation systems. As FERC has recognized, the NYISO's postings are really advisory "projections", albeit advisory projections that the Commission believes can be useful to customers. Nothing in Order No. 890 required the NYISO to modify this system, no New York stakeholder has asked that it be changed, and there is no reason why it cannot be accommodated within a framework of rigorous and technically accurate ATC standards. NERC should not interpret the ATC standards in

Commenter	Yes	No	5. Comments on Conflicts
			a way that would require the NYISO to perform functions that are inconsistent with its model or with past waivers it has received from FERC's OASIS/ATC regulations and related NAESB business practices. The NYISO identifies a limited number of requirements where this issue could arise in its response to Question Six, below. The NYISO believes that its ATC practices will comply with NERC's proposed requirements and that any differences between the details of its procedures and those of other transmission providers can be addressed in its ATCID. For NERC's reference, the orders granting the NYISO waivers from various FERC OASIS and ATC requirements, and from related NAESB business practices, include New York Independent System Operator, Inc. 121 FERC 61,036 (2007); New York Independent System Operator, Inc., 117 FERC ¶ 61,197 (2006); New York Independent System Operator, Inc., 94 FERC ¶ 61,215 (2001); and Central Hudson Gas & Electric Corp., et al., 88 FERC ¶ 61,253 at 61,803 (1999).
Response: These standards do not address the selling of service, and instead only apply to the determination of ATC.			
PacifiCorp		☑	
PJM Interconnection LLC	☑		The requirements are procedural in nature and conflict with PJM's implementation of ATC and CBM. The LSEs have delegated authority to implement CBM and determine reserve margins to PJM in the RAA. The PJM membership has enjoyed the benefits of an area wide application of CBM. The standards specify requirements that do not observe differing implementations of CBM. The procedural requirements of the standards conflict with the procedures in PJM Manuals and implemented by PJM In the RAA, and JOAs. These standards additionally would then affect the ability for LSEs to delegate responsibility to ISOs by limiting both the general flexibility by which CBM may be implemented and the specific application in PJM. The standards must state that the requirements do not apply in the event that the responsible parties have FERC approved agreements in place that differ in implementation. Such agreements may include the RAA, and JOAs between ISOs.
Response: The standard has been modified to include Planned Resource Sharing Groups, which should address your concerns. The SDT is uncertain with the manner in which the standards conflict with PJM's implementation of ATC, as no detail has been provided. Please also see the responses to your other comments. Paragraph 160 of Order 890 provides ISOs and RTOs the means through which they can request to be exempted from the requirements of the Order, and NERC has similar provisions through which exemptions from the requirements of this standard may be pursued.			
Progress Energy, Carolinas			
Public Service Commission of SC		☑	
Public Utility District #2 of Grant County, Washington		☑	
Puget Sound Energy	☑		Throughout, these standards assert that the calculation of ATC is a reliability matter. This is incorrect. ATC is a commercial product, a commodity that is offered by transmission service providers, sold to transmission customers, and sometimes traded amongst transmission customers.

Commenter	Yes	No	5. Comments on Conflicts
			FERC requires jurisdictional transmission providers to calculate and post ATC. 18 CFR Part 37.6 contains the standards of ATC calculation and posting. It is not reasonable to be subject both to FERC enforcement of the CFRs and to NERC enforcement of these overlapping standards. In the west, reliability is not impacted by the miscalculation, posting, or sale of ATC. Reliability is impacted when transactions are scheduled in a manner that causes flows to exceed a path's TTC. And ,as such, improper TTCs impact reliability. Failure to evaluate proposed transactions and their impacts to the transmission system impacts reliability. It is reasonable that NERC reliability standards cover the calculation of TTC, and some aspects of CBM and TRM.
Response: These standards do not address the posting of ATC. They also provide significant more detail than the CFR with regard to the requirements related to calculation of ATC. The drafting team does not believe there is overlap. The SDT agrees that failure to evaluate proposed transactions and their impacts to the transmission system impact reliability, and therefore require that, through these standards, all Transmission Service Providers have an accurate understanding of how both proposed transactions and those to which the Transmission Service Provider has already committed will affect the transmission system.			
Salmon River Electric Cooperative		☑	
Salt River Project	☑		See Answer to question Q2
Response: Please see response to question Q2.			
Santee Cooper		☑	
SERC ATCWG		☑	
Sierra Pacific Resources Transmission	☑		Throughout, these standards assert that the calculation of ATC is a reliability matter. This is incorrect. ATC is a commercial product, a commodity that is offered by transmission service providers, sold to transmission customers, and sometimes traded amongst transmission customers. FERC requires jurisdictional transmission providers to calculate and post ATC. 18 CFR Part 37.6 contains the standards of ATC calculation and posting. It is not reasonable to be subject both to FERC enforcement of the CFRs and to NERC enforcement of these overlapping standards.
Response: These standards do not address the posting of ATC. They also provide significant more detail than the CFR with regard to the requirements related to calculation of ATC. The drafting team does not believe there is overlap. The SDT agrees that failure to evaluate proposed transactions and their impacts to the transmission system impact reliability, and therefore require that, through these standards, all Transmission Service Providers have an accurate understanding of how both proposed transactions and those to which the Transmission Service Provider has already committed will affect the transmission system.			
Snohomish PUD	☑		Throughout, these standards assert that the calculation of ATC is a reliability matter. This is incorrect. ATC is a commercial product, a commodity that is offered by transmission service providers, sold to transmission customers, and sometimes traded amongst transmission customers. FERC requires jurisdictional transmission providers to calculate and post ATC. 18 CFR Part 37.6 contains the standards of ATC calculation and posting. It is not reasonable to be subject both to

Commenter	Yes	No	5. Comments on Conflicts
			FERC enforcement of the CFRs and to NERC enforcement of these overlapping standards. In the West, reliability is not impacted by the miscalculation, posting, or sale of ATC. It is when transactions are scheduled that reliability is potentially impacted. Improper TTCs impact reliability. Failure to evaluate proposed transactions and their impacts to the transmission system impact reliability. It is reasonable that NERC reliability standards cover the calculation of TTC, and some aspects of CBM and TRM.
Response: These standards do not address the posting of ATC. They also provide significant more detail than the CFR with regard to the requirements related to calculation of ATC. The drafting team does not believe there is overlap. The SDT agrees that failure to evaluate proposed transactions and their impacts to the transmission system impact reliability, and therefore require that, through these standards, all Transmission Service Providers have an accurate understanding of how both proposed transactions and those to which the Transmission Service Provider has already committed will affect the transmission system.			
The Southeast Coalition	☑		Please see list below. Consistency Between ATC calculations and Operational & Long-Term Expansion Studies: MOD-001 (R8). Requirement 8 of MOD-001 does not fully include the goals and requirements established in FERC Order 890/Cite 292 & 237 which are very clear about requiring TSPs to use data and modeling assumptions for ATC calculations that are consistent with those used in operations planning and long-term system expansion studies. FERC clearly states its expectation in the following extract of Order 890/Cite 292: "We find that requiring consistency in the data and modeling assumptions used for ATC calculations will remedy the potential for undue discrimination by eliminating discretion and ensuring comparability in the manner in which a transmission provider operates and plans its system to serve native load and the manner in which it calculates ATC for service to third parties". Furthermore, FERC establishes the following requirement in Citation 237 of Order 890: "We direct public utilities, working through NERC, to address, through the reliability standards process, any differences in developing TTC/TFC for transmission provided under the pro forma OATT and for transfer capability for native load and reliability assessment studies" It is known that some Transmission Providers use a number of procedures such as: switching operating guides, generation re-dispatch, dropping load, etc. to mitigate transmission limit violations when performing reliability assessments of their systems in the planning horizon. Based on the application of mitigation procedures, these TSPs conclude that their transmission systems are reliable and thus, no transmission upgrades/reinforcements are needed. However, these mitigation procedures are not made available to third parties requesting transmission service and, as a result of this, transmission service requests are refused or the requestor is assigned financial responsibility for upgrading constrained facilities which could be mitigated by the application of the TSP operating procedures. Furthermore, these mitigation procedures typically are not included in the ATC models, which leads to artificial overloads, negative ATC/AFC, and the unduly discriminatory denial of transmission service. We believe that requirement 8 of MOD-001 should fully incorporate the FERC directive in Order 890/Cite 292 & 237 and explicitly require TSPs to incorporate ALL data, modeling assumptions, and mitigation procedures used in operations planning and long-term expansion studies in their ATC/AFC

Commenter	Yes	No	5. Comments on Conflicts
			models and calculations. A measurement to ensure full compliance with this requirement should be added to the Standard. Response: The drafting team believes that R8 (currently R6) does capture the intent of the FERC statements cited. For clarity a partial list of assumptions has been included in the measure, M6. Over-Generation: Order 890 at Cite 245 clearly establishes the requirement by which reservations from a generator in excess of the generator's nameplate capacity should not be simultaneously included in the calculation of ETC. Furthermore, FERC directed NERC to develop requirements in MOD-001 that lay out clear instructions on how to model a generator, which has reservations in excess of its nameplate capacity for a given time frame, to prevent unrealistic utilization of transmission capacity associated with over-generation. MOD-001 does not include the requirements directed by FERC to ensure that over-generation does not occur in the calculation of ETC. Response: The drafting team has discussed this requirement in detail, and can find no clear-cut practice that will not either 1.) harm open access by denying service, or 2.) harm reliability by ignoring the impact of potential schedules. The drafting team believes that over time, additional SARs and directives will arise that call for continued improvement. The SDT encourages the commenters to submit such SARs as they feel appropriate to address their concerns, and provide explicit guidance as to what language would be appropriate to accomplish those goals. ATC/AFC Coordination: Requirement 10 of MOD-001 identifies the data set to be made available by Transmission Service Providers for ATC/AFC coordination purposes. Requirement 10 also establishes that this data needs to be made available by a TSP if there is a request by another TSP, Planning Coordinator, Reliability Coordinator, or Transmission Operator. Requirement 10 does not require the data set be exchanged by TSPs or the use of the data for coordination purposes. Thus, this requirement is inconsistent with Order 890 at Cite 310 wherein FERC directed TSPs to coordinate ATC/AFC and, as part of this directive, requires the establishment of a standard data exchange mechanism to enable the coordination process. Cite 310 of Order 890 states the following: "the Commission adopts the NOPR proposal and directs public utilities, working through NERC, to revise the related MOD reliability standards to require the exchange of data and coordination among transmission providers…". Furthermore, FERC in the last sentence of Cite 310 makes it clear that "As explained above, transmission providers are required to coordinate the calculation of TTC/TFC and ATC/AFC with others and this requires a standard means of exchanging data". Therefore, it is clear to us that FERC's ultimate objective is the on-going coordination of TTC/TFC and ATC/AFC by transmission providers. To achieve this objective, requirement 10 of MOD-001 should be changed to mandate data exchange and on-going coordination of TTC/TFC and ATC/AFC among adjacent Transmission Service Providers. Response: The standards address this by requiring the provision of the data in MOD-001 and the use of the provided data in the individual MOD-028 and MOD-030 standards. Since the Rated System Path methodology (MOD-029) does not use simulations in the same fashion as in the other two

Commenter	Yes	No	5. Comments on Conflicts
			methodologies, it does not require the data be used to the same degree, but does incorporate some of the provided data in R1. Benchmarking of ATC Models: Order 890 at Cite 290 & 291 requires NERC to modify ATC-related standards to incorporate requirements for the periodic review, update, and benchmark of models used for ATC calculations. FERC states the following in Cite 290: "this [requirement] means that the models should be updated and benchmarked to actual events. We find that this requirement is essential in order to have an accurate simulation of the performance of the grid and from which to comparably calculate ATC, therefore increasing transparency and decreasing the potential for undue discrimination by transmission providers". This cornerstone of Order 890, the accuracy of ATC calculations through review, updating, and benchmarking to actual events, has not been included in the ATC standard. Even if these requirements have been included in other reliability standards associated with ATC calculations, there should be a clear reference to these requirements in the ATC standard. Enforcing the above requirements - to review, update, and benchmark models used in ATC calculations - is essential to instill confidence in the market place and to obtain accurate and realistic ATC values. Response: NERC intends to address these requirements with future standards development efforts. Transparency: Throughout Order 890, FERC has included various requirements to increase transparency in ATC calculations. In the spirit of Order 890 Cite 210 & 471 requirements, TSPs should be required to post all non-confidential input data & power flow models necessary to replicate their ATC calculations & results. If a data item used in ATC calculations is considered to be confidential, this data item should be identified as such and accordingly, documented in the TSP ATCID. Order 890 Cite 323 requires TSPs to document modeling assumptions, parameters, and methodologies used in their ATC calculations, and to make this documentation available along with work papers and analyses necessary to justify settings of ATC parameters. We believe that requiring TSPs to post a comprehensive set of ATC input data, models, and documentation of their methodologies, is not only necessary to provide the transparency required by Order 890, but will enable market participants, transmission customers and regulators, to validate ATC calculations and use the models in their own analyses. This will increase confidence in ATC calculations, provide meaningful transparency, and significantly improve the overall ATC process. Further, the general posting requirements to meet Order 890 transparency requirements should be included in MOD-001 and the posting details should be included in the business practices currently being developed by NAESB. It is important to note that, currently, there are TSPs who post a great deal of ATC input data and power flow models. It is commendable that these TSPs have taken great strides in providing transparency. It is now time for other TSPs to follow suit. Response: NAESB will be addressing all posting, transparency, and disclosure requirements other than those related to reliability coordination.

Commenter	Yes	No	5. Comments on Conflicts
			Consistency of Modeling Practices: Although MOD-001 states that its purpose is to promote "consistent application of ATC calculations" (as required by Order 890), this standard does not explicitly require consistent modeling practices to calculate ATC values for different time frames. It is known that some TSPs use different transmission models and modeling practices when calculating ATC values for different time frames. For example, the dispatch model used in the calculation of daily ATC values may be different than the dispatch model used in monthly ATC calculations. Another example is the representation of external systems in ATC models used for daily vs. monthly ATC calculations. These inconsistent modeling practices lead to inconsistent ATC values and reduced confidence in ATC calculations. TSPs should be required to eliminate or minimize inconsistent modeling practices. If inconsistent modeling practices can not be eliminated, TSPs should identify and document differences in models and modeling practices due to ATC calculation time frames and provide justification for them. Response: The standard does require models be developed in a standard way. It also require disclosure of the procedures in the ATCID, and that assumptions be consistent with those used in operations and planning standards. The SDT believes that this has set an appropriate level of consistency at this time. In order to have accurate ATC calculation, the SDT believes that having different models for different time periods is acceptable.
Response: Please see in-line responses.			
Southern Company Transmission		☑	
SPP			No comment.
Tacoma Power		☑	
Tri-State Generation and Transmission Association		☑	
WECC MIC MIS ATC TF Drafting Team		☑	
WestConnect Transfer Capability Workgroup		☑	
Western Area Power Administration - RMR		☑	

6. Please provide any other comments (that you have not already provided in response to the questions above) that you have on the draft standards.

Summary Consideration: May commenters elected to provide comments in this section, rather than in the specific question areas. In this cases, responses are consistent with those provide in earlier questions.

Some entities expressed confusion with regard to the difference between NERC and NAESB responsibilities. The SDT clarified that items related to the customer interface, such as the posting of documents on OASIS or public disclosure of information to the marketplace, were the responsibility of NAESB. Items related to the determination of information related to reliability coordination are within the scope of NERC.

Several entities expressed concern regarding the requirement that CBM be granted prior to TSRs when capacity became available. The drafting team discussed this issue at length, and determined that both methods (holding capacity for un-granted CBM requests, putting CBM requests into a queue for processing) were acceptable. Accordingly the SDT has changed the standard to allow entities to take either approach, provided they document the manner used in their ATCID.

Some entities expressed a desire to have the TSP set the SCM to the maximum amount requested, rather than the sum. The SDT explained the choice of this course of action because of potential conflicts with state or local regulations.

Some entities questioned the need for NERC to require data provision and exchange if FERC or NAESB is already doing so. The SDT explained that these standards required the provision and exchange of data for reliability reasons, which need to persist regardless of the status of FERC or NAESB requirements.

Many entities expressed concern that the monthly updates related to changes in CBM were excessive. The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The standard has been modified to clarify that entities must update their CBM at least once a month if it changes, but that determination may be through a recalculation or through a simple adjustment (e.g., a addition or subtraction, based on contracts or other drivers).

Many entities expressed concerns with the implication that MOD-030 would require entities to convert all Flowgate Capabilities into path Transfer Capabilities for posting. The standard was modified to state that entities were required to use the provided formula to calculate ATCs and TTCs if they were doing such a conversion, but that the standards did not actually require the conversion unless entities were compelled to do so for another reason. To the extent entities wished to use a tool to do the conversion, the standard allows for this.

Some market operators requested clarification that the standards were not forcing any particular market design. The SDT agreed and clarified this, and in some cases provided examples how a market operator and its customers would comply with the standards.

With regard to the Violation Risk Factors, several entities requested either many or all requirements be set to Low. The drafting team discussed the requested changes at length, but was ultimately unable to come to consensus sufficient enough to establish the required supermajority vote to change the VRFs. NERC defines that requirement with a Violation Risk Factor of Lower is one that “if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system.” The SDT does believe that there are many requirements in these standards to which this VRF should apply, but there also are many that can have a more significant impact than this.

The drafting team modified the approach to counterflow in the standards based on the comments provided. The default values were removed and a requirement for the ATCID to provide detail regarding how the TSP handles counterflows.

Many entities expressed confusion with regard to the difference between NERC and NAESB responsibilities. The SDT clarified that items related to the customer interface, such as the posting of documents on OASIS or public disclosure of information to the marketplace, were the responsibility of NAESB. Items related to the determination of information related to reliability coordination are within the scope of NERC.

Many entities provided supportive comments, indicating particular areas of the standards they felt were accurate representations of industry need.

The SDT made other minor corrections and clarifications as needed.

Commenter	Other Comments
Alberta Electric System Operator	The AESO currently does not use OASIS for transmission services but is sharing information with the British Columbia Transmission Corporation for posting transmission services on the only one shared tie line. To meet some of the requirements in these standards that require the entity to post transmission information (such as ATCID) on OASIS, would it be acceptable for such entity to post the information on its website instead? Could this provision be added to the requirements?
Response: These standards are not addressing posting requirements. While these standards require the existence of certain data or documents, NAESB will be addressing the posting of them.	
Ameren Services	MOD-004-1 6. Effective Date: "all six standards are approved" MOD-001-1 lists the six standards, should list here as well. Response: The SDT has modified the language such that the standards are consistent, recognizing that the standards will now be posted for separate ballots. .1.2.2. "each impacts" => "each impact" Response: The SDT has corrected this typographical error.
Response: Please see in-line responses.	
American Transmission Company	MOD-001-1 – Available Transfer Capability R1: Potential source of problems – the Transmission Operator (American Transmission Co.) selects an ATC methodology that the Transmission Service Provider (Midwest Independent System Operator) must use for calculations even if it is not equipped to use the methodology chosen. May want to add language that urges agreement between TO and TSP. Response: The drafting team discussed this, and felt it could not create such a requirement. If the parties did not agree, it would be difficult to determine who was at fault and therefore exposed to sanctions. MOD-004-1 – Capacity Benefit Margin R2: Typo in line two, “CBID” should be “CBMID” Response: The SDT has corrected this typographical error. R4.1.2.2: Should be rewritten. Suggestion: “Impacts with a Distribution Factor of 3% or greater relative to OTDF

Commenter	Other Comments
	Flowgates and 5% or greater relative to PTDF Flowgates will be classified as significant." Response: This requirement has been removed from the standard. R4.2: CBM should not be based on the sum of all requests – we don't need to plan for a simultaneous capacity emergency in every area impacted by a Flowgate. Rather, CBM should be based on the maximum of all requests. By reserving the maximum CBM of all requests, a single capacity emergency in any one area impacted by the Flowgate will be covered. Response: The SDT has written the standard with the intention of allowing LSEs to aggregate requests in order to address the scenario you describe. The SDT did not want to give the TSP the responsibility to aggregate such requests, as it may result in them creating situations where they unintentionally cause the LSE to violate regulatory requirements for resource adequacy. R4.2.2: Setting CBM to the lesser of the GCIR impacts or the firm AFC for a Flowgate is not correct, because setting CBM based on AFC or ATC is an invalid circular argument. Consider the following simple example: The definition of AFC:TFC – EFC – CBM –TRM + Postbacks + Counterflows = AFC So, if the rating on a Flowgate is 100 MW (TTC = 100), there are no existing transmission commitments (ETC = 0), the calculated GCIR impacts is 25 MW (CBM = 25), and for the sake of this example there is no Transmission Reliability Margin (TRM = 0), and no Postbacks or Counterflows. Our AFC: 100 – 0 – 25 – 0 + 0 + 0 = 75 Now assume that firm sales account for 75 MW of flow across the Flowgate, so ETC = 75. New AFC: 100 – 75 – 25 – 0 + 0 + 0 = 0 So in this case, we've got an AFC of zero, which is less than the calculated GCIR, so we would set CBM to zero even though we previously set aside 25MW for CBM that is being unused! CBM should be set to the calculated maximum GCIR value for the impacted LSE's. As CBM fluctuates up and down year-by-year the AFC will be affected and may sometimes go negative, but this is a necessary by-product of selling transmission service (ETC) far into the future. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a

Commenter	Other Comments
	description of that choice to be included in the CBMID. R4.3: CBM should not be reduced based on insufficient capacity. If AFC/ATC happens to be negative when a request to use CBM is issued, the CBM transactions should be granted and then all transactions across the constrained element, including the CBM transactions, should be curtailed on a pro-rata basis, which will result in load shedding procedures for the capacity deficient entity. This is the next step in an Energy Emergency Alert. CBM is the last attempt in EEA2 to prevent EEA3 and firm load curtailment. Response: The SDT has modified the standard such that it allows the Transmission Service provider to choose the manner in which they will handle CBM requests that exceed available capacity. The standard also requires a description of that choice to be included in the CBMID. The standard is not intended to address the load shedding process. R5.2: Change sum to maximum, see note for R4.2. The SDT chose this course of action because of potential conflicts with state or local regulations. If a state mandates that entity X rely on 200MW worth of external resources for generation adequacy, and mandates entity Y rely on 200MW as well, these two entities may make separate requests to the TSP, each requesting 200MW. If the TSP only grants 200MW of CBM, and a capacity emergency occurs that impacts both entities, then there will not be enough CBM. Rather than put the TSP and LSEs in this position, the standard requires the TSP grant what he is asked for, and gives LSEs the opportunity to make joint requests, directly or through a third party, so that aggregations such as you describe can occur – but only with the LSEs knowledge and consent. The drafting team has modified the language to explicitly allow planned resource sharing groups to address your concern. MOD-008-1 – Transmission Reliability Margin R1.5: Typo in line one, change “all” to “any.” Response: The SDT has modified this language to read “If TRM is not used, a statement of that practice.” R4: Shouldn’t the Transmission Operator also have the right to request this information? This requirement only allows other TSP’s to receive the TRM calculation info. Response: The SDT has incorporated the suggested change. MOD-030-1 – Flowgate Methodology R2.1: Typo in line one, change “used” to “use.” Response: The SDT has corrected this typographical error. R3: Change “Transmission Operator” to “Transmission Service Provider” because MOD-001 requires the TSP to calculate ATC/AFC values. Response: The SDT has incorporated the suggested change.

Commenter	Other Comments
	R8: Typo in counterflows section, change “ATC” to “AFC” Response: The SDT has corrected this typographical error. R9: Typo, “ATCNF” should be “AFCNF” Response: The SDT has corrected this typographical error.
Response: Please see in-line responses.	
Avista Corporation	MOD-001-1, A., 3. the stated purpose contains goals that are not required for reliable system operation, but rather are for viable commercial activity. Reliable system operations are impacted by incorrect TTC values and uncoordinated transaction scheduling activities. Response: The Drafting Team has clarified in the stated purpose why these standards are required for reliable system operation as follows: To promote the consistent and reliable application and documentation of Available Transfer Capability (ATC) calculations for analysis and system operations. MOD-001-1, A., 4. Applicability, Transmission Service Providers calculate ATC. Transmission Operators (in the near term) and Transmission Planners (in the longer term) calculate TTC. Response: The SDT agrees that these are good descriptions of the roles entities play in determining ATC and TTC. The SDT does not believe the Transmission Planner should be a applicable entity in the standard, as they are dealing with long-term issues. MOD-001-1, B., R1, Transmission Operators calculate transfer capability (TTC) of facilities within their TO areas. Transmission Planners calculate transfer capability (TTC) of facilities within their TP areas. Transmission Service Providers calculate ATC for those paths that they are required to, choose to, or are asked to post. Response: It is unclear what change is being suggested. MOD-001-1, B., R3 Transmission Service Providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability. This requirement to create a separate document creates an undue burden on the industry - transmission customers will have two different documents to review, and transmission service providers will have two different documents to maintain. Response: The standard does not preclude entities from creating one document that meets both needs. MOD-001-1, B., R3.3 the term “Facility” should say "Posted Path" (but see the comment above regarding definition of "Posted Path"). The term facility in the NERC glossary says facility is “A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.).” Response: The SDT has modified 3.3 and eliminated the language referring to “Facilities.” MOD-001-1, B., R3.6 “Allocation methodologies” – it is not clear to what this means? Perhaps the following: "For paths where multiple Transmission Service Providers share capacity or have rights, describe how the capacity is allocated among providers," or words to that effect.

Commenter	Other Comments
	Response: The Drafting Team added detail to this requirement to address this concern. MOD-001-1, B., R4 is not needed, it is already covered in R3.2. MOD-001-1, B., R5 is not needed, it is already covered in R3.2. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. MOD-001-1, B., R6 is not necessary. Revisions to Attachment C are to be filed and posted. Response: These are to be notifications to the entities to alert them to changes that may impact them. Filing and posting does not provide notification. MOD-001-1, B., R7 Attachment C is already required to be posted (available) for any entity to review, subject to CEII concerns. Response: This requirement is not in conflict with the requirement to post Attachment C. MOD-001-1, B., R9 is not a reliability concern. In addition, it is unduly burdensome. Current and accurate ATCs are a commercial concern. In addition, performing 168 hourly calculations every hour when neither TTC nor ETC has changed, benefits no one and is costly. The commercial requirement should be to require the recalculation of hourly ATC once a day and whenever either TTC or ETC changes for any period of time between this hour and the next 168 hours. Response: The SDT has modified the language to not require recalculations if the components in the ATC equation have not changed. However, the SDT does not agree this is only a commercial requirement. The amount of service sold is based on the amount of energy that can be transferred reliably, and these standards intend to ensure that number is as accurate as possible. MOD-001-1, B., R10, this requirement for data sharing between reliability entities is a good concept. However, as currently worded, all the burden to supply data is incorrectly placed totally upon the TSP and not on the Transmission Operator or Transmission Planner. Much of the data listed is critical for proper TTC calculation which the TSP may not have access to. The TSP calculates ATC based on upon TTC supplied by the Transmission Operator and/or Transmission Planner. Response: The Transmission Provider will be responsible for working with their Transmission Operators or Transmission Planners to secure the data.

Commenter	Other Comments
	This requirement does not specify how the request is made or how the response or provision of data is dated. Response: The SDT believes this to be implementation details to be determined by the Transmission Service Provider and the requestor. NAESB may elect to define standards in this area. The corresponding measurement, M9, implies that all data items requested will be supplied within 14 days, but requirement states that the TSP will begin to make available at the 14 day mark. Response: M9 measures whether or not the "requested data items" were begun to be made available. By "begun," the standard means that the process of sending all the data was started, not that only some of the data requested was sent. In addition, change first sentence words "…days of a request of any Transmission…" to "…days of a request made by any Transmission…" to read more in-line with the intent. Response: The SDT has rewritten this requirement to be clearer. MOD-004-1, A., Capacity Benefit Margin is a use of the transmission system that is requested by a load serving entity. This standard contains requirements for the interactions between the LSE and the transmission provider. These requirements are largely commercial in nature and should be under NAESB development. Reliability standards concerning CBM should only require LSEs to acquire minimum CBM to ensure service to load. Response: CBM is a margin used to ensure reliability. Not only requests for it, but the actual setting of it and its ultimate inclusion in the ATC calculation all have reliability impacts, and are appropriate for development in this standard. MOD-004-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's CBM methodology. This requirement to create a separate document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and providers would have to maintain two different documents. Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. Note that the Attachment C may not be as detailed as the implementation documents, however. MOD-004-1, B., R2 is not necessary. Revisions to Attachment C are to be filed and posted (available) for any entity to review, subject to CEII concerns. Response: R2 is intended to ensure this information is provided to reliability entities for reliability purposes, regardless of what other information is required to be posted to meet FERC requirements. MOD-004-1, B., combine R3.3 language into R3.1. Response: The SDT does not understand the reason to combine these requirements.

Commenter	Other Comments
	MOD-004-1, B., R3.2 it seems more reasonable for the requirement to read "LSE shall review any active CBM requests at least every six months and submit updates as required." Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The Standard is requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been modified to clarify that incremental changes are allowed without entire re-calculation. MOD-004-1, B., R8, R9, R10, M11, M12, M13 use of the terms "tag" or "Interchange Transaction Tag" which is inconsistent with NERC INT and NAESB CI BP standards where specific reference to "tag" or "e-Tag" has purposefully been avoided in those standards. The term Request For Interchange (RFI) refers to a collection of data as defined in the NAESB RFI Datasheet, to be submitted to the Interchange Authority for the purpose of implementing bilateral Interchange between a Source and Sink BA. Or the term Arranged Interchange refers to The state where the Interchange Authority has received the Interchange information (initial or revised) and has distributed that information for reliability assessment. I believe that in these requirements, Arranged Interchange is the more appropriate language. Response: The drafting team has modified the standard to use the term Arranged Interchange. MOD-008-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's TRM methodology. This requirement to create a separate document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and TSPs two different documents to maintain. Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. MOD-008-1, B., R1.1 suggest modifying to read: "For each path or flowgate that ATC or AFC is calculated, describe how each of the following components of uncertainty are used in calculating TRM for each of the ATC time horizons (if not applicable, indicate as such):" The words "ATC time horizons" could be used to eliminate the need for R1.4. Response: The drafting team intentionally avoided the use of the phrase "time horizons" in order to avoid confusion with NERC Compliance Time Horizons. MOD-008-1, B., R1.1 suggest adding another item to the list. Variability and uncertainty in determining Transmission losses across Posted Paths. Response: Losses are already included in the list as a part of the Load Forecast. MOD-029-1, B., R1 (modeling requirements) should include the statement that the data listed below should reflect the expected conditions for the applicable time period. Response: R1 has been modified to address this concern. MOD-029-1, B., 1.6 Suggests this bullet be deleted. This is already addressed in R2 wherein the modeling process is dictated. In the RSP methodology, "peak load forecasts" are not used to stress the system; rather, load and generation are simulated to stress the system to its greatest capacity. There are cases when the highest forecasted load may not stress the system to its greatest utilization – which is the goal of the R2 under the RSP.

Commenter	Other Comments
	Response: The reference to "peak" load forecasts has been removed. MOD-029-1 B., R5 definition of GF - The language describing Grandfathered capacity includes the defined terms "Firm" and "Transmission Service." Use of these words as defined terms is inconsistent throughout the proposed standards. They should either be changed here to a lower case or all applicable areas in each proposed standard should be changed to the defined term. Response: The SDT agrees and has made the changes for consistency. MOD-029-1 in R6, is the "non-firm capacity reserved for NITS" the same as Secondary Network Service (i.e., NN-6)? Response: It is the same as Secondary Service and the requirement has been revised to reflect that. MOD-029-1 in R7 & R8, what are "Postbacks"? This term is not used in the west. The term Postback should not be used in the RSP methodology. Response: This term came from Order 890; to the drafting team's knowledge, it has generally not been used in the East or ERCOT either. The SDT believes that postbacks are used in the West (e.g. release of unscheduled firm as non-firm ATC), but are not referred to in this fashion. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-029-1 in R5, R6, R7, & R8, calculation of ETC and ATC are commercial concerns and should be addressed in business practice standards NAESB and enforced through FERC's adoption of those business practice standards into the CFR. Response: The drafting team does not believe these are only commercial concerns. If calculated correctly, ATC should be a reasonable approximation of what flows are expected on the system at a given point in time. Ensuring that this number is accurate will help ensure that entities do not oversell their systems into overloads. MOD-029-1 in R8 ETC (Firm) definition, it uses the word "non-firm" and it should state "firm". We are assuming this is a typo. Response: The SDT has corrected this typographical error. MOD-029-1 in R8 the requirement says we are to use the same formula for all horizons – this is incorrect. For the real-time, same-day time frame, we release all unscheduled capacity as non-firm ATC. As such, the formula would read: ATCNF = TTC – Scheduled ETCF – Scheduled ETCNF – CBMS – TRMU + Counter-schedulesF + Counter-schedulesNF Response: It is the SDT's understanding that NAESB will incorporate unscheduled capacity in postbacks. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. Therefore, the requirement is correct as written.
Response: Please see in-line responses.	
Arizona Public Service Co.	Arizona Public Service Co. is in agreement with the WestConnect Comments and in general agreement with the WECC Comments.

Commenter	Other Comments
Response: Please see responses to WestConnect and the WECC MIC MIS ATC Drafting Team.	
Bonneville Power Administration	a. GENERAL i.BPA supports retention of the three methods recognizing the differences between the Rated System Path (MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028). ii. BPA supports the retention of the proposed one-year implementation period. iii.BPA supports allowing NAESB to address all "posting" issues as they directly affect OASIS. b. MOD-001 i.BPA supports allowing the use of more than one methodology for calculation of ATC by any one entity. For example, the Team supports allowing any entity to use the Flowgate methodology inside their affected area while also using the Rated System Path methodology at its boundaries. ii. BPA supports allowing each entity to specify in its ATCID how it will treat counterflows. iii.BPA supports the aggregation of transmission capacity for grandfathered contracts when shared with neighboring requestors. iv.BPA supports the specifically limited universe of entities to which data sharing is required as prescribed in R10. c. MOD-008 i.R2 – Add the following language to strengthen the distinction between TRM and CBM: "Transmission capacity required for the period immediately following a contingency and before the market can respond (up to 59 minutes following the contingency) are included in TRM" Response: The language has been added. d. MOD-029 i.BPA strongly supports retention of the requirement(s) in R2.2 that accommodate paths which are "flow limited" by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing and functional practices without re-inventing the wheel where no such effort is required to meet FERC's goals of transparency and consistency. ii.BPA strongly supports retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. iii.BPA strongly supports retention of the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. iv.BPA strongly supports retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts and potentially their associated operational agreements while supporting FERC's mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required. v.BPA strongly supports the adoption of the proposed Counterflow definition as its adoption clarifies the application of Counterflows in each equation. e. MOD-030 i.R10 – It is assumed this requirement has been included to promote transparency, but will in fact have the opposite effect due to a flood of posted data being required that is not used to process requests, and therefore is not used by

Commenter	Other Comments
	market participants, and should be modified to the following: "The Transmission Service Provider shall provide a tool to convert…" BPA has heard from a number of its Customers and other impacted parties that the posting of ATC, rather than AFC, will not promote transparency in the Northwest market or across BPA's system. BPA provides several tools on its website and OASIS site to facilitate interested parties' access to AFC-to-ATC conversions. These tools are easy to use and since a smaller quantity of data is posted to our OASIS site (i.e. 10 AFCs as opposed to several thousand ATCs), our OASIS system is more responsive and therefore, also easier to use. Response: These standards do not address postings of these values. R10 simply describes how such values are to be converted.
Response: Please see detailed in-line responses. Thank you for your supportive comments.	
British Columbia Transmission Corporation	1. MOD-028-1, R3.1 - We believe we understand the meaning of intra-day but are unfamiliar with the term intra-peak. Does this mean hourly peak? Response: This language has been corrected. 2. MOD-028-1, R3.1, R3.2, R4.1, R4.2 - The parenthetical "(at a minimum)" is subject to interpretation. Does it mean that this is the minimum list of parameters to model or does it mean that these are the most conservative values allowed? If additional parameters or some other values are used, the references need to be specified somewhere. For example, if Peak Load is not used (because a higher TTC can be made available in shoulder hours), the ATCID needs a section describing what load to use. We suggest that "(at a minimum)" be replaced with "(or other values and additional parameters as specified in the ATCID)". Response: The language has been modified to address this concern. 3. MOD-028-1, R7 - The process for calculating TTC should also the Transmission Operator to calculate TTC by interpolating between TTC values that have been calculated according to the process outlined. In complex systems with many assumptions in variables (e.g. load forecast, ambient temperature, generation dispatch), many possible limitations (e.g. thermal, transient stability, voltage stability, minimum voltage), and many single and multiple contingencies to run, it becomes impractical to calculate TTCs as described in R7. BCTC currently runs up to N-3 contingencies. BCTC, as well as an adjacent Transmission Operator, calculate TTCs using the process described in R7 for representative conditions, which on there own can require thousands of studies. TTCs for other conditions are then found by interpolation between the representative cases. Any margin we need to allow for "interpolation error" is much less that the margin we would need to allow if we generalize generation dispatch, ignore transient stability, or omit multiple contingency studies. Under no conditions do we extrapolate outside of the conditions bracketed by the studies. We propose an item f be added as follows: f. When two or more transfer capabilities have been established according to the above procedure which bracket the requirements described above, the TTC can be determined by interpolation between these established transfer capabilities. Response: The MOD-028 method requires an actual simulation of the system to calculate the TTC values. The drafting team does not believe an interpolation process conforms to the requirements of the standard. A deviation from this process could be obtained through a regional variance. 4. MOD-029-1, R4 - The double use of TTC is potentially confusing. At a minimum we suggest rephrasing R4 to be "at the lesser of the TTC calculated in R1". Response: R4 has been changed to reference the "value calculated in R2." R3 and R4 have been reordered to

Commenter	Other Comments
	eliminate any confusion. 5. MOD-029-1, M1 - This measure is redundant. M4 requires that the TO produce the models, reports, or study results that it used to establish TTC. Since M4 already addresses models, M1 is redundant. Response: The drafting team has deleted "models" from M4 to address.
Response: Please see detailed in-line responses.	
Clearwater Power Company	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Response: Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
ColumbiaGrid, Inc.	Please see the comments below. GENERAL COMMENTS: a) ColumbiaGrid, a non profit corporation formed to promote the efficient operation, planning and use of the Northwest transmission grid, is generally supportive of the ATC Reliability Standards comments prepared by WECC. ColumbiaGrid believes that it is important to recognize and address the distinctive characteristics of the Western interconnected transmission grid. It should be noted that ColumbiaGrid has not attempted to address or comment on questions one through five, which address the specific language of the individual standards. ColumbiaGrid submits these general comments on its own behalf, not on behalf of its members or other participating parties, each of whom may submit general or specific comments on its individual behalf. b) ColumbiaGrid supports the inclusion and need for all three ATC methodologies, recognizing the differences between the Rated System Path (MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028). ColumbiaGrid believes that retention of all three ATC methodologies is necessary to ensure that differences in structure and operation of regional and individual transmission systems are accurately and efficiently accommodated. c) MOD-029 – ColumbiaGrid supports the need for this methodology, which is commonly utilized in the Western region. Response: Thank you for your supportive comments. d) MOD 030 - R10: R10 states that the TSP shall convert Flowgate AFCs to ATCs for Posted Paths. Posted Paths is defined in MOD 1 as: 1. Any Balancing Authority to Balancing Authority interconnection;

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	2. Any path for which service is denied, curtailed or interrupted for more than 24 hours in the past 12 month; 3. Any path for which a Transmission Customer requests to have Available Transfer Capability or Total Transfer Capability posted. ColumbiaGrid is concerned that posted paths, as used in R10, could mean that AFCs must be converted to ATCs for any constrained POR/POD combination. ColumbiaGrid understands that this requirement has been included to promote transparency, but it may in fact have the opposite effect due to a flood of posted ATCs that are not used to process requests and of little value to transmission customers. BPA has provided a better alternative than converting AFCs to ATCs on constrained POR/POD combinations. BPA posts AFCs on internal flowgates and provides a tool for its customers to calculate the flow imposed on the flowgate relative to the POR/POD. ColumbiaGrid understands that BPA has heard from a number of its Customers and other impacted parties that the posting of ATC, rather than AFC, will not promote transparency in the Northwest market or across BPA's system. Further, ColumbiaGrid understands that BPA provides several tools on its website and OASIS site to facilitate interested parties' access to AFC-to-ATC conversions. These tools are easy to use and since a smaller quantity of data is posted to BPA's OASIS site (e.g. approximately 10 AFCs as opposed to potentially several thousand ATCs), BPA's OASIS system will likely be more responsive and therefore, also easier to use. ColumbiaGrid believes that this method eliminates burdensome postings of multiple POR/POD ATCs. ColumbiaGrid proposes that R10 be modified as follows: "The Transmission Service Provider shall provide a tool to convert AFCs to ATCs for posted paths…" Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
Consumers Power, Inc.	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
Duke Energy	
Entergy Services Inc.	SDT has done a great job!!!

Commenter	Other Comments
Response: Thank you for your supportive comment.	
EPSA	EPSA would like to provide the following additional comments: 1. MOD 001-1, R3.1 (similar language is used elsewhere) provides that information will be provided "in such detail that, given the same information used by the Transmission Service Provider, the results of the ATC calculations may be validated." However it is also noted on page 4 of this document above, that all posting requirements will be as determined in the associated NAESB standards. While we are aware of the coordination with NAESB that is on-going and we are actively participating in it, EPSA's assessment of the appropriateness of this requirement can not be completed without knowing the outcome of the related NAESB standard drafting work that is on-going. Response: It is the intention of the drafting team to define documents that are needed for reliability purposes (in this case, so that other reliability entities may be aware of the processes and procedures used by their neighbors). This does not preclude NAESB from using this information to meet their transparency and disclosure goals, but it is not necessarily the intent that these documents support only NAESB efforts. 2. MOD 004-1, the CBM standard incorporates a number of principles with respect to allocation of CBM, both at the time of ATC calculation and at the time of scheduling deliveries, which EPSA summarizes as follows. CBM, by virtue of being determined as a "set-aside" has priority over all purchases of transmission service, even firm service. This extends into future time frames in that R4.3 states that, if there is initially insufficient CBM to meet all requests, any new interface capability coming available would be allocated first to unfilled CBM requests. Furthermore, when scheduling CBM, LSE's are entitled to utilize any available CBM, not just the quantity that they have requested. EPSA accepts the notion of a set aside for CBM, contingent on acceptance of some additional principles. CBM should be purchased by eligible LSEs at full embedded cost of the transmission. This is clearly a superior service that is being provided-it should not be available at a reduced cost. Response: The NERC standard does not intend to provide any specific guidance on how much CBM should cost. In the event of an emergency at level EEA2 or higher, LSEs are granted access to all CBM reserved, even if reserved by other LSEs. EPSA acknowledges that under such emergency conditions, all possible accommodations should be made. However, this accommodation together with the charge for service as discussed above, provides considerable incentive to under-reserve CBM. As LSEs are required (R3.2) to update their CBM requirements at least every 31 days, scheduling beyond their reserved amount at the time of an emergency should be investigated, after the fact, for possible violation of this requirement. Response: Such investigations may be necessary to ensure no hoarding or under-reserving of CBM occurs. Those related to reliability will be handled through the NERC processes; those related to pricing and open access will likely be addressed through other processes. R4.3 notes that CBM is made available as a set-aside, such that LSE's are granted priority access to available service, including service that becomes available in future if not all requests can be accommodated initially. Such priority access to future quantities should not receive priority over duly granted roll-over rights. Response: R4.3 has been removed. 3. MOD 001-R4 and R5 define the default values for counterflows to be used in the calculations of firm and non-firm ATC. As stated, these values are extremely conservative. R4 and R5 should require an explanation, based on modeling or based on historical values, of whatever values of counterflows are adopted by the TSP. Response: The drafting team has modified the approach to counterflows in the standards based on the comments

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	provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules.
Response: Please see detailed in-line responses.	
ERCOT	For the entire ERCOT Interconnection, the market rules that govern establish, under Texas State Law, that the transmission system is to be operated in an open access process, much as a common carrier. As such, there is not a Transmission Service Market in the ERCOT Interconnection. Therefore, ATC, TTC, CBM, and TRM are not applicable within ERCOT operations. These Standards should have provisions that make it clear that these requirements apply only within market structures in which they are pertinent.
Response: These standards are intended to apply to all entities described in the "Applicability" portion of the standards. Paragraph 160 of Order 890 provides ISOs and RTOs the means through which they can request to be exempted from the requirements of the Order, and NERC has similar provisions through which exemptions from the requirements of this standard may be pursued. These standards do not address the selling of service, and instead only apply to the determination of ATC (i.e., determining the difference between the capability of the system and the forecast use of the system). Note that given the new definition of ATC Path, if ERCOT is not required to post ATC for any paths, then ERCOT would only be required to implement MOD-001 R3, R4, R5, and R8; all other requirements, as well as MOD-028, -029, and -030, would not apply. If ERCOT does not maintain CBM, it would be exempt from MOD-004. If ERCOT does not use TRM, it would be only be required to implement MOD-008 R1 and R3; all other requirements would not apply.	
Fall River Rural Electric Cooperative, Inc.	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Response: Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
FirstEnergy Corp.	1. MOD-001-1: - R2 & R9 - There is no calculation requirement for yearly ATC in R2 or R9. Yet in MOD-004-1, R3.1 requires the identification of a CBM amount for, "each month for each year for the next ten year period." Response: MOD-004 and CBM are different from ATC. The drafting team believes that CBM requires this longer-term analysis to support long term planning. - R6 - In addition to notification, before implementation of a new ATCID, the Transmission Service Provider should

Commenter	Other Comments
	allow for a comment period. This will assure that all the affected entities have been given an opportunity to provide valuable clerical and technical input on the document. Response: While entities may elect to offer such comment and peer review periods, the team did not mandate such reviews to ensure that the ability to address necessary changes quickly was allowed. - Counter-flow calculations in the past were difficult to justify and manage. This standard attempts to manage counter-flows by requiring TSPs to specify their accounting method in the ATCID, but does not require any justification of the method used for applying them. This situation could result in inconsistency in ATC calculations and application. Requirements should be developed that govern the calculation and application of counter-flows to ensure consistency and transparency. Response: The drafting team has modified the approach to counterflows in the standards. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID. Further standardization of counterflow treatment in ATC calculations could conflict with the requirement to use assumptions in the ATC calculation that are consistent with those used in planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. 2. MOD-004-1: - The need for LSE involvement in setting CBM levels is completely dependent on the Resource Adequacy Requirement structure, and for some structures it would not be appropriate for LSEs to have input into the CBM calculation. For example, in PJM, an individual LSE (1) may not know if there is enough capacity in the market to meet reliability needs, or even what are the specific resources serving their load; (2) may have no responsibility to identify specific capacity resources beyond the obligation to purchase capacity credits from unspecified sources. Overall capacity management, short-term and long-term reliability responsibility, resides at the ISO level. Response: Your comment is correct and the standard has bee modified to address your concerns by including Planned Resource Sharing Groups. - In general, this standard may lead to situations that cause CBM reservations to be excessively higher than needed. There is no reference to a CBM calculation methodology, leaving LSEs free to request CBM on any basis. Many LSEs do not have the necessary tools needed to make proper CBM calculation, which could lead to simplistic and conservatively high CBM requests. Response: The drafting team was specifically silent on the methodology used to determine the amount of GCIR and/or CBM required, as we agree – the procedures and regulatory requirements associated with this determination vary significantly. To the extent an LSE does not have the tools need, they would be expected to either acquire those tools or work with a third party to develop their request. - Further compounding the problem of over-reserving CBM is the provision that calls for the TSP and TP to set the aggregate CBM level as the sum of all LSE requests such that all requests can be met simultaneously. It is unlikely all LSE adverse scenarios will occur. It is even more unlikely that all will occur at the same time. These provisions will result with too much CBM being set aside. Diversity is not taken into account. Response: The drafting team chose this course of action because of potential conflicts with state or local regulations. If a state mandates that entity X rely on 200MW worth of external resources for generation adequacy, and mandates entity Y rely on 200MW as well, these two entities may make separate requests to the TSP, each requesting 200MW.

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	If the TSP only grants 200MW of CBM, and a capacity emergency occurs that impacts both entities, then there will not be enough CBM. Rather than put the TSP and LSEs in this position, the standard is requiring the TSP grant what he is asked for, and giving LSEs the opportunity to make joint requests, directly or through a third party, so that aggregations such as you describe can occur – but only with the LSEs knowledge and consent. - There are no provisions for the TP or TSP to challenge unreasonable CBM requests. Response: The LSEs are responsible per R3.3 for making reasonable requests, and are subject to sanctions if they do not. - This standard does not incorporate the resource adequacy criteria into the process of setting the total CBM value. The simple summation of CBM requests ignores the uncertainty associated with the scenarios behind the CBM requests. Response: This is true. The drafting team was specifically silent on the methodology used to determine the amount of GCIR and/or CBM required, as the procedures and regulatory requirements associated with this determination vary significantly. - R2 - "CBID" should be "CBMID" Response: The SDT has corrected this typographical error. - R3 & R4 - A monthly value is extremely difficult to administrate and implement in the ATC calculation. Such a requirement will incur significant cost and subject the TSP to significant increases in cost. We suggest leaving it to each region to decide on the time intervals. Response: The intent of this standard is to require incremental changes and not recalculation of the GCIR. The standard has been modified to address your concern. - R3.1 – This section should be clarified. It states “requested for each month for each year for the next ten year period.” Do we really want 120 months worth of requests, or 12 monthly requests and 9 yearly? Response: The drafting team has changed the standard to clarify what is required. Also, the ATC postings only cover at most a 12 month period in MOD-001-1. Why is it necessary to have such a disparity in the period of coverage? Response: CBM is not just required for ATC, but also for transmission planning. R3.2 requires updating this CBM request at least every 31 days to reflect any changes that alter future needs. New development projects influence future needs for load growth. The probability that these projects will come to fruition can change from month to month. Is it reasonable to require a ten year look ahead to be revised on a 31 day cycle? Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. We are requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The intent of this standard is to require incremental changes and not necessarily recalculation of the GCIR. The standard has been modified to address your concern.

Commenter	Other Comments
	- R3.1.1 - In some areas it may not be possible that CBM can be determined from GCIR at the LSE level, especially if the standard will require data ten years in the future. In retail choice areas, an LSE has few load responsibilities (therefore resource responsibilities) for more than a couple years. Response: If the LSE does not know their need more than two years out, then they should request zero or their best estimate for those later years. - R3.1.1.1 - CBM will be called upon in an emergency. We are not sure that it is feasible to identify the Balancing Authority or Posted Paths in all areas. We assume CBM would be used to bring in the most appropriate resources at any given time, but can that be known now for an emergency in the future? Response: If entities are requesting CBM, it is reasonable to expect them to have an idea where the energy will be coming from. CBM is not intended to be a generic margin on all paths in case it is needed (like TRM), it is intended to be a margin based on a potential use. - R3.1.2 - The basis for the request of CBM is not clearly defined. This requirement indicates that GCIR must be based on standards, criteria, established by other authorities. The LSE must document the Resource Adequacy Requirement (RAR) standards & authorities that form the basis of their request, and all details of the associated resource studies. This implies that it is a clear, objectively-determined parameter, yet it does not say how any particular elements of the results of the RAR study fit into the GCIR calculation. Response: The standard does not intend to require any specific methodology or basis for determining GCIR. LSEs are expected to follow whatever study parameters or guidelines are required by their regulator. - R4.1 either contains an extra colon that should be deleted, or is missing "(TRM" Response: This has been corrected. - R4.3, R5.3, and R6 address the idea that the sum of all requests may be greater than the available capacity on the facility and directs the CBM to be increased based on availability up to the sum of all CBM requests. The standard is silent on what is to be done if the sum of all requests is greater and no additional capacity is made available on the facility. The standard should include the method for allocating the requests in this situation. Response: Since CBM is a margin (not a reservation), allocation is not necessary. Any entity is entitled to use CBM if needed and it is available, regardless of how much was requested or granted. When not all requests can be granted simultaneously, all customers will be notified of this fact. - R9 - Should be adjusted so that it explicitly states that only the timing requirements for the Real-Time market only will be waived. For example, the Day-Ahead Market timing requirements cannot be waived. Response; The standard has been modified to incorporate this suggestion, - R8, R9 & R10 - This standard refers to Interchange Transaction Tags. This has become problematic in that there are no requirements to tag interchange transactions in the NERC Standards posted on 10/23/07 with one exception. INT-004-1 still requires a modification to the tag for dynamic interchange transaction modifications. IRO-006 still relies heavily on interchange transaction tags for the TLR procedures, but without a requirement to tag a transaction, it is not clear how this procedure is accomplished under today's standards. Until transaction tags are required by the standards, the references in R9 and R10 that rely on interchange transaction tagging should be revised. Response: We have revised these requirements to reflect the terms use in the Interchange standards. 3. MOD-008-1:

Commenter	Other Comments
	- R1.3. - Should be revised to state the description of the method used to allocate TRM across Posted Paths or Flowgates. As currently stated, it appears to be a list of Posted Paths or Flowgates with a TRM value or percentage assigned. Response: The requirement has been modified to incorporate the suggested change. - R3 - Should be revised to state within seven calendar days of the receipt of a written request. Response: The SDT has incorporated the suggested change. - R4 - Should be revised to state within seven calendar days of the receipt of a documented request for such information. Response: The SDT has incorporated the suggested change. 4. MOD-028-1: - R5.3 - The requirement states, "If the source has not been specified, use the interface point with the adjacent upstream Transmission Service Provider as the source." It may be difficult to determine the upstream Transmission Service Provider when the source has not been specified. The same is true for "If the sink has not been specified, use the interface point with the adjacent downstream Transmission Service Provider." These statements should be revised to state, "If the source has not been specified and the sink has, use the interface point with the adjacent Transmission Service Provider upstream from the source as the source." And "If the sink has not been specified and the source has, use the interface point with the adjacent Transmission Service Provider downstream from the sink as the sink." Response: The SDT has modified this requirement to be more explicit, as well as allow for more flexibility based on specifications in the ATCID. - R11 & R12 - Use the term "postbacks" that is not defined in the NERC Glossary nor is it well defined in this standard. It appears the requirement is communicating that it is defined in Business Practices. We suggest it be defined in the ATCID much like the Counterflows are described in the ATCID. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. 5. MOD-029-1: - R7 & R8 - See our comments regarding "Postbacks" above. Response: See response regarding "Postbacks" above. 6. MOD-030-1: - R2.1.2 - The phrase "first three limiting" is too prescriptive and should be removed. For example, if the most limiting first contingency transfer is a large value, say 10,000, adding the first three limiting elements/contingency combinations is not necessary. If the requirement cannot be removed, we suggest adding wording that sets a transfer level such that the first three constraints that cause the FCITC to fall under that level will be captured. Also, "source sink combinations" needs to be further defined as a calculation; an entity of any size could have thousands of these possible combinations. Also, if this in-depth study is required, the frequency in R2.2 should be decreased (as this is a minimum standard to maintain the reliability of the BES).

Commenter	Other Comments
	Response: The requirement could create some unneeded flowgates, but the SDT feels that this is not overly burdensome to those using the flowgate methodology. In order to maintain reliability the SDT believes that the minimum of the first three limiting Elements/Contingency combinations within the Transmission Operator's system being included as Flowgates is required. The SDT has modified R2.1.1. and R2.1.2 to include the phrase, "up to the path capability". The source sink has been changed to POR POD in R2.1.2. The frequency in R2.2 has been modified to annually. - R4 - The requirement states, "If the source has not been specified, use the interface point with the adjacent upstream Transmission Service Provider as the source." It may be difficult to determine the upstream Transmission Service Provider when the source has not been specified. The same is true for "If the sink has not been specified, use the interface point with the adjacent downstream Transmission Service Provider." These statements should be revised to state, "If the source has not been specified and the sink has, use the interface point with the adjacent Transmission Service Provider upstream from the source as the source." And "If the sink has not been specified and the source has, use the interface point with the adjacent Transmission Service Provider downstream from the sink as the sink." Response: The SDT has modified this requirement to be more explicit, as well as allow for more flexibility based on specifications in the ATCID. - R5.2 - It is not clear to us what the definition of a "third-party" is and how it is used in AFC calculations. Please clarify. Response: The old R5.2 (now R5.3) was modified to remove third party and clarify language as, "Transmission Service Provider that calculates AFC for that Flowgate as the AFC." - R8 & R9 - See our comments regarding "Postbacks" above. Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. - R9 - "Counterflows" is missing subscript "NFi" in the formula. Response: While the adjustments may be based on the impacts, business practices may dictate the actual value used. Therefore, the SDT has chosen to not include the "i." The same is true for postbacks. 7. MOD-001-1 (R7, R10), MOD-004-1 (R2), MOD-008-1 (R4), and throughout other standards the drafting team uses the phrase, "make available." In addition, per FERC Order 693 (e.g. Par. 1023), wording should be added as to how it needs to be made available, such as on a website. Furthermore with regard to the sharing of information, requirements in these standards that require an entity provide information to another entity should have a standard method for providing the information or at a minimum require a negotiated method and format for providing the information. This will also require dispute resolution when two entities cannot agree on a method or format. Response: The SDT used the words "make available" to allow for flexibility. If entities wish to make this information available via a website, that is acceptable. With regard to data exchange, the same is true. Note that NAESB may elect to draft business practices to address this concern as well.

Commenter	Other Comments
	8. These standards do not address the market operation methods in use today. Currently, the Transmission Service Providers are the RTOs in some markets. These entities are also the market operators and not-for-profit organizations that have no vested financial interest in the amount of TTC assigned to a flow-gate or transmission facility. The modification of these standards to place the burden on the Transmission Operator for these calculations is a significant step backwards that should be revised to avoid the need for waivers or delegation agreements and to meet the needs of the old method of operation and the new market methodology. Response: The SDT believes the functional model has the Transmission Operator as responsible for calculating the TTC. If an RTO is performing this function, the team believes they are performing it on behalf of their Transmission Operator. 9. Several requirements related to ATC have been incorporated into NAESB standards. It would be beneficial for these standards to be more transparent to the industry since it is challenging to find these standards on NAESB's website or some other means. It may help to have a direct link to these business practices on NERC's website in the future. Furthermore, it may help to incorporate these NAESB standards into NERC's standard review process for this and future projects in an effort to achieve full industry input on the development of these practices. Response: NAESB standards are handled through the NAESB process, which is an open and ANSI-accredited process. The SDT encourages entities to participate in the NAESB process. 10. This set of ATC standards may need to go through a field test to determine how effective these calculations for ATC can be based on all the new requirements for Implementation Documents and Applicability to Transmission Operators and Load Serving entities that may not have ever dealt with these sorts of calculations in the past. If a field test is not an option due to time constraints, then the effective date should be pushed out another 12 months. Response: The majority of responses to Question 1 of this comment solicitation indicate that 12 months is an acceptable implementation period. The majority of entities did not request a field test.
Response: Please see in-line responses	
Flathead	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	

Commenter	Other Comments
FRCC	MOD 28 Requirements, Measures and VSLs for R9-R12 are not explicit that setting a value to "Zero" is "using" the value. This could cause confusion on audits. R9-R12 should be revised to indicate that "Zero" is an acceptable value and qualifies as "using" the element. For example under each item where the elements are defined a line could be added stating. "The Transmission Service Provider shall show all elements of the calculation even those that have a value of zero for the path being calculated, and that value of zero for an element is considered using the element." Response: The SDT has added language to the measures in the standards to explicitly allow the use of zero. MOD-001-1: ATC: The frequency of calculation in R9 for the same products in R2 adds little or no accuracy or value to the results, particularly towards the end of the horizon. For example, hourly ATC must be re-calculated for three to seven days out every hour, the same as for two to four hours out. This should be relaxed to a tiered requirement. The postings should be made out to 168 hours, however, the frequency could be relaxed so that the outer bounds of the horizon are updated less frequently. (i.e. R9.1 For next 4 hours, once per hour, for hours beyond 4 hours out until end of next day (midnight), once every 6 hours, for hours beyond end of next day, once per day.) Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD-001-1: ATC: R10 is exhaustive. The requester should be required to have cause to request such information and be required to pay for the administrative costs of collecting and transmitting the information. Much of the listed information is embedded within the power-flow models, and transmitting models electronically on an hourly basis to potentially multiple requesters would be very costly and time-consuming. If a requester has a grievance or dispute, then the historical data should be sufficient to provide for the calculations in question. Response: This information is not intended to be used to address grievances or disputes… it is intended to improve the accuracy of the ATC calculation. All transmission providers are expected to meet this requirement as part of their cost of doing business reliably. MOD-028-1: Area Interchange Methodology: R7 – In step 'a' the 5% distribution factor should be specified as OTDF or PTDF (should be OTDF). Response: The distribution factor is meant to refer to PTDF or OTDF. MOD -028-1: R7 – in Step 'A' the 5% distribution factor appears to only apply to adjacent systems. This could result in a scenario where Utility B prudently limits ATC based on a facility in their system between them and Utility C, however Utility A allows a transaction to C that has the same impact on the same facility because of the 5% rule. We suggest that the ATCID should specify the handling of off system non path impacts. Response: The Drafting Team has modified the second bullet of the requirement as follows: "-A SOL is reached on any other adjacent system in the Transmission model that is not on the study path and the distribution factor is greater than 5%. The Transmission Operator may honor distribution factors less than 5 %." MOD-028-1: In R7 step 'c', Please further define "all impacts of firm transmission service included in the study model" and/or provide an example. In our region this phrase was interpreted by some to mean "firm point to point only" and by others to include network and native service.

Commenter	Other Comments
	Response: The Drafting Team has clarified the language as follows: "-The sum of the incremental Transfer Capability and the impacts of Firm Transmission Services, as described in the Transmission Service Provider's ATCID, that were included in the study model, or." MOD-029-1 R1 This section should specifically say that all the BA-BA transactions are removed from the load flow model. These transactions are accounted for under ETC. Response: In the Rated System Path methodology, the model is used to determine TTC, which is the "unloaded" capability of the system. There is not necessarily a relationship between the schedules used in the model and simulation to determine TTC and the schedules and reservations used to determine ETC. MOD-29-1 R1-6 This section implies that load is in the model which means the TTC calculated would be reduced due to the load. In MOD-29-1 R5 load is again accounted for under ETC. It appears that the equation for ATC in MOD-29-2 R7 double counts the effect of load because it is included in the TTC and in ETC. Response: Response: In the Rated System Path methodology, the model is used to determine TTC, which is the "unloaded" capability of the system. There is not necessarily a relationship between the schedules used in the model and simulation to determine TTC and the schedules and reservations used to determine ETC. Mod-29-1 R5 More detail is needed as to how the components of ETC are to be determined from a load flow model. Particularly, NLF, NITSF and GFF. Response: ETC components are not derived from simulation in the Rated System Path methodology. The standard does not define the specifics of how these are determined, other than requiring their inclusion within the ATCID as described in R3.1. MOD-029-1 R7 C: Assuming no other changes this sentence should be revised to state "Determine the impacts of Firm Transmission Service that were included in the study model." The summing of this item with the incremental Transfer Capability occurs in Step D and mentioning it here in C is redundant. Response: There is no MOD-029 R7C. Mod 28 R7c: This term should have a defined variable name or acronym. Response: The drafting team does not believe that a variable name or acronym is required, and that the language is clear as written. Mod 28 R7c, R9, R10, R11, R12: In R7c the "impacting firm transmission service" is determined and summed to the ITC results to get the TTC. In R9 & R10 an ETC is determined then in R11 & R12 that is deducted from the TTC to get ATC. However there is no tie made between the undefined "impacting Firm Transmission Service" R7c and the ETC in R9 & R10. So there is no requirement that would prevent a service from being modeled in the model, not included in the "Impacting Firm Transmission Service" (IFTS) but then included in the ETC calculation, thereby effectively double counting the service. The service was on in the model, thereby reducing the capacity, the service was not added to the model in the IFTS but was deducted from the capacity in the ETC as if it wasn't running in the model. Response: R7c has been changed to require the Transmission Service Provider to document their process of how

Commenter	Other Comments
	they accounted for the impacts in the TTC calculation in their ATCID. We suggest that the drafting develop a set of examples to clearly explain the principles and calculations laid out in the standards to help insure uniformity in interpretation of the standards. See that attached example, which while basic, could be modified to emphasize specific concepts like CBM, Postbacks, Counter Flows, TRM, "Impacting Firm Transmission Service", etc. Response: The drafting team will investigate the possibility of creating a reference document to accompany the standards.
Response: Please see in-line responses.	
Georgia Transmission Corporation	MOD-001-1, R10 requires "within fourteen calendar days" for a TSP to begin supplying large amounts of data used in calculations. "Within thirty calendar days" is more realistic to supply large amounts data that could be extensive and detailed. Response: This change has been incorporated. MOD-004-1, R2 requires a TSP to act within 7 calendar days, R6 requires a TSP to act within 5 calendar days, R7.1 and R7.2 require a TSP to act within 7 calendar days. R2, R6, R7.1 and R7.2 should be changed to match the 14 calendar days required by R4. 14 calendar days is more appropriate for data requests that are "reports", "supporting data", documentation, work papers, etc. Response: R2 has been modified to require provision before the effective date of the document. R6 has been retained at 5 days, as the drafting team does not believe this to be onerous. R7.1 and 7.2 have been extended to thirty days. MOD-008-1 R3 and R4 require "seven calendar days" for a TSP to act. 14 calendar days is more appropriate for data requests that are "underlying documentation, work papers…", etc. Response: R3 has been extended to thirty days. R4(which is now R5) remains at 7 days. MOD-028-1, R5, it appear that the word "shall" is not needed in the following sentence. "-If the sink has been specified in the reservation and it is discretely modeled in the Transmission Service Provider's Transmission model, use the discretely modeled point shall as the sink." Response: The SDT has corrected this typographical error. MOD-028-1, the VSL for R8 is missing a measurement: The Transmission Operator has not provided its Transmission Service Provider with its Posted Path TTCs within ___ (should be seven) calendar days of their determination, but is has not been more than 21 calendar days since their determination. Response: The SDT has corrected this typographical error.
Response: Please see in-line responses.	
Hydro One Networks	MOD-028-1(Area Interchange Methodology) VSL Requirement 2: The requirement talks about Facility ratings from both Transmission Owners and Generator Owners. The associated VSL description forgot to include Generator Owners. Response: The SDT has corrected this oversight. As well, this VSL talks about not using a certain number of Facility Ratings which I assume would result in some TTC

Commenter	Other Comments
	error therefore I would propose changing how this requirement is measured: Lower VSL: 1%<TTC error<5% Moderate VSL: 5%<TTC error < 8% High VSL: 8%< TTC error < 10% Severe VSL: TTC error > 10% As well this can be used for R3 and likely several other requirements were TTC and ATC errors can result from non-compliance. Response: The drafting team discussed the proposed change and determined that relating the violation to the number of facility rating errors that directly affected the TTC was a more appropriate measure than trying to find a percentage that would apply fairly to all sizes of TTC. As a result of your comment, the drafting team has adjusted the VSL section of the standard as follows: An inaccurate Facility Rating is a single violation, regardless how many times that Facility Rating has been utilized.
Response: Please see in-line responses.	
Hydro-Québec TransÉnergie (HQT)	MOD-001 1. R1: While in many cases, the decision on which ATC methodology to use may be made jointly between the TSP and TOP. However, since you cannot have joint responsibility in the standard, the TOP is the appropriate Functional Model entity. Response: The SDT concurs with your assessment. Acronyms TSP, and TOP need to be defined in the Background Information on p. 3. Response: These are defined in the glossary; the background was not intended to be part of the standards. 2. R8: Since this standard deals with short-term Transmission Service, the reference to planning studies should be removed from R8 Response: While this standard deals with short-term service, it requires that assumptions used in that short-term analysis are consistent with those used in the long term. The SDT does not believe this to be in conflict. 3. R8 is an appropriate representation of the broad FERC requirement as-written that will force entities to make a conscious effort to ensure this consistency occurs. While the language is somewhat vague, we recognize that adding more detail would be unreasonably difficult. We would suggest that detail be added in the measures to provide examples of what a valid demonstration would be. For example, TOP/TSP may provide evidence to demonstrate that the source of the inputs used in the operational studies is the same as for the TTC/ATC studies. Response: The Drafting Team could not develop a comprehensive, exclusive list of assumptions, but has added a partial list of examples in the measure, M6. TOP and TSP need to be defined in the Background Information on p. 3. Response: These are defined in the glossary; the background was not intended to be part of the standards.

Commenter	Other Comments
	MOD-028 1. R8 should be broken down into the different timeframes; sending TTC values used in hourly and daily ATC calculations seven days after being calculated is too late. Suggest: 8.1 within one calendar day of its determination for TTCs used in hourly and daily ATC calculations; 8.2 within seven calendar day of its determination for TTCs used in monthly ATC calculations. Response: The SDT has modified the standard to incorporate the suggested change. The following modifications were made: R8.1.One calendar day of its determination for TTCs used in hourly and daily ATC calculations R8.2. Seven calendar day of its determination for TTCs used in monthly ATC calculations. MOD-030 1. R4 seems duplicative of MOD-001 R8 Response: The Standard Drafting Team agrees. R4 has been edited to remove this duplication. 2. R6.3, 6.4 - The last sentence of R6.3 seems to belong in 6.4 not 6.3 Response: The SDT has corrected this typographical error.
Response: Please see in-line response.	
IESO	MOD-028 and MOD-029: We raise the question on the "purpose" of both MOD-028 and MOD-029, both of which are defined as: "…to support reliable system operations". Is the methodology to be used for calculating transfer capability for "Transmission services", or for supporting reliable system operations? For entities which do not provide physical point-to-point transmission services, like the IESO, why should we be held responsible for meeting the standard requirements for calculating TTCs that support transmission services? Response: The Drafting Team removed the reference to Transmission Service. MOD-030 Several requirements are written with sub-requirements that are really criteria. These sub-requirement should be incorporated directly into the requirement itself. Otherwise, we risk having the Commission assign a VRF to something that really is criteria or explanatory text. Some examples include R2, R3, and R4. R2 could be written as: R2. The TSP shall identify Flowgates for use in the AFC process based on the following minimum criteria. - Flowgates should be defined with contingencies that are used in operations and planning studies for the associated time horizon. -At least the first Flowgates identified as limits to transfer from or to all adjacent BA within the TOP transmission system. -Any modeled Flowgate that has been subjected to Interconnection wide congestion management procedure or another TP using methodologies defined by MOD-28 or MOD-29 has requested that meets one of the following two criteria. -Any generator within the Transmission Service Provider area has at least a 5% PTDF or OTDF impact on the

Commenter	Other Comments
	Flowgate when delivered to aggregate load in the TSP areas or -A transfer from any BA within the TSP's area to a BA adjacent that has at least a 5% PTDF or OTDF impact on the Flowgate We agree with that the remaining sub-requirements of R2 are really sub-requirements. Response: The standard drafting team has reviewed all of the sub-requirements and has made adjustments where appropriate. R4 should be rewritten as because the assumptions should be specifically designed and it is too vague: R4 The Transmission Service Provider shall use contingencies from it planning and operating studies for the applicable Time Horizon and should model the impact of point-to-point Transmission Service as: - When the source or sink are specified in the reservation, the Transmission Service Provider should model the reservation in the following order of importance: 1. Model the reservation using the actual source and sink in the model. 2. Map to an "equivalence" or 3. Map to the interface point with the adjacent upstream Transmission Service Provider as the Source the adjacent downstream Transmission Service Provider as the Sink. - When the source or sink are not specified, the Transmission Service Provider should map the reservation to the interface point with the adjacent upstream Transmission Service Provider as the Source the adjacent downstream Transmission Service Provider as the Sink. Response: The SDT has modified the language to be clearer, and have also allowed for more flexibility by providing for source/sink processing rules to be specified in the ATCID. R2.2 should also require a change to flowgates any time there is a topological change that impacts one. Response: The SDT does not believe that this should be a requirement since there are other methods to incorporate the impacts of topological changes. This requirement does not disallow updating flowgates more often or for topological changes. The VSLs for R1 need to be defined according to the Violations Severity Levels Development Criteria document. R1 fits the procedure/program category. Lower, Moderate and High VSLs should be defined based on some of the criteria being included. Response: The VSLs have been updated to incorporate two levels. Counterflows - the treatment of counterflows is mentioned in all the MOD standards - MOD-001, MOD-028, MOD-029, and MOD-030 - all the formulae incorporate counterflows into the calculations but there seems to be a disconnect between the formulae and R5 of MOD-001 - if counterflow treatments are left to the discretion of the TSP in the respective ATCIDs, then why does R5 of MOD-001 exist - can it not be written as: "When determining the impact of counterflows in the determination of non-firm ATC or Available Flowgate Capability (AFC), the Transmission Service Provider shall apply counterflow treatment consistent with the Transmission Service Provider's ATCID". The counterflow treatment should also be consistent with transmission planning studies. Response: The drafting team has modified the approach to counterflow in the standards based on the comments provided. The default values were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The

Commenter	Other Comments
	Drafting Team modified the requirement for the ATCID in MOD-001 to include more detail regarding how the TSP handles counterflows. With this approach we do not believe that a definition of counterflow is required. Assumptions in ATC calculations should be consistent with assumptions used in operation studies and planning studies for similar time horizons. We agree with the NERC SDT that the TRM methodology should not be prescriptive. Response: Thank you for your supportive comment, MOD-008 (TRM) has a requirement when entities have a zero value for TRM - R1.5 of MOD-008 states that: "If TRM is zero for all the time periods…".There is no similar language for MOD-004 when entities have a zero value for CBM. Response: The SDT has modified the standard to clarify that the communication of fact that TRM is not used is what is required.
Response:	
ISO/RTO Council (IRC)	MOD-029 RATED SYSTEM PATH TTC, ETC & ATC 1) The SRC supports retention of the requirement(s) in R2.2 that accommodate paths which are “flow limited” by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing practices without re-inventing the wheel where no such effort is required to meet FERC’s goals of transparency and consistency. Response: Thank you for your supportive comment. 2) The SRC supports retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. Response: Thank you for your supportive comment. 3) The SRC supports retention of the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. Response: Thank you for your supportive comment. 4) The SRC supports retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts, associated litigation and potential renegotiation of associated operational agreements while supporting FERC’s mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required. Response: Thank you for your supportive comment. MOD-030 Several requirements are written with sub-requirements that are really criteria. These sub-requirements should be incorporated directly into the requirement itself. Otherwise, we risk having the Commission assign a VRF to something that really is criteria or explanatory text. Some examples include R2, R3, and R4. R2 could be written as: R2. The TSP shall identify Flowgates for use in the AFC process based on the following minimum criteria. - Flowgates should be defined with contingencies that are used in operations and planning studies for the associated time horizon.

Commenter	Other Comments
	-At least the first Flowgates identified as limits to transfer from or to all adjacent BA within the TOP transmission system. -Any modeled Flowgate that has been subjected to Interconnection wide congestion management procedure or another TP using methodologies defined by MOD-28 or MOD-29 has requested that meets one of the following two criteria. -Any generator within the Transmission Service Provider area has at least a 5% PTDF or OTDF impact on the Flowgate when delivered to aggregate load in the TSP areas or -A transfer from any BA within the TSP's area to a BA adjacent that has at least a 5% PTDF or OTDF impact on the Flowgate We agree with that the remaining sub-requirements of R2 are really sub-requirements. Response: The standard drafting team has reviewed all of the sub-requirements and has made adjustments where appropriate. R4 should be rewritten as because the assumptions should be specifically designed and it is too vague: R4 The Transmission Service Provider shall use contingencies from it planning and operating studies for the applicable Time Horizon and should model the impact of point-to-point Transmission Service as: - When the source or sink are specified in the reservation, the Transmission Service Provider should model the reservation in the following order of importance: 1. Model the reservation using the actual source and sink in the model. 2. Map to an "equivalence" or 3. Map to the interface point with the adjacent upstream Transmission Service Provider as the Source the adjacent downstream Transmission Service Provider as the Sink. - When the source or sink are not specified, the Transmission Service Provider should map the reservation to the interface point with the adjacent upstream Transmission Service Provider as the Source the adjacent downstream Transmission Service Provider as the Sink. Response: The SDT has modified the language to be clearer, and have also allowed for more flexibility by providing for source/sink processing rules to be specified in the ATCID. R2.2 should also require a change to flowgates any time there is a topological change that impacts one. Response: The SDT does not believe that this should be a requirement since there are other methods to incorporate the impacts of topological changes. This requirement does not disallow updating flowgates more often or for topological changes. The VSLs for R1 need to be defined according to the Violations Severity Levels Development Criteria document. R1 fits the procedure/program category. Lower, Moderate and High VSLs should be defined based on some of the criteria being included. Response: The VSLs have been updated to incorporate two levels.

Commenter	Other Comments
Response: Please see in-line responses.	
Manitoba Hydro	For Standard MOD-030-1, R2.1.2, the phrase "first three limiting" is too prescriptive and should be removed.
Response: The requirement could create some unneeded flowgates, but the SDT feels that this is not overly burdensome to those using the flowgate methodology. In order to maintain reliability the SDT believes that the minimum of the first three limiting Elements/Contingency combinations within the Transmission Operator's system being included as Flowgates is required.	
MidAmerican Energy Electric Trading	Although the standards are heading in the right direction, two things that must be done are to create an on-the-path, off-the-path methodology for determining which facilities to include when determining an ATC and the standard must create rules on how to include partial path reservations. If these two things are not done in a consistent manner, the entire process falls apart.
Response: The drafting team has, for the most part, addressed these items. Regarding on path and off path, ATC in MOD-028 and MOD-030 is based on all potential limits in the model, including off path constraints. Regarding partial path reservations, the drafting team understands the concern expressed, and believes that the methodologies each handle this in different ways. MOD-029 does not include any flow-based analysis, and therefore partial path reservations are irrelevant. MOD-028 addresses this by requiring monthly or longer service include all adjacent TSPs reservations, filtered to eliminate duplicates; for shorter than monthly service, MOD-028 does not include flow-based analysis. MOD-030 includes similar language for all point-to-point reservations (including adjacent). We believe that currently, given the three methodologies, this is the best approach.	
Midwest ISO	General comments on MODs: - All Violation Risk Factors in MOD-001, -004, -008, and -030 should be Lower as none represent a risk of cascading outages if they are not met. We agree that none of these requirements represent a risk of cascading outages if they are not met. However, this does not mean that all requirements should be considered "lower." A requirement with a Violation Risk Factor of Lower is one that "if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system." We believe that there are many requirements in these standards to which this VRF should apply, but there also are many that can have a more significant impact than this. A requirement with a Violation Risk Factor of Medium is one that "if violated, could directly affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures." We believe that several of the requirements in these standards, if not met, can directly affect the electrical state or capability of the bulk electric system. - Many of the "sub-requirements" listed in the standards should either be bulleted items under the standard or removed and placed in an Appendix, rather than being made actual requirements themselves. For example, in MOD-001, R3, the requirements R3.1 through R3.6 could be just bulleted or placed in an Appendix with R3 reworded to say that the ATCID must address all the items in Appendix xx. Response: Since each of the items listed in R3.1 through R3.7 are required in the ATCID, they should be sub-

Commenter	Other Comments
	requirements. Bulleted lists are used to indicate items that do not all have to be performed, but may be selected from. MOD-001-1: - MOD-001, R1, should read "…Transmission Operator or Transmission Service Provider…" After hearing some industry comment that including this "or" (as we have in multiple comments) may not be possible in a standards requirement, we look to the team to determine how best to include some flexibility in which entity is required to meet the standard, to respect the varying distribution of work across these regions. Response: The drafting team believes that the functional model indicates this to be the Transmission Operator. - In MOD-001-1, R6, the method of notification should include an option for public posting such as OASIS. Response: The intent of this requirement is that the TSP take an action that calls the attention of the listed entities to the fact that the ATCID is changing. Simply posting on OASIS does not meet this intent. - MOD-001-1, R10. 14 days can be too short when there are multiple requests pending. There should be a queue process. It is reasonable to request a response time for the first request in the queue, but not on all simultaneous requests. Response: The time has been changed from 14 days to 30 days. Note that providers need not wait to build their data exchange systems until the data is requested; the intent of the 30 days is to allow for any necessary coordination details and access approvals to be taken care of prior to the beginning of the data exchange. - MOD-001-1, R10.12 Since there is a requirement to provide this information in 14 days, this needs to be clarified to say the information that must be provided is the rules for calculating counterflow used in the calculation of ATCs, not the actual MW values themselves. A database of the actual MW values for any given calculation would be extremely large and could not be provided, nor would it serve any real purpose. Response: This requirement has been deleted. MOD-004-1: - For Standard MOD-004, R3 and R4, A monthly value is extremely difficult to administrate and implement in the ATC calculation. Such a requirement will subject the TSP to significant increases in cost (the vendor has to provide new code and the frequency of TSP updates would drastically increase). GCIR calculation part has to do a lot more studies. Midwest ISO suggests leaving it to each region to decide on the time intervals. Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The standard is requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been clarified that incremental changes OR full recalculation is acceptable. - MOD-004, R3.1 – This section should be updated to clarify what is meant to be requested. For example, it states "requested for each month for each year for the next ten year period." Do you really want 120 months worth of requests, or 12 monthly requests and 9 yearly? Suggested wording "for each month for the first 12 months and for

Commenter	Other Comments
	each year for the remainder of the ten year period" Response: This phrase has been deleted to be clearer. - MOD-004, R3.2 – Why should LSE update every month if CBM is only calculated once per year? We suggest that these timelines be clarified. Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The standard is requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been clarified that incremental changes OR full recalculation is acceptable. - MOD-004, R9 -- Should be adjusted so that it explicitly states that only the timing requirements for the Real-Time market only will be waived. For example, the Day-Ahead Market timing requirements cannot be waived. Response: The SDT has modified the requirement to incorporate the suggested change. MOD-008-1: - MOD-008, R1.5: "If TRM is zero for any of the time periods listed…" Response: The SDT has rewritten this requirement such that if the provider does not use TRM, they must so indicate. MOD-030-1: - MOD-030-1, change R1 language to affect M1 regarding criteria used by Transmission OwnerR1, TSP should not be responsible for actively notifying changes made to criteria set by TO. Suggested wording is "… shall include … (ATCID) the practice or a link to the practice the TSP uses for adding Flowgates". Response: The Transmission Service Provider is responsible for interacting with the Transmission Operator to ensure this information is available. - For Standard MOD-030-1, requirement R.2.1.1. is redundant with the definition of Flowgate given in the "definitions" section. This requirement should be removed, or at least reworded to read "…may be a Flowgate." Response: The drafting team has corrected and clarified this language. - For Standard MOD-030-1, R2.1.2, the phrase "first three limiting" is too prescriptive and should be removed. For example, if the most limiting first contingency transfer is a large value, say 10,000, adding first three limiting elements/contingency combinations is not necessary. If the requirement can't be deleted, we suggest adding wording that sets a transfer level such that the first three constraints that cause the FCITC to fall under that level will be captured. Also, "source sink combinations" needs to be further defined as a calculation entity of any size could have thousands of these possible combinations. Also, if this in-depth study is required, the frequency in R2.2 should be decreased (as this is a minimum standard). Response: The requirement could create some unneeded flowgates, but the SDT feels that this is not overly burdensome to those using the flowgate methodology. In order to maintain reliability the SDT believes that the minimum of the first three limiting Elements/Contingency combinations within the Transmission Operator's system being included as Flowgates is required. The SDT has modified R2.1.1. and R2.1.2 to include the phrase, "up to the path capability". The source sink has been changed to POR POD in R2.1.2. The frequency in R2.2 has been modified to annually.

Commenter	Other Comments
	- MOD-030-1, R2.3 rating issues, refer to comments from SRC, which says "MOD-030-1, R2.3 does not identify that TFC can be limited by an IROL but it should. If selling transmission service really requires development of a reliability standard, R2.4 should be modified to require updating the TFC any time the underlying determinants, such as facility ratings, change.". Response: Please refer to responses to ISO/RTO Council (IRC). - MOD-030-1, R5.1. This is not always the best practice. For example, while using PSS/E model, some outage remote to the TSP service area can cause the case to not solve and the TSP has to either use DC power flow solution or ignore the outage. The impact from ignoring a remote outage on the accuracy of AFC is much smaller than that from using DC power flow. The TSP has to temporarily block the outage to achieve overall better accuracy. Suggestion wording is "… have been executed, to the extent it helps improve the AFC calculation accuracy." Understanding that the ability to measure deviations may become an issue, the wording could be adjusted to state "… have been executed, except for any outages that, if included, would force the calculation into a less accurate solution technique." We realize that the suggested wording is not perfect, but we're hoping that the team understands our intention and can adjust it accordingly. Response: R5.1 has been revised to provide additional flexibility. - MOD-030-1, R5.2. Should add "to the extent they are available" to the end. Not all MISO third parties have that data available. Response: The requirement says to use any AFC provided. If you are not provided an AFC value, then you do not need to use it, and should use the number you calculated. - In MOD-030-1, R8 and R9, "ATC" should be "AFC". Response: The SDT has corrected this typographical error. - MOD-030-1, R6.3 and 6.4, should say a 3% distribution factor or an impact of 3% of the total MW of the PTP request, not 3% of the distribution factor. Response: The SDT has modified the requirement to incorporate this language, as well as changed the threshold to reference that used in applicable congestion management procedures. - MOD-030-1, R10 should be revised to say "The Transmission Service Provider shall convert or provide a tool to convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths." Response: The standard does not prohibit the use of a tool to convert AFCs and TFCs.
Response: Please see in-line responses.	
Modesto Irrigation District	MID supports the comments submitted by SMUD on behalf of the WECC MIC MIS ATC Drafting Team as to this inquiry.
Response: Please see responses to the WECC MIC MIS ATC Drafting Team.	
MRO	
New Brunswick System Operator	1. Since a TTC limit may be due to thermal or stability limit, those limits that are considered IROLs should be required to be identified in the methodology.

Commenter	Other Comments
	Response: SOLs and IROLs are required to be identified in TOP-002 and monitored in TOP-004. The SDt does not see the need to identify them in the methodology. 2. If no inputs to an ATC have changed then an update should not be required. (MOD-001) Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation.
Response: Please see in-line responses.	
NorthWestern Energy (NWMT)	MOD-001-1, A., 3. the stated Purpose contains noble goals which are not required for reliable system operation but for viable commercial activity. Reliable system operations are impacted by incorrect TTC values and uncoordinated transaction scheduling activities. Response: The Drafting Team has clarified in the stated purpose why these standards are required for reliable system operation as follows: To promote the consistent and reliable application and documentation of Available Transfer Capability (ATC) calculations for analysis and system operations. MOD-001-1, A., 4. applicability, Transmission Service Provides calculate ATC. Transmission Operators (in the near term) and Transmission Planners (in the longer term) calculate TTC. Response: The SDT agrees that these are good descriptions of the roles entities play in determining ATC and TTC. The SDT does not believe the Transmission Planner should be a applicable entity in the standard, as they are dealing with long-term issues. MOD-001-1, B., R1, Transmission Operators calculate transfer capability (TTC) of facilities within its TO area. Transmission Planners calculate transfer capability (TTC) of facilities within their TP areas. Transmission Service Providers calculate ATC for those paths that they are required to, choose to, or are asked to post. Response: It is unclear what change is being suggested. MOD-001-1, B., R2 is a good requirement, but for commercial reasons, not reliability reasons. Transmission customers need to have access to more “granular” ATC closer to real-time. Response: The SDT believe that calculation of ATC relates to the ability of the Transmission Service provider to understand expected energy flows on both its own system and those systems of other entities for future time periods. Accordingly, the same access to current data has reliability aspects as well as commercial aspects. Also, why were weekly ATC values not included? Response: The Drafting Team did not include weekly values because we do not believe they are necessary for reliability nor are they required by the pro-forma Tariff. MOD-001-1, B., R3 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability. This requirement to create a separate document creates an undue burden on the industry - transmission customers will have two different documents to review, and transmission service providers will have two different documents to maintain.

Commenter	Other Comments
	Response: The standard does not preclude entities from creating one document that meets both needs. MOD-001-1, B., R3 the term "Facility" is used several times in MOD-001-1. The NERC glossary says facility is "A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)". In R3.3 the requirement to list the Transmission Operators and Planning Coordinators for every facility under the TSP's tariff is burdensome and does not have value. Hundreds of facilities make-up even small systems. R3.3 should say "for each path for which the Transmission Service Provider calculates ATC, list the corresponding Transmission Operator and Transmission Planner and Reliability Coordinator". Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. The Drafting Team could not identify a reason to include the Reliability Coordinator. MOD-001-1, B., R3.6 "Allocation methodologies" – it is not clear to what this means? Perhaps the following: "For paths where multiple Transmission Service Providers share capacity or have rights, describe how the capacity is allocated among providers", or words to that effect. Response: The Drafting Team added detail to this requirement to address this concern. MOD-001-1, B., R4 is not needed, it is already covered in R3.2. Since R4 leaves it open to each TSP's choice and requires them to document it, perhaps as a suggestion, the requirement could be to have the TSP do as they say they do in their Attachment C. The requirement might be rewritten to say "the TSP utilizes counter schedule information in their firm ATC calculations as specified in their Attachment C." Then, if the TSP fails to document or to do as they say they do, this could be a violation of the requirement. MOD-001-1, B., R5 is not needed, it is already covered in R3.2. Since R4 leaves it open to each TSP's choice and requires them to document it, perhaps as a suggestion, the requirement could be to have the TSP do as they say they do in their Attachment C. The requirement might be rewritten to say "the TSP utilizes counter schedule information in their firm ATC calculations as specified in their Attachment C." Then, if the TSP fails to document or to do as they say they do, this could be a violation of the requirement. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. MOD-001-1, B., R6 is not necessary. Revisions to Attachment C are to be filed and posted. Response: These are to be notifications to the entities to alert them to changes that may impact them. Filing and posting does not provide notification. MOD-001-1, B., R7 Attachment C is already required to be posted (available) for any entity to review, subject to CEII

Commenter	Other Comments
	concerns. Response: This requirement is not in conflict with the requirement to post Attachment C. MOD-001-1, B., R8 does not read clearly. It can be interpreted as requiring any restudy of TTC to include previously used data rather than data that is reflective of the conditions of the time period being studied. Perhaps the requirement was for data used in the determination of TTC should be the most accurate, up-to-date data available and should reflect the expected conditions of the period of time under study. Response: The requirement says "assumptions", not "data". The Drafting Team has added examples of assumptions to the associated measure which should decrease the change of said misinterpretation. MOD-001-1, B., R9 is not a reliability concern. In addition, it is unduly burdensome. Current and accurate ATCs are a commercial concern. In addition, performing 168 hourly calculations every hour when neither TTC nor ETC has changed, benefits no one and is costly. The commercial requirement should be to require the recalculation of hourly ATC once a day and whenever either TTC or ETC changes for any period of time between this hour and the next 168 hours. Also, require the recalculation of daily ATC once a day for the next 30 days and whenever either TTC or ETC changes for any period of time between this hour and the next 31 days. Response: The SDT has modified the language to not require recalculations if the components in the ATC equation have not changed. However, the SDT does not agree this is only a commercial requirement. The amount of service sold is based on the amount of energy that can be transferred reliably, and these standards intend to ensure that number is as accurate as possible. MOD-001-1, B., R10, this requirement for data sharing between reliability entities is a good concept. However, as currently worded, all the burden to supply data is incorrectly placed totally upon the TSP and not on the Transmission Operator or Transmission Planner. Much of the data listed is critical for proper TTC calculation which the TSP may not have access to. The TSP calculates ATC based on upon TTC supplied by the Transmission Operator and/or Transmission Planner. Response: The Transmission Provider will be responsible for working with their Transmission Operators or Transmission Planners to secure the data. This requirement does not specify how the request is made or how the response or provision of data is dated. Response: The SDT believes this to be implementation details to be determined by the Transmission Service Provider and the requestor. NAESB may elect to define standards in this area. The corresponding measurement, M9, implies that all data items requested will be supplied within 14 days, but

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	requirement states that the TSP will begin to make available at the 14 day mark. Response: M9 measures whether or not the "requested data items" were begun to be made available. By "begun," the standard means that the process of sending all the data was started, not that only some of the data requested was sent. In addition, change first sentence words "…days of a request of any Transmission…" to "…days of a request made by any Transmission…" to read more in-line with the intent. Response: The SDT has rewritten this requirement to be clearer. Additionally, the requirement borders on a run-on sentence. Suggest moving the list of allowable requesters from R10 to be a sub-requirement R10.xx. The list of data is not all inclusive, there may other information needed. By each item, list what entity would have that data – TSPs would have ATC and ETC information, operators and planners would power flow data, etc. Response: The requirement has been rewritten to improve clarity. The Drafting Team could not identify any other information that would be needed for ATC calculation. It would be difficult to determine for all situations and company organizations who would have the listed data, and the value of identifying that couldn't be determined. The Transmission Service Provider is responsible for supplying the data. MOD-004-1, A., Capacity Benefit Margin is a use of the transmission system that is requested by a load serving entity. This standard contains requirements for the interactions between the LSE and the transmission provider. These requirements are largely commercial in nature and should be under NAESB development. Reliability standards concerning CBM should only require LSEs to acquire minimum CBM to ensure service to load. Response: CBM is a margin used to ensure reliability. Not only requests for it, but the actual setting of it and its ultimate inclusion in the ATC calculation all have reliability impacts, and are appropriate for development in this standard. MOD-004-1, A., 6. Effective Date language is not but should be exactly the same for all six MOD draft standards. Response: The SDT has modified the language to ensure it is consistent, recognizing that the standards will now be posted for separate ballots. MOD-004-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's CBM methodology. This requirement to create a separate document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and providers would have to maintain two different documents.

Commenter	Other Comments
	Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. Note that the Attachment C may not be as detailed as the implementation documents, however. MOD-004-1, B., R2 is not necessary. Revisions to Attachment C are to be filed and posted (available) for any entity to review, subject to CEII concerns. Response: R2 is intended to ensure this information is provided to reliability entities for reliability purposes, regardless of what other information is required to be posted to meet FERC requirements. MOD-004-1, B., combine R3.3 language into R3.1. Response: The SDT does not understand the reason to combine these requirements. MOD-004-1, B., R3.2 it seems more reasonable for the requirement to read "LSE shall review any active CBM requests at least every six months and submit updates as required." Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The Standard is requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been modified to clarify that incremental changes are allowed without entire re-calculation. MOD-004-1, B., R4 uses active verb "shall set….as follows:" but R4.1 says "Determine the amount of CBM…". To align the language a little better perhaps R4 should simply say "…the Transmission Service Provider shall:". In that way the TSP shall "determine" (R4.1), shall "set" (R4.2), shall "increase" (R4.3). Response: The drafting team believes the standard as now written is correct. MOD-004-1, B., R4.3 contemplates the case where there is insufficient capacity to meet all the CBM requests on a particular path, but there is no discussion on allocation of limited capacity to the requests. Is NAESB working on this aspect? If not, is it a TSP's discretion to develop a CBM allocation methodology? Response: Since CBM is a margin, and not a reservation, there is no need to allocate. The only time this would be required would be if multiple entities who requested CBM needed CBM at the same time, and at that time, their use would need to be pro-rata adjusted (possibly through TLR or other interconnection-wide congestion management procedures). Otherwise, available CBM might be withheld from use unintentionally. MOD-004-1, B., R8, R9, R10, M11, M12, M13 use of the terms "tag" or "Interchange Transaction Tag" which is inconsistent with NERC INT and NAESB CI BP standards where specific reference to "tag" or "e-Tag" has purposefully

Commenter	Other Comments
	been avoided in those standards. The term Request For Interchange (RFI) refers to a collection of data as defined in the NAESB RFI Datasheet, to be submitted to the Interchange Authority for the purpose of implementing bilateral Interchange between a Source and Sink BA. Or the term Arranged Interchange refers to The state where the Interchange Authority has received the Interchange information (initial or revised) and has distributed that information for reliability assessment. I believe that in these requirements, Arranged Interchange is the more appropriate language. Response: The drafting team has modified the standard to use the term Arranged Interchange. MOD-004-1, B., R10 requires, without exception, that all submitted Arranged Interchange using CBM must be approved. This would force TSPs to potentially approve malformed transactions possibly citing incorrect contract arrangements, incorrect connectivity, etc. Perhaps the requirement could state the TSP shall approve all valid requests to schedule CBM. The drafting team might consider requiring the TSP or other approval entities to supply a valid reason for denying a CBM schedule. Response: We believe that in a capacity emergency, an import of the energy is more important that ensuring the details of assignment refs and the like are correct. Note that Balancing Authorities are not prohibited from denying the Arranged Interchange; this is dealing solely with the Transmission Service Provider. MOD-008-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's TRM methodology. This requirement to create a separate document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and TSPs two different documents to maintain. Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. MOD-008-1, B., R1.1 suggest modifying to read: "For each path or flowgate that ATC or AFC is calculated, describe how each of the following components of uncertainty are used in calculating TRM for each of the ATC time horizons (if not applicable, indicate as such):" The words "ATC time horizons" could be used to eliminate the need for R1.4. Response: The drafting team intentionally avoided the use of the phrase "time horizons" in order to avoid confusion with NERC Compliance Time Horizons. MOD-008-1, B., R.3 what "request" is being referred to? Should it read "…seven calendar days of a request from:"? Or should "of a request" be removed as a typo? Response: The team reviewed this requirement. Based on your comments and others the team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient.

Commenter	Other Comments
	#3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. MOD-008-1, B., it seems that R1, 2, and 5 could be merged together into a new R1 TRM calculation and documentation. R3 and 4 could merged together into a new R2 on TRM data sharing. Response: While we agree these items could be merged, we believe it is more appropriate at this time to keep them as separate requirements. MOD-029-1 inclusion of the Rated System Path methodology is greatly needed and appreciated. The drafting team was wise in including it and should be thanked for their efforts. Response: Thank you for your supportive comment. MOD-029-1 suggest reordering R4 to be R1. Response: The SDT has reordered R3 and 4 to address this comment. MOD-029-1 R1 (modeling requirements) should include the statement that the data listed below should reflect the expected conditions for the applicable time period. Response: The drafting team agrees and has modified R1 to address your concerns. MOD-029-1 R1.6 change "peak load forecast" to "applicable load forecast" since some SOLs, and ultimately TTCs, may be based upon light load conditions. Response: The SDT has eliminated the word "peak" from the requirement. MOD-029-1 delete R2.7 as it, in its current form, does not provide the entire paradigm contained in the WECC's Procedures For Regional Planning Project Review And Rating Transmission Facilities. Response: The SDT believes this is covered in section 3 of the WECC PCC handbook. MOD-029-1 in R6, is the "non-firm capacity reserved for NITS" the same as Secondary Network Service (i.e., NN-6)? Response: It is the same as Secondary Service and the requirement has been revised to reflect that. MOD-029-1 in R7 & R8, what are "Postbacks"? This term is not used in the west. Response: This term came from Order 890; to the drafting team's knowledge, it has generally not been used in the

Commenter	Other Comments
	East or ERCOT either. The SDT believes that postbacks are used in the West (e.g. release of unscheduled firm as non-firm ATC), but are not referred to in this fashion. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-029-1 in R5, R6, R7, & R8, calculation of ETC and ATC are commercial concerns and should be addressed in business practice standards NAESB and enforced through FERC's adoption of those business practice standards into the CFR. Response: The drafting team does not believe these are only commercial concerns. If calculated correctly, ATC should be a reasonable approximation of what flows are expected on the system at a given point in time. Ensuring that this number is accurate will help ensure that entities do not oversell their systems into overloads. MOD-029-1 in R8 the requirement says we are to use the same formula for all horizons – this is incorrect. For the real-time, same-day time frame, we release all unscheduled capacity as non-firm ATC. As such, the formula would read: ATCNF = TTC – Scheduled ETCF – Scheduled ETCNF – CBMS – TRMU + Counter-schedulesF + Counter-schedulesNF Response: It is the SDT's understanding that NAESB will incorporate unscheduled capacity in postbacks. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. Therefore, the requirement is correct as written. MOD-029-1 in R8 the ETCF definition should be changed from "…existing non-firm commitments…" to "…existing non-firm commitments…" Response: The SDT has corrected this typographical error. MOD-030-1 it is unreasonable for TSPs to convert AFC values into ATC values simply because FERC regulations fail to contain the term AFC. For large systems using this methodology, posting thousands of ATC values benefits no one if AFC values can give transmission customers a better picture of available capability of the transmission system. Response: The SDT has modified the standard such that it does not require this conversion, but requires that if the conversion is done, it be done as described.
Response:	
NPCC Regional Standards Committee	MOD-001 1.R1: While in many cases, the decision on which ATC methodology to use may be made jointly between the TSP and TOP. However, since you cannot have joint responsibility in the standard, the TOP is the appropriate Functional Model entity. Response: The SDT concurs with your assessment.

Commenter	Other Comments
	Acronyms TSP, and TOP need to be defined in the Background Information on p. 3. Response: These are defined in the glossary; the background was not intended to be part of the standards. 2.R8: Since this standard deals with short-term Transmission Service, the reference to planning studies should be removed from R8 Response: While this standard deals with short-term service, it requires that assumptions used in that short-term analysis are consistent with those used in the long term. The SDT does not believe this to be in conflict. 3. R8 is an appropriate representation of the broad FERC requirement as-written that will force entities to make a conscious effort to ensure this consistency occurs. While the language is somewhat vague, we recognize that adding more detail would be unreasonably difficult. We would suggest that detail be added in the measures to provide examples of what a valid demonstration would be. For example, TOP/TSP may provide evidence to demonstrate that the source of the inputs used in the operational studies is the same as for the TTC/ATC studies. Response: The Drafting Team could not develop a comprehensive, exclusive list of assumptions, but has added a partial list of examples in the measure, M6. 4. TOP and TSP need to be defined in the Background Information on p. 3. Response: These are defined in the glossary; the background was not intended to be part of the standards. MOD-028 1. R8 should be broken down into the different timeframes; sending TTC values used in hourly and daily ATC calculations seven days after being calculated is too late. Suggest: 8.1 within one calendar day of its determination for TTCs used in hourly and daily ATC calculations; 8.2 within seven calendar day of its determination for TTCs used in monthly ATC calculations. Response: The SDT has modified the standard to incorporate the suggested change. The following modifications were made: R8.1.One calendar day of its determination for TTCs used in hourly and daily ATC calculations R8.2. Seven calendar day of its determination for TTCs used in monthly ATC calculations. MOD-030 1. R4 seems duplicative of MOD-001 R8 Response: The Standard Drafting Team agrees. R4 has been edited to remove this duplication. 2. R6.3, 6.4 - The last sentence of R6.3 seems to belong in 6.4 not 6.3 Response: The SDT has corrected this typographical error.

Commenter	Other Comments
Response: Please see in-line responses.	
NYISO	The NYISO joins in and supports the comments submitted by the IRC in response to this question. The NYISO also supports the comments submitted by the NPCC. NERC's November 21 filing with FERC for an extension of time to complete the ATC standards development process described MOD-29 as a methodology used "exclusively" in the Western Interconnection. It also referred to MOD-28 as a methodology used "primarily" in the Southeast. Notwithstanding these descriptions, the NYISO is not aware of any NERC proposal to restrict the use of MOD-028 or MOD-29 to particular geographic regions. If, however, it is NERC's intent to impose such restrictions, the NYISO respectfully requests that NERC reconsider. Order No. 890 did not impose geographic restrictions or require all transmission providers in a given region to use the same methodology. Transmission Providers should be free to implement whichever methodology best suits them, their customers, and the needs of any markets they administer, so long as they comply with that methodology's requirements. Response: Any such restriction would have to be included in the standard and go through the full NERC process. The SDT has no intention of doing so at this time. With respect to MOD-028, NERC should revise requirements R3 and R4 so that transmission providers are not required to re-calculate and re-post TTC at the specified intervals at times when none of the underlying inputs to the TTC calculation have changed. Under the NYISO system, TTC values do not change often. Accordingly, having to make more frequent TTC calculations would require the NYISO to adopt costly compliance measures that offer no benefit to its customers. Response: R6 describes how often the Transmission Operator should perform the calculation. Depending on the timeframe of the TTC being calculated, R3 and R4 describes the appropriate data for the period that is being calculated. We have modified R6.1 as follows: "R6.1. At least once in the calendar week prior to the specified period for TTCs used in hourly and daily ATC calculations." With respect to MOD-029, NERC should revise requirements R2.3 and R2.6 or, in the alternative, clarify in response to this comment that they do not apply to transmission providers, such as the NYISO, that do not offer physical transmission rights based on contract-path reservations. Response: If you do not have posted paths limited by contract or situations where multiple ownerships of Transmission rights exist on a ATC Path, then these requirements would not apply. Similarly, with respect to MOD-001, NERC should revise requirements R10.3 through R10.8, and R10.14, or in the alternative, clarify in response to this comment that they do not apply to transmission providers, such as the NYISO, that use financial reservation models and thus will not have the information that the proposed requirements direct them to make available on request. Otherwise, the R.10 information requirements would effectively call on the NYISO to perform functions that FERC's waiver orders excuse it from performing and that would serve no purpose under the NYISO model. More specifically:

Commenter	Other Comments
	R10.3 -- Unit Commitments and Dispatch Orders -- Under the NYISO system, this information is only available for the day-ahead and real-time market horizons. The NYISO will not have this information for the "operations planning" horizon as the proposed language would require. Response: This requirement is intended to allow other transmission providers to estimate flows expected from the dispatch of generation within the NYISO. The SDT assumes that assumptions of some kind with regard to dispatch order are used in your planning studies. Providing this information will meet the requirements of the standard. R10.4 -- Firm and Non-Firm Network Integration Transmission Service details -- The NYISO's OATT currently requires the NYISO to offer a "financial" version of this service but no customer has ever requested it. The NYISO anticipates that it will propose to FERC that the Network Integration Transmission Service provisions of its OATT be eliminated well before MOD-001 is implemented. The NYISO will therefore not have any information on such reservations to make available in response to requests under R10. Response: The SDT understands your situation and believe this to be acceptable. R10.5 -- Confirmed firm and non-firm Transmission reservations -- In the NYISO system, customers do not make express, physical firm or non-firm transmission reservations. The NYISO will, therefore, not have any information on such reservations to make available in response to requests under R10. Response: The SDT understands your situation and believe this to be acceptable. R10.6 -- Grandfathered firm and non-firm contracted transmission capacity on an aggregated basis -- Although the NYISO honors the grandfathered transmission arrangements that are listed in Attachment L to its OATT it does not make express physical transmission reservations in connection with them. The NYISO will, therefore, not have any aggregated information on grandfathered capacity reservations to make available in response to requests under R10. Response: The SDT understands your situation and believe this to be acceptable. R10.7 -- Firm Roll Over Rights -- The NYISO's FERC-approved OATT has never included the pro forma OATT's roll-over right provisions. The NYISO will, therefore, not have any information on such rights to make available in response to requests under R10. Response: The SDT understands your situation and believe this to be acceptable. R10.8 -- Firm and Non-Firm Adjustments to Reflect Parallel Path Impacts -- Because the NYISO does not support physical firm or non-firm reservations, it has no procedures for gauging their parallel path impacts and will, therefore, not have information to make available in response to requests under R10. Response: The SDT understands your situation and believe this to be acceptable. R10.14 -- Flowgate values - The NYISO does not utilize any flowgates. The NYISO will, therefore, not have any flowgate-related information to make available in response to requests. Response: The SDT understands your situation and believe this to be acceptable. Except to the extent that they are addressed by the IRC or NPCC, the NYISO has no comments on MOD-004 or MOD-008. The NYISO has never set aside transmission capacity for CBM and does not intend to do so in the future. Consistent with NERC's expectation, the NYISO would explain this practice to the extent required in its ATCID. Likewise, the NYISO uses TRM and intends to comply with all of NERC's requirements related to it. Response: The requirement only applies to flowgates used when selling service, so having no values here is acceptable.

Commenter	Other Comments
	Thank you very much for your attention to these comments.
Response: Please see in-line responses.	
PacifiCorp	PacifiCorp supports the following general and affirmative comments related to MOD-01 and MOD-029 submitted by the WECC MIC MIS ATC Drafting Team December 14, 2007. GENERAL 1) Supports retention of the three methods recognizing the differences between the Rated System Path (MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028). 2) Strongly supports the retention of the proposed one-year implementation period. 3) Supports allowing NAESB to address all "posting" issues as they directly affect OASIS. In addition, PacifiCorp suggests that any standards set forth herein be subject to an acknowledgement by NERC that compliance should not be required until the related NAESB standards are complete. Response: The SDT has discussed this, and believes that compliance with the NERC standards can be accomplished without the associated NAESB standards. MOD-001 UMBRELLA 1) Supports allowing the use of more than one methodology for calculation of ATC by any one entity. 2) Supports allowing each entity to specify in its ATCID how it will treat counterflows / schedules. (R4., R5.) 3) Supports the aggregation of transmission capacity for grandfathered contracts when shared with neighboring requestors. 4) Supports the specifically limited universe of entities to which data sharing is required as prescribed in R10. MOD-029 RATED SYSTEM PATH TTC, ETC & ATC 1) Strongly supports retention of the requirement(s) in R2.2 that accommodate paths which are "flow limited" by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing practices without re-inventing the wheel where no such effort is required to meet FERC's goals of transparency and consistency. 2) Strongly supports retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. 3) Strongly supports the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. 4) Supports retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts, associated litigation and potential renegotiation of associated operational agreements while supporting FERC's mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required. 5) Supports the adoption of a definition for counterflow to clarify its application in each equation. In addition PacifiCorp echoes its earlier comment in Section 2 that any changes to clarify the term counterflow should not undermine the flexibility allowed in the definition of the term "counter-schedules" in MOD-029. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and

Commenter	Other Comments
	we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules.
Response: Thank you for your supportive comments. Please see in-line responses.	
PJM Interconnection LLC	PJM encourages further development that would include a diversity of implementations. PJM also wishes a clear distinction between reliability aspects and economic aspects in further revisions MOD-001 Available Transfer Capability R3.2 - Is this requirement consistent with use of the terms "counter flow" and "counter reservation" in the rest of the Standard? Response: The drafting team believes that it is. R3.6 - What is the definition of "Allocation methodologies" and is it different for flowgate capabilities or paths? Response: The Drafting Team added detail to this requirement to clarify what the intent is. R9: We believe the frequency could be better addressed and aligned with other posting requirements by NAESB in business practices. Response: These requirements only apply to the minimum calculation times. Posting times remain in the purview of NAESB. The Drafting Team has modified the standard to require that the ATC shall be recalculated when a variable in the ATC equation changes, instead of making the requirement time based. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. M8 has been revised to measure recalculation of AFC and M9 has been revised to measure whether or not ATC has been recalculated when any of the variables have changed. R10: Insert "its own data" in the first sentence, 3rd line as follows: …Provider shall begin to make "its own data" available on the schedule specified… Response: The addition has been made as requested. MOD-004 Capacity Benefit Margin R2: The acronym "CBID" in the 2nd line of the first sentence should be "CBMID". Response: The SDT has corrected this typographical error. Entities should have a more reasonable time frame of fourteen (14) calendar days to make CBMID and any changes available to applicable parties. Response: The drafting team has changed the standard to require that the document be provided prior to

Commenter	Other Comments
	implementing any change. R6 - Fourteen (14) calendar days for providing requested CBM information would be more reasonable. Response: the drafting team believes that five days is adequate. R7.1 and R7.2 - Fourteen calendar days for providing CBM supporting data would be more reasonable. Response: The drafting team has modified the standard to allow 30 days. R9: Add "within the bounds of reliable operation" to the end of the R9 requirement description. Response: The SDT has incorporated the suggested language into the requirement. MOD-008 TRM Calculation Methodology R3, R4, R5 - Fourteen calendar days for providing TRM calculations and supporting data would be more reasonable. (Response for R3, R4) The team reviewed this requirement. Based on your comments and others the team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient. #3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. (Response for R5) Providing the TRM calculation to the TSP is considered by the team to be an important step. In the teams opinion this value should be sent to the TSP's and transmission planners as soon as it is prepared and adopted by the transmission operator. However "as soon as" is not an auditable requirement. The team did not want to require transmission of the value prior to adoption, so settled on a 7 day time frame as reasonable and practical from an evidence standpoint. MOD-030 Flowgate Methodology R2.1.1 - The current definition makes every facility a flowgate. Suggest changing the wording as follows, "Any facility within the Transmission Operator's area based on thermal, stability or voltage limits is eligible to become a flowgate." The requirements that follow (R2.1.2 and R2.1.3) would be sub-requirements of R2.1.1 that would be used to determine the subset of all transmission facilities described in R2.1.1 that become flowgates. Response: The Standards Drafting Team (SDT) has modified the language of this requirement to limit the scope. R2.1.2.1 - "This requirement is only applicable if the planning studies and operating studies use the same methodologies. If the planning studies use a TTC methodology then all transmission facilities may be contingencies. In AFC studies only the select flowgate definitions that contain contingency elements would be included.

Commenter	Other Comments
	Recommend removing this requirement." If this requirement remains suggest following wording, …Use Contingencies consistent with the Contingencies used in operations studies and planning studies for the applicable time", but not all contingencies used in studies need to be included in transfer analyses." Response: The SDT has modified this to require consistent consistency assumptions, rather than contingencies. The language also now includes the phrase "for the applicable time periods". R2.2 - Should be yearly instead of quarterly. Delete the word "definitions" from the sentence. Response: The SDT changed the requirement to annually for internal flowgates and monthly for external flowgates. The word "definitions" has been deleted from the sentence. R3.1 - Recommend that R3.1 be deleted since TFC may be derived from another source such as a flowgate parameter files. This is should be an acceptable practice since it is easier to maintain flowgate attributes/parameters in files included in the calculation process than in the load flow models. Response: R3.1 does not preclude you from using flowgate parameter files. R3.4 and R3.5 - Change Reliability Coordinator's area to Transmission Operator's area. Response: The SDT feels that requiring the model to contain the facilities in the RC area will be required for consistent, reliable calculation of AFC. The standard drafting team feels that it will not be burdensome to supply such data even for a small TOP within a large RC. The team has added a statement saying, "Equivalent representation of radial lines and facilities161kV or below is allowed." which should help with the modeling. R4.2 - What is the definition of an interface point? It is suggested that the words "the interface point with" should be clarified or revised from the language in bullet points 3,4,7 and 8 under R4.2. Response: The SDT has eliminated the use of the phrase interface point. R5.1 - Recommend rewording of R5.1 to address outage rules. Outage rules used in the standard to define the set of outages to include in monthly or daily calculations where multiple outage periods exist. An example would be that in monthly AFC calculations all outages for the month are not included. Only the set of outages that meet the outage rules (for example all EHV with a duration of greater than 7 days or all outages that occur on the 3rd Wed of the month, etc) The requirement should be reworded to say "all outages that meet the outage rules as specified in the ATCID". Response: R5 has been revised to provide additional flexibility, and entities are required to describe the rules for handling outages during the ATC process in their ATCID. R5.2 - Replace the existing wording and deleting word "any" with the following: "For external third party flowgates, PDF greater than 5% and passing coordination agreement study process, if applicable, use the AFC for each specific flowgate provided by that third party as the AFC for that flowgate, except where there is a mutually agreed temporary problem with that value." Response: The SDT does not believe specifying coordination agreement study processes is with the drafting teams' scope. R6.3 and R6.4 - The threshold values for calculating impacts should be consistent with the threshold values contained in MOD-028. Response: The drafting team has discussed the distribution factors extensively and set them to appropriate levels. R7.2 and R7.4 - The threshold values for calculating impacts should be consistent with the threshold values contained in MOD-028.

Commenter	Other Comments
	Response: The drafting team has discussed the distribution factors extensively and set them to appropriate levels. R8 - What is a "postback" as defined by NAESB? The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.
Response: Please see in-line responses.	
Progress Energy, Carolinas	
Public Service Commission of SC	None.
Public Utility District #2 of Grant County, Washington	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
Puget Sound Energy	MOD-001-1, A., 3. the stated Purpose contains noble goals which are not required for reliable system operation but for viable commercial activity. Reliable system operations are impacted by incorrect TTC values and uncoordinated transaction scheduling activities. Response: The Drafting Team has clarified in the stated purpose why these standards are required for reliable system operation as follows: To promote the consistent and reliable application and documentation of Available Transfer Capability (ATC) calculations for analysis and system operations. MOD-001-1, A., 4. applicability, the Transmission Service Provides calculate ATC. Transmission Operators (in the near term) and Transmission Planners (in the longer term) calculate TTC. Response: The SDT agrees that these are good descriptions of the roles entities play in determining ATC and TTC. The SDT does not believe the Transmission Planner should be a applicable entity in the standard, as they are dealing with long-term issues.

Commenter	Other Comments
	MOD-001-1, B., R1, Transmission Operators calculate transfer capability (TTC) of facilities within its TO area. Transmission Planners calculate transfer capability (TTC) of facilities within their TP areas. Transmission Service Providers calculate ATC for those paths that they are required to, choose to, or are asked to post. Response: It is unclear what change is being suggested. MOD-001-1, B., R2 is a good requirement, but for commercial reasons, not reliability reasons. Transmission customers need to have access to more "granular" ATC closer to real-time. Response: The SDT believe that calculation of ATC relates to the ability of the Transmission Service provider to understand expected energy flows on both its own system and those systems of other entities for future time periods. Accordingly, the same access to current data has reliability aspects as well as commercial aspects. Also, why were weekly ATC values not included? Response: The Drafting Team did not include weekly values because we do not believe they are necessary for reliability nor are they required by the pro-forma Tariff. MOD-001-1, B., R3 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability. This requirement to create a separate implementation document creates an undue burden on the industry - transmission customers will have two different documents to review, and transmission service providers will have two different documents to maintain. Response: The standard does not preclude entities from creating one document that meets both needs. MOD-001-1, B., R3 the term "Facility" is used several times in MOD-001-1. The NERC glossary says facility is "A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)". In R3.3 the requirement to list the Transmission Operators and Planning Coordinators for every facility under the TSP's tariff is burdensome and does not have value. Hundreds of facilities make-up even small systems. R3.3 should say "for each path for which the Transmission Service Provider calculates ATC, list the corresponding Transmission Operator and Transmission Planner and Reliability Coordinator". Response: The Drafting Team has modified the requirement to require a list of Transmission Operators from which the Transmission Service Provider receives data for use in ATC calculations instead of requiring this information for each facility. The Drafting Team could not identify a reason to include the Reliability Coordinator. MOD-001-1, B., R3.6 "Allocation methodologies" – it is not clear to what this means? Perhaps the following: "For

Commenter	Other Comments
	paths where multiple Transmission Service Providers share capacity or have rights, describe how the capacity is allocated among providers", or words to that effect. Response: The Drafting Team added detail to this requirement to address this concern. MOD-001-1, B., R4 is not needed, it is already covered in R3.2. If the drafting team wants to keep it, please move it MOD-028, MOD-029, and MOD-030. Since R4 leaves it open to each TSP's choice and requires them to document it, perhaps as a suggestion, the requirement could be to have the TSP do as they say they do in their Attachment C. The requirement might be rewritten to say "the TSP utilizes counter schedule information in their firm ATC calculations as specified in their Attachment C." Then, if the TSP fails to document or to do as they say they do, this could be a violation of the requirement. MOD-001-1, B., R5 is not needed, it is already covered in R3.2. If the drafting team wants to keep it, please move it MOD-028, MOD-029, and MOD-030. Since R4 leaves it open to each TSP's choice and requires them to document it, perhaps as a suggestion, the requirement could be to have the TSP do as they say they do in their Attachment C. The requirement might be rewritten to say "the TSP utilizes counter schedule information in their firm ATC calculations as specified in their Attachment C." Then, if the TSP fails to document or to do as they say they do, this could be a violation of the requirement. Response: The drafting team has modified the approach to counterflows in the standards based on the comments provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. MOD-001-1, B., R6 is not necessary. Revisions to Attachment C are to be filed and posted. Response: These are to be notifications to the entities to alert them to changes that may impact them. Filing and posting does not provide notification. MOD-001-1, B., R7 Attachment C is already required to be posted (available) for any entity to review, subject to CEII concerns. Response: This requirement is not in conflict with the requirement to post Attachment C. MOD-001-1, B., R8 does not read clearly. Perhaps the phrase "categories of data" could be used. As R8 reads now, it can be interpreted as requiring any restudy of TTC to include previously used data rather than data that is reflective of the conditions of the time period being studied. Perhaps the requirement was for data used in the determination of TTC should be the most accurate, up-to-date data available and should reflect the expected

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	conditions of the period of time under study. Response: The requirement says "assumptions", not "data". The Drafting Team has added examples of assumptions to the associated measure which should decrease the change of said misinterpretation. MOD-001-1, B., R9 is not a reliability concern. In addition, it is unduly burdensome. Current and accurate ATCs are a commercial concern. In addition, performing 168 hourly calculations every hour when neither TTC nor ETC has changed, benefits no one and is costly. The commercial requirement should be to require the recalculation of hourly ATC once a day and whenever either TTC or ETC changes for any period of time between this hour and the next 168 hours. Also, require the recalculation of daily ATC once a day for the next 30 days and whenever either TTC or ETC changes for any period of time between this hour and the next 31 days. Response: The SDT has modified the language to not require recalculations if the components in the ATC equation have not changed. However, the SDT does not agree this is only a commercial requirement. The amount of service sold is based on the amount of energy that can be transferred reliably, and these standards intend to ensure that number is as accurate as possible. MOD-001-1, B., R10, this requirement for data sharing between reliability entities is a good concept. However, as currently worded, all the burden to supply data is incorrectly placed totally upon the TSP and not on the Transmission Operator or Transmission Planner. Much of the data listed is critical for proper TTC calculation which the TSP may not have access to. The TSP calculates ATC based on upon TTC supplied by the Transmission Operator and/or Transmission Planner. Response: The Transmission Provider will be responsible for working with their Transmission Operators or Transmission Planners to secure the data. This requirement does not specify how the request is made or how the response or provision of data is dated. Response: The SDT believes this to be implementation details to be determined by the Transmission Service Provider and the requestor. NAESB may elect to define standards in this area. The corresponding measurement, M9, implies that all data items requested will be supplied within 14 days, but requirement states that the TSP will begin to make available at the 14 day mark. Response: M9 measures whether or not the "requested data items" were begun to be made available. By "begun," the standard means that the process of sending all the data was started, not that only some of the data requested was sent. In addition, change first sentence words "…days of a request of any Transmission…" to "…days of a request made by any Transmission…" to read more in-line with the intent. Response: The SDT has rewritten this requirement to be clearer.

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	Additionally, the requirement borders on a run-on sentence. Suggest moving the list of allowable requesters from R10 to be a sub-requirement R10.xx. The list of data is not all inclusive, there may other information needed. By each item, list what entity would have that data – TSPs would have ATC and ETC information, operators and planners would power flow data, etc. Response: The requirement has been rewritten to improve clarity. The Drafting Team could not identify any other information that would be needed for ATC calculation. It would be difficult to determine for all situations and company organizations who would have the listed data, and the value of identifying that couldn't be determined. The Transmission Service Provider is responsible for supplying the data. MOD-004-1, A., Capacity Benefit Margin is a use of the transmission system that is requested by a load serving entity. This standard contains requirements for the interactions between the LSE and the transmission provider. These requirements are largely commercial in nature and should be under NAESB development. Reliability standards concerning CBM should only require LSEs to acquire a minimum CBM to ensure service to load. Response: CBM is a margin used to ensure reliability. Not only requests for it, but the actual setting of it and its ultimate inclusion in the ATC calculation all have reliability impacts, and are appropriate for development in this standard. MOD-004-1, A., 6. Effective Date language is not but should be exactly the same for all six MOD draft standards. Response: The SDT has modified the language to ensure it is consistent, recognizing that the standards will now be posted for separate ballots. MOD-004-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's CBM methodology. This requirement to create a separate implementation document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and providers would have to maintain two different documents. Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. Note that the Attachment C may not be as detailed as the implementation documents, however. MOD-004-1, B., R2 is not necessary. Revisions to Attachment C are to be filed and posted (available) for any entity to review, subject to CEII concerns. Response: R2 is intended to ensure this information is provided to reliability entities for reliability purposes, regardless of what other information is required to be posted to meet FERC requirements. MOD-004-1, B., combine R3.3 language into R3.1. Response: The SDT does not understand the reason to combine these requirements. MOD-004-1, B., R3.2 it seems more reasonable for the requirement to read "LSE shall review any active CBM requests at least every six months and submit updates as required."

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	Response: The intent of this requirement is to avoid unintentional hoarding. CBM, by virtue of it being a margin, can remove significant amounts of ATC from the market. The Standard is requiring that entities update their CBM at least once a month to ensure that no unneeded CBM is still being held back from the market. The standard has been modified to clarify that incremental changes are allowed without entire re-calculation. MOD-004-1, B., R4 uses active verb "shall set….as follows:" but R4.1 says "Determine the amount of CBM…". To align the language a little better perhaps R4 should simply say "…the Transmission Service Provider shall:". In that way the TSP shall "determine" (R4.1), shall "set" (R4.2), shall "increase" (R4.3). Response: The drafting team believes the standard as now written is correct. MOD-004-1, B., R4.3 contemplates the case where there is insufficient capacity to meet all the CBM requests on a particular path, but there is no discussion on allocation of limited capacity to the requests. Is NAESB working on this aspect? If not, is it a TSP's discretion to develop a CBM allocation methodology? Response: Since CBM is a margin, and not a reservation, there is no need to allocate. The only time this would be required would be if multiple entities who requested CBM needed CBM at the same time, and at that time, their use would need to be pro-rata adjusted (possibly through TLR or other interconnection-wide congestion management procedures). Otherwise, available CBM might be withheld from use unintentionally. MOD-004-1, B., R8, R9, R10, M11, M12, M13 use of the terms "tag" or "Interchange Transaction Tag" which is inconsistent with NERC INT and NAESB CI BP standards where specific reference to "tag" or "e-Tag" has purposefully been avoided in those standards. The term Request For Interchange (RFI) refers to a collection of data as defined in the NAESB RFI Datasheet, to be submitted to the Interchange Authority for the purpose of implementing bilateral Interchange between a Source and Sink BA. Or the term Arranged Interchange refers to the state where the Interchange Authority has received the Interchange information (initial or revised) and has distributed that information for reliability assessment. I believe that in these requirements, Arranged Interchange is the more appropriate language. Response: The drafting team has modified the standard to use the term Arranged Interchange. MOD-004-1, B., R10 requires, without exception, that all submitted Arranged Interchange using CBM must be approved. This would force TSPs to potentially approve malformed transactions possibly citing incorrect contract arrangements, incorrect connectivity, etc. Perhaps the requirement could state the TSP shall approve all valid requests to schedule CBM. The drafting team might consider requiring the TSP or other approval entities to supply a meaningful reason for denying a CBM schedule. Response: We believe that in a capacity emergency, an import of the energy is more important that ensuring the details of assignment refs and the like are correct. Note that Balancing Authorities are not prohibited from denying the Arranged Interchange; this is dealing solely with the Transmission Service Provider.

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	MOD-008-1, B., R1 transmission service providers are already required by FERC to file and post Attachment C - Methodology To Assess Available Transfer Capability – which includes discussion of the provider's TRM methodology. This requirement to create a separate implementation document creates an undue burden on the industry. In addition, transmission customers will have two different documents to review and TSPs two different documents to maintain. Response: The standard does not preclude a Transmission Service Provide from using one document to meet both requirements. MOD-008-1, B., R1.1 suggest modifying to read: "For each path or flowgate that ATC or AFC is calculated, describe how each of the following components of uncertainty are used in calculating TRM for each of the ATC time horizons (if not applicable, indicate as such):" The words "ATC time horizons" could be used to eliminate the need for R1.4. Response: The drafting team intentionally avoided the use of the phrase "time horizons" in order to avoid confusion with NERC Compliance Time Horizons. MOD-008-1, B., R.3 what "request" is being referred to? Should it read "…seven calendar days of a request from:"? Or should "of a request" be removed as a typo? Response: The team reviewed this requirement. Based on your comments and others the team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient. #3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. MOD-008-1, B., it seems that R1, 2, and 5 could be merged together into a new R1 TRM calculation and documentation. R3 and 4 could merged together into a new R2 on TRM data sharing. Response: While we agree these items could be merged, we believe it is more appropriate at this time to keep them as separate requirements.

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	MOD-029-1 inclusion of the Rated System Path methodology is greatly needed and appreciated. The drafting team was wise in including it and should be thanked for their efforts. Response: Thank you for your supportive comment. MOD-029-1 suggest reordering R4 to be R1. Response: The SDT has reordered R3 and 4 to address this comment. MOD-029-1 R1 (modeling requirements) should include the statement that the data listed below should reflect the expected conditions for the applicable time period. Response: The drafting team agrees and has modified R1 to address your concerns. MOD-029-1 delete R2.7 as it, in its current form, does not provide the entire paradigm contained in the WECC's Procedures For Regional Planning Project Review And Rating Transmission Facilities. Response: The SDT believes this is covered in section 3 of the WECC PCC handbook. MOD-029-1 in R6, is the "non-firm capacity reserved for NITS" the same as Secondary Network Service (i.e., NN-6)? Response: It is the same as Secondary Service and the requirement has been revised to reflect that. MOD-029-1 in R7 & R8, what are "Postbacks"? This term is not used in the west. Response: This term came from Order 890; to the drafting team's knowledge, it has generally not been used in the East or ERCOT either. The SDT believes that postbacks are used in the West (e.g. release of unscheduled firm as non-firm ATC), but are not referred to in this fashion. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-029-1 in R5, R6, R7, & R8, calculation of ETC and ATC are commercial concerns and should be addressed in business practice standards NAESB and enforced through FERC's adoption of those business practice standards into the CFR. Response: The drafting team does not believe these are only commercial concerns. If calculated correctly, ATC should be a reasonable approximation of what flows are expected on the system at a given point in time. Ensuring that this number is accurate will help ensure that entities do not oversell their systems into overloads. MOD-029-1 in R8 the requirement says we are to use the same formula for all horizons – this is incorrect. For the real-time, same-day time frame, we release all unscheduled capacity as non-firm ATC. As such, the formula would read: ATCNF = TTC – Scheduled ETCF – Scheduled ETCNF – CBMS – TRMU + Counter-schedulesF + Counter-schedulesNF

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	Response: It is the SDT's understanding that NAESB will incorporate unscheduled capacity in postbacks. The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. Therefore, the requirement is correct as written. MOD-030-1 it is unreasonable for TSPs to convert AFC values into ATC values simply because FERC regulations fail to contain the term AFC. For large systems using this methodology, posting thousands of ATC values benefits no one if AFC values can give transmission customers a better picture of available capability of the transmission system. It is recommended that TSPs using MOD-030-1 post AFCs and provide customers tools to either convert AFC information to specific POR-POD ATCs or tools which indicate the feasibility of a transaction from POR to POD. Response: The SDT has modified the standard such that it does not require this conversion, but requires that if the conversion is done, it be done as described. Thank you for the opportunity to comment.
Response: Please see in-line responses.	
Salmon River Electric Cooperative	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). We believe at this time that this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response: Please see in-line responses.	
Salt River Project	SRP supports the WECC MIC MIS ATC Drafting Team and WestConnect responses to this questionnaire. The comments offered below represent additional comments that have not been addressed by the WECC or WestConnect comments but are noteworthy nevertheless. MOD-001 MOD-001-1 R1."Each Transmission Operator shall select one ATC methodology…" should be changed to "Each Transmission Service Provider shall select one ATC methodology…" to allow the entity that calculates ATC (R2) to choose the methodology. Response: The STD believes that the functional model indicates the choice is that of the Transmission Operator.

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	MOD-001-1 R2 FERC regulations in 18CFR37.6 require postings for the time periods in R2.1, R2.2 and R2.3 for only constrained paths and only for firm ATC. (1) Please explain the rationale for applying this regulation to unconstrained paths and to non-firm ATC for which FERC has different rules in place. (2) Also, please explain the rationale for calculating more frequently than data is required by FERC to be posted. (3) Consider removing R2 from the standard and instead referring to FERC regulations. Response: The drafting team believes that the calculation of both Firm and Non-Firm ATC supports NERC's reliability goals, and is allowed to be different from the CFR. The drafting team believes that these calculation time periods support NERC's reliability goals, and is allowed to be different from the CFR. Note that MOD-001 R2 does not address posting requirements; these will be addressed by NAESB. MOD-001-1 R2. If R2 remains, "Each Transmission Service Provider shall calculate ATC values for the time periods listed below…" should read "Each Transmission Service Provider shall calculate Firm ATC values for each constrained Posted Path for the time periods listed below…" Response: The drafting team disagrees that this should only apply to Firm calculations. MOD-001-1 R3.4 and R3.5 The term "transfer capability" is used in these two standards. As R3. describes the ATCID presumably the term used here means "Available Transfer Capability" and should be changed to this term for clarity. Response: The SDT uses the term "transfer capability" because we are referring to any of the three methodologies and their associated transfer capabilities (ATC and TTC). MOD-001-1 R4. and R5. While MOD-001-1 R4. directs the Transmission Service Provider to set the value of counterflows to zero for the calculation of firm ATC unless otherwise specified within the Transmission Service Provider's ATCID, no such similar standard exists to direct the Transmission Service Provider to set counterschedules to zero for the calculation of firm ATC under MOD-029-1. This presumed oversight points out the risk involved when having one standard require use of a variable while another standard sets the value of that variable. Another reason MOD-001 R4. and R5. should be moved from MOD-001-1 is that they do not fit into the Standard Drafting Team's explanation of the standard which is the following: "MOD-001 – Available Transfer Capability. An "umbrella" standard requires the selection of a methodology, the updating of values, and the sharing of procedures and data." SRP, therefore, recommends that: (1) MOD-001-1 R4. and R5. be moved into each of MOD-028, MOD-029, and MOD-030. (2) SRP also recommends that when R4 and R5 are moved into MOD-029 they be modified to use the same term used in MOD-029 R7 and R8. That is, MOD-029 R7 and R8 currently use the term Counter-Schedules and MOD-001-1 R4 and R5 currently use the term counterflows. These terms should be the same. Response: The drafting team has modified the approach to counterflows in the standards based on the comments

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	provided. R4 and R5 were removed because all entities were allowed to modify the default values in their ATCID and we were concerned that the use of the defaults could conflict with planning and operating studies. The Drafting Team modified the requirement for the ATCID in MOD-001 with respect to how the TSP handles counterflows more detailed and clarified that counterflows include counterschedules. MOD-001-1 R6. Perhaps instead of requiring e-mails it would be more efficient for the NERC Standards Drafting Team to request that NAESB develop a standard to require the ATCID, TRMID, and CBMID be posted on OASIS. Then R6 could be removed as a standard. Response: The intention of this requirement is to make the entity changing notify entities impacted by the change. While the SDT is not opposed to this information being posted on OASIS, this would not eliminate the need for R6. However, the specific reference to e-mail has been removed from the requirement, and instead included as an example in the measures. MOD-001-1 R9. (1) Please explain how "update ATC" is different from "Post ATC" and (2) If it is the same thing, please remove the standard and work with NAESB to develop such a standard. Response: By "update ATC," the drafting team meant that the value which the provider has calculated must be either recalculated or confirmed to not need recalculation. We have modified the language to require recalculation. This number is the number that is used internally by the TSP and shared with neighbors pursuant to MOD-001 R10. NAESB is drafting a standard related to the posting of this number for market consumption. MOD-001-1 R9. (1) Please explain the rationale for requiring the Transmission Service Provider to "update" ATC at minimum frequencies as this standard does not support the goals of consistency or transparency. Each unnecessary calculation is a chance for the calculation, no matter how automated it is, to miscalculate and lead to lack of consistency. (2) If R.9 is not removed, it should be reworded from "…shall update ATC at a minimum on the following frequency" to "shall review and update if necessary ATC at a minimum on the following frequency". The way this would be measured is there would be a violation if a variable changed and the ATC calculation was not updated within a certain time frame. Response: The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. MOD-001-1 R10. As currently worded the data items listed must be provided by any of the entities listed and anyone can ask for the data. R10 should be reworded from "Within 14 calendar days of a request of any Transmission Service Provider, Planning Coordinator…" to "Within fourteen calendar days of a request by any Transmission Service Provider, Planning Coordinator…" Response: This change has been incorporated in the rewrite of the requirement. Violation Severity Level for R9. (1) The level of complexity suggested in this violation severity level will be very difficult to track and police. It is impractical and should be greatly simplified to make it manageable. (2) The use of the phrase "not calculated" also makes the description difficult to understand if not incorrect. For example, the description in the Lower VSL column reads "For Hourly, not calculated within 5hrs … etc" Reading that literally if I

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	calculate Hourly 5 or more hours after the hour in question I have satisfied the criteria for the Lower VSL. This was obviously not the intent. A more appropriate wording for this description would be "For Hourly, calculated from 1 to 5 hours after the fact … etc" It is recommended that the description for all the levels of compliance for this requirement be changed replacing the phrase "not calculated" with "calculated" and changing the rest of the descriptions appropriately. Response: The SDT has modified the VSLs to incorporate the suggested concept. MOD-029 MOD-029-1 R1.12 The wording of this requirement does not match the form of those that precede it (i.e. R1.1 thru R1.11). It is a sub-requirement of the overall requirement R1. which stipulates that the TOP use a model to calculate TTC that "meets the following criteria:" The other sub-requirements stipulate that the model "includes" or "uses" or "models" certain items. R1.12 as written stipulates that the model "identifies" the percent fault damping used. This requirement would be more appropriately located in the requirement which stipulates what the study report must identify (R2.8) rather than what the model must identify. Response: The SDT has modified the requirement to incorporate the suggestion. MOD-029-1 Violation Severity Level for R1. This is a two part requirement for each of the four levels of severity. The first part is reasonable but the second part is not practical. To verify that the facility ratings used by the TOP in the model he used to calculate TTC are the same as those specified by the TO, the compliance person would have to manually compare the rating supplied with the rating used for hundreds even thousands of facilities in the model. Moreover, this would have to be done for every model used for every TTC established for every Posted Path. There may be many models representing several different years in the future. Even if you could overcome that hurdle and you found a few facility ratings that were wrong in a model, how would you verify that "…one of those Facility Ratings were used (or should have been used) to establish a TTC for one or more Posted Paths?" An erroneous facility rating is only important if it should have been the limiting factor but wasn't. You could only determine that if you corrected the erroneous facility rating in the model and rerun the study. Thus this test for compliance is very impractical and should be modified. In the WECC, facility rating coordination is done by sharing the model with the effected entities before running the study. Once the affected entities have reviewed the model and are satisfied that it models their system appropriately they give their ok to run the study. (1) The requirement should be changed to say that the TSP shared the model with affected entities for their review of facility ratings. (2) The measure would be that the TSP can demonstrate that each of the affected entities reviewed the model and are satisfied with it. (3) The vsl would be that the TSP was able to demonstrate that all but one or two etc of the affected entities reviewed the model and were satisfied with it. Response: The SDT agrees and has added a new R1.2. , M1.4 and modified the VSL for R1. to reflect the changes suggested in your comments. MOD-029-1 R7 Please explain the reliability reason for requiring Counter-SchedulesF in the formula for ATCF. Paragraph 212 of Order 890 reads in part, "(1) for firm ATC calculations, the transmission provider shall account only for firm commitments; and (2) for non-firm ATC calculations, the transmission provider shall account for both firm and non-firm commitments, postbacks of redirected services, unscheduled service, and counterflows."

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	Response: Since FERC did not require the use of counter-schedules in the firm calculation, we will not do so either. However, we have included the term such that a TSP can include counter-schedules if they desire. Note that the value is determined at the TSPs discretion. In addition the standards have been modified to allow for the use of zero for any of the elements of the algorithms. MOD-004 MOD-004-1 Violation Severity Level for R3 The Moderate and High VSL columns each have two subparts. The wording for the first subpart for each is identical. Thus if I don't comply with the first subpart it is unclear whether the level of non-compliance is Moderate or High. Response: This has been corrected so that lacking 1 item is Medium, lacking 2 or more is High. Also, the second subpart for the Moderate and High VSL columns are very similar in wording and are overlapping. If the GCID changed by more than 20MW but not more than 30MW the noncompliance falls into both the Moderate and the High VSL. Response: This has been corrected to eliminate the overlap. MOD-004-1 Violation Severity Level for R7 The phrase "did not provide" should be changed to "provided" in all four levels of severity because the way it is currently written an entity could provide the requested data within the required seven days and still be non-compliant. Response: The SDT has modified the VSLs to incorporate the suggested concept. MOD-008 MOD-008-1 Throughout MOD-008-01 including in the "Applicability" section the term "Transmission Operator" should be replaced with the term "Transmission Owner". In cases where a line is jointly owned, the Transmission Operator will calculate TTC of the facility, but each individual Transmission Owner will calculate their own TRM. It is not correct to say the Transmission Operator of the line tells the other line owners what their TRM will be. Response: The way entities are currently organized and the functional model do not always align due to the variety of organizational structures and the developmental state of the Functional Model and revising the functional model is beyond the scope of this team. There has been much discussion by the team on what part of the functional model is assigned to what requirements, and while the team would not claim to have found the perfect fit, we do believe we have found the best fit for the current model. Based on the model as currently written the team believes the Transmission Operator is the correct party. There is nothing in this requirement or the functional model that precludes the Transmission Operator from contracting with the Transmission Owners to provide the method, calculation, values and representation on this issue. MOD-008-1 Future Development Plan: Anticipated Actions #7 (first page of the standard) The phrase "Board Adopts MOD-001-1" should be changed to read "Board adoption" to be consistent with the other standards.

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	Response: The SDT has corrected this typographical error. MOD-008-1 Violation Severity Level for R3 "Moderate Level" should be reworded as follows: The Transmission Operator provided its TRMID to all but one entity specified in R3. OR provided its TRMID to all entities in 14 calendar days or more but less than 30 calendar days. MOD-008-1 Violation Severity Level for R3 "High VSL" should be reworded as follows: The Transmission Operator provided it's TRMID to all but two entities specified in R3. OR provided its TRMID to all entities in 30 calendar days or more but less than 60 calendar days. MOD-008-1 Violation Severity Level for R3 "Severe VSL" should be reworded as follows: The Transmission Operator did not provide the TRMID to any of the entities specified in R3 OR provided its TRMID to all entities in 30 calendar days or more but less than 60 calendar days. Response: All R3 VSL's were adjusted based on comments that drove a change in the requirement. The team believes this has addressed your concern, although not exactly in the manner suggested.. . AFFIRMATIVE COMMENTS: In addition to the affirmative comments provided in the WECC and the WestConnect comments SRP wishes to emphasize that it is very supportive of the drafting team's incorporation of the following attributes into the draft standards: Twelve Month Implementation Plan – The draft standards impose new requirements for the calculation of ATC and it's components that will require substantial effort and time in order to implement. It is envisioned that at a minimum twelve months will be required to make the changes necessary to conform to the new standards. MOD029 Modeled after WECC Path Rating Methodology – SRP congratulates the drafting team for giving full consideration of the WECC Path Rating Methodology when drafting the MOD029 Rated System Path Methodology Standard. The WECC methodology has been developed and refined over a number of years and has served the west well. We are happy that the key features have been retained in MOD029. The requirements in R2. and its sub-requirements are particularly important to us and we would be very disappointed if any of the features of these requirements are degraded as a result of the drafting teams response to industry comments. Response: Thank you for your supportive comments.
Response: Please see in-line responses.	
Santee Cooper	MOD001 R3.3 Make sure that the data retention requirements are not more stringent than the FERC Requirements. Also, be consistent with the data retention requirements instead of having some that say most recent calendar year plus current year and some say three calendar years. Response: NERC has its own data retention requirements, which are reflected in the standards. MOD004 Effective date should list the six standards consistent with all the other standard's effective date. Response: The SDT has modified the language to be consistent with the other standards, recognizing that the

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	standards will now be posted for separate ballots. MOD004 R6 need to be consistent with wording. It should either read "Within five business days" or "Within five calendar days". Response: The SDT has modified the standard to consistently refer to “calendar” days. MOD004 consider removing R8, R9, and R10 since these are related to Business Practices. Response: The SDT agrees these are related to business practices; however, also believe that the specific requirements are reliability oriented. In MOD029 consider adding some detail requirements related to the ATCID similar to details outlined in MOD028. Response: Much of this detail is intended to be included in the study reports, rather than the ATCID. Real-time Planning, Operations Planning, and Long-term Planning should be defined in the NERC Glossary. Response: We have definitions for these terms as they relate to the Compliance Time Horizons. However, in general, the SDT does not believe it is within their scope of work to define these terms as they pertain to the industry at large.
Response: Please see in-line responses.	
SERC ATCWG	MOD-001 Available Transfer Capability R3.1 - Is this requirement consistent with use of the terms "counter flow" and "counter reservation" in the rest of the Standard? Response: The drafting team believes that it is. R3.6 - What is the definition of "Allocation" of flow gate capabilities or paths Response: The Drafting Team added detail to this requirement to clarify what the intent is. R9: Is this consistent with communications protocols and NAESB Business Practices? In addition, it shouldn't be necessary to update a value that hasn't changed. Response: These requirements apply to the minimum calculation times; communication protocols and NAESB Business Practices deal with posting requirements for the calculated values. The Drafting Team has modified the standard so that recalculation is not required unless the calculated values identified in the ATC equation have changed. The other associated standards (MOD-004, 008, 028, 029 and 030) contain requirements for time based updates of the variables in the ATC equation. R10: Insert "its own data" in the first sentence, 3rd line as follows: ...Provider shall begin to make "its own data" available on the schedule specified... Response: The addition has been made as requested. Fourteen (14) days appears to be unreasonably burdensome to supply the significant amount of data contemplated - thirty (30) days would be a more reasonable time period we would support. Response: This change has been incorporated.

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	In addition, an entity should not be required to supply another entity's data that is used in their models. Response: The SDT has modified the standards to incorporate this requirement. R10.8 - This requirement needs clarification. Why isn't it covered by the rules of counterflow? If not, it should be explained why it isn't or removed from the standard. It seems to fall in and be a part of the TRM standard. Response: This data item is not covered by the rules of counterflow. It is related to how a TSP distributes the impact of a reservation on parallel paths. For entities that use this information, this ensures the data can be requested and exchanged. If this data is not utilized by a TSP then the bulleted item would not apply. R10.13 - In an AFC environment, there should not be a requirement to post CBM and TRM on a Posted Path. Response: The requirement has been changed to allow provision of CBM and TRM on a path or flowgate basis. R10-13 and R10.14 - It appears that R10.13 and R10.14 should be combined under one Requirement as sections "a" and "b". R10.13 applies to Rated system Path and R10.14 applies to AFC. There should also be a measure that applies to the top level. Response: The bullets have been reworded to clarify which data applies to which calculation method. MOD-004 Capacity Benefit Margin R2: The acronym "CBID" in the 2nd line of the first sentence should be "CBMID". Response: The SDT has corrected this typographical error. Entities should have a more reasonable time frame of fourteen (14) calendar days to make CBMID and any changes available to applicable parties Requirement 4: Response: R4.1.2.2 - Entities should have the option to use a lower threshold than 3%, if desired. Response: The SDT has added a clarifying footnote that entities are allowed to use thresholds lower that those specified if desired. R6 - Fourteen (14) calendar days for providing requested CBM information would be more reasonable. Response: the drafting team believes that five days is adequate. R7.1 and R7.2 - Fourteen calendar days for providing CBM supporting data would be more reasonable. Response: The drafting team has modified the standard to allow 30 days. R9: Add "within the bounds of reliable operation" to the end of the R9 requirement description. Response: The SDT has incorporated the suggested language into the requirement.

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	MOD-008 TRM Calculation Methodology R3, R4, R5 - Fourteen calendar days for providing TRM calculations and supporting data would be more reasonable. (Response for R3, R4) The team reviewed this requirement. Based on your comments and others the team made several changes that should address your concerns: #1: R4 on the TSP was removed, it did not make sense for the TSP to serve as aggregator for the Transmission Operators material and would be burdensome on some TSP to have to respond to requests for information that is not theirs. #2: R3 was modified to say make available instead of provide to better reflect the phrasing in other standards and to indicate that shipment of the material is not required, a posting such as a secure FTP site could be sufficient. #3: R3 was modified to require a response to the requestor with the material requested, not a blanket response to all parties listed. #4: R3 was modified to allow for 30 days instead of 7 days. While the material should be readily available, it is more common to allow 30 days for non critical information transmittal and this resolves the concern at some smaller entities over holidays and vacations. #5: Due to the elimination of R4, R3's list of possible requestors was expanded. (Response for R5) Providing the TRM calculation to the TSP is considered by the team to be an important step. In the teams opinion this value should be sent to the TSP's and transmission planners as soon as it is prepared and adopted by the transmission operator. However "as soon as" is not an auditable requirement. The team did not want to require transmission of the value prior to adoption, so settled on a 7 day time frame as reasonable and practical from an evidence standpoint. MOD-028 Area Interchange Methodology The existing wording for R3 (and R4) is very difficult to follow. Also, it appears that the drafting team intends that a peak and an off-peak TTC value will be calculated each day. Please consider using wording such as the following to add clarity: R3 - When calculating TTC values (for intra-day and next day) for Posted Paths, the Transmission Operator shall include the following data for the Transmission Service Provider's Area. The Transmission Operator shall also include comparable data associated with external Facilities that are explicitly represented in the Transmission model, as provided by adjacent Transmission Service Providers, and by any other Transmission Service Providers with which coordination agreements have been executed. The Transmission Operator shall include (at a minimum): R3.1. Expected generation and Transmission outages, additions, and retirements. R3.2. Load forecasts for the on-peak periods and the off-peak periods being calculated. At a minimum, a peak value and an off-peak value shall be calculated for each day. R3.3. Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run, (within or out of economic dispatch) as they are expected to run.

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	R4 - Wording similar to R3 can be used in R4 (as shown below). Alternately, R4 could simply be combined into R3 by changing "(for intra-day and next day)" in the first sentence to "(for intra-day through Month 13.)" R4. When calculating TTC values (for time periods beyond next day) for Posted Paths, the Transmission Operator shall include the following data for the Transmission Service Provider's Area. The Transmission Operator shall also include comparable data associated with external Facilities that are explicitly represented in the Transmission model, as provided by adjacent Transmission Service Providers, and by any other Transmission Service Providers with which coordination agreements have been executed. The Transmission Operator shall include (at a minimum): R4.1. Expected generation and Transmission outages, additions, and retirements. R4.2. Peak Load forecasts for the periods being calculated. R4.3. Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run, (within or out of economic dispatch) as they are expected to run. Response: The drafting team incorporated your suggestions based on the language above for R3 and R4. R5.3 - What is the definition of an interface point? This would require artificially modeling a generator as a source or sink. It is suggested that the words "the interface point with" should be deleted from the language in bullet points 3,4,7 and 8 under R5.3. Response: We have eliminated the use of the phrase interface point. R11 and R12 - What is a "postback" as defined by NAESB? Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks. MOD-030 Flowgate Methodology R2.1.1 - The current definition makes every facility a flowgate. Suggest changing the wording as follows, "Any facility within the Transmission Operator's area based on thermal, stability or voltage limits is eligible to become a flowgate." The requirements that follow (R2.1.2 and R2.1.3) would be sub-requirements of R2.1.1 that would be used to determine the subset of all transmission facilities described in R2.1.1 that become flowgates. Response: The Standards Drafting Team (SDT) has modified the language of this requirement to limit the scope. R2.1.2.1 - This requirement is only applicable if the planning studies and operating studies use the same methodologies. If the planning studies use a TTC methodology then all transmission facilities may be contingencies. In AFC studies only the select flowgate definitions that contain contingency elements would be included. Recommend removing this requirement. Response: The SDT has modified this to require consistent consistency assumptions, rather than contingencies. The

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	language also now includes the phrase “for the applicable time periods”. R2.2 - Should be yearly instead of quarterly. Delete the word "definitions" from the sentence. Response: The SDT changed the requirement to annually for internal flowgates and monthly for external flowgates. The word "definitions" has been deleted from the sentence. R3.1 - Recommend that R3.1 be deleted since TFC may be derived from another source such as a subsystem file. This is a common industry practice since it is easier to maintain flowgate attributes in external subsystem files than in the load flow models. Response: R3.1 does not preclude you from using flowgate parameter files. R3.4 and R3.5 - Change Reliability Coordinator's area to Transmission Operator's area. Response: The SDT feels that requiring the model to contain the facilities in the RC area will be required for consistent, reliable calculation of AFC. The standard drafting team feels that it will not be burdensome to supply such data even for a small TOP within a large RC. The team has added a statement saying, “Equivalent representation of radial lines and facilities161kV or below is allowed.” which should help with the modeling. R4.2 - What is the definition of an interface point? This would require artificially modeling a generator as a source or sink. It is suggested that the words "the interface point with" should be deleted from the language in bullet points 3,4,7 and 8 under R4.2. Response: The SDT has eliminated the use of the phrase interface point. R5.1 - Recommend rewording of R5.1 to address outage rules. Outage rules are used in to define the set of outages to include in monthly or daily calculations where multiple outage periods exist. An example would be that in monthly AFC calculations all outages for the month are not included. Only the set of outages that meet the outage rules (i.e. all EHV with a duration of greater than 7 days or all outages that occur on the 3rd Wed of the month, etc) The requirement should be reworded to say "all outages that meet the outage rules as specified in the ATCID". Response: R5 has been revised to provide additional flexibility, and entities are required to describe the rules for handling outages during the ATC process in their ATCID. R5.2 - Replace the existing wording with the following: "For external third party flowgates and PDF greater than 5%, Use the AFC for each specific flowgate provided by that third party as the AFC for that flowgate." Response: The flowgates to be considered are those that meet the criteria in R2.1; it is not necessary to specify a

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	threshold criterion in this requirement. R6.3 and R6.4 - The threshold values for calculating impacts should be consistent with the threshold values contained in MOD-028. Response: The drafting team has discussed the distribution factors extensively and set them to appropriate levels. R7.2 and R7.4 - The threshold values for calculating impacts should be consistent with the threshold values contained in MOD-028. Response: The drafting team has discussed the distribution factors extensively and set them to appropriate levels. R8 - What is a "postback" as defined by NAESB? Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.
Response: Please see in-line responses.	
Sierra Pacific Resources Transmission	In MOD-001, not one Requirement should have a VRF other than Lower. Certainly for the Rated System Path Methodology, not calculating ATC means not posting ATC, means not selling Transmission, means not allowing any flow. No flow is less reliable (i.e., greater risk?) than some flow? No. While it is certainly important to have transparency in the ATC methodology, including ATC/TTC calculations, a VRF of Medium is excessive. Having an incorrect ATC value 13 months in the future is in no way materially affecting reliability. Response: The SDT does not agree. Not posting ATC may result in no reliability concern, but this standard does not address posting of ATC. Rather it addresses calculating of ATC. Not calculating ATC means not knowing what has been sold, which means not knowing what may be scheduled, which means not knowing what may be flowing, which means not knowing whether you should expect an SOL or IROL in the future, which means not knowing whether or not additional sales would cause an SOL or IROL. While these standards are not about the actual selling of transmission, they are about ensuring the data used to make the decision of whether or not to sell is accurate, is consistently derived, and includes consideration of activities beyond the Transmission provider's border. As such, the STD believes that in several cases, a VRF of medium is justified. GENERAL 1) The SPR companies support retention of the three methods recognizing the differences between the Rated System Path (MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028). 2) The SPR companies strongly support the retention of the proposed one-year implementation period. 3) The SPR companies support allowing NAESB to address all "posting" issues as they directly affect OASIS and any reference to postings should be removed. MOD-001 Umbrella 1) The SPR companies support allowing the use of more than one methodology for calculation of ATC by any one entity. For example, the SPR companies support allowing any entity to use the Flowgate methodology inside their

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	affected area while also using the Rated System Path methodology at its boundaries. 2) The SPR companies support allowing each entity to specify in its ATCID how it will treat counterflows / schedules. (R4., R5.) within the methodology each entity chooses. This will allow the entity to use counter schedules instead of counterflows where applicable. 3) The SPR companies support the aggregation of transmission capacity for grandfathered contracts when shared with neighboring requestors. 4) The SPR companies support the specifically limited universe of entities to which data sharing is required as prescribed in R10. 5) The SPR companies support those comments submitted by SERC specifying suggested changes to the VRFs. However, this Team makes no comment on the VRFs as they affect MOD-28. MOD-029 RATED SYSTEM PATH TTC, ETC & ATC 1) The SPR companies support retention of the requirement(s) in R2.2 that accommodate paths which are "flow limited" by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing practices without re-inventing the wheel where no such effort is required to meet FERC's goals of transparency and consistency. 2) The SPR companies support retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. 3) The SPR companies support retention of the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. 4) The SPR companies support retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts, associated litigation and potential renegotiation of associated operational agreements while supporting FERC's mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required. 5) The SPR companies support the adoption of a definition for counterflow to clarify its application in each equation." MOD-004 CBM 1) The SPR companies support the concept of allowing the LSE to decide how much CBM it needs to satisfy its resource adequacy requirements and the TSP determining how the total CBM requirement for all requesting LSE's is

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	allocated among paths. This is the proper division of labor. 2) The SPR companies support allowing the LSE scheduling rights to the CBM after declaration of an EEA2 or higher condition. Response: Thank you for your supportive comments.
Response: Please see in-line responses.	
Snohomish PUD	1) We support the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) MOD-030-1 R10 states that the TSP shall convert Flowgate AFCs to ATC for Posted Paths. Snohomish, as a major BPA customer, has a concern that if AFCs must be converted to ATCs for any possible constrained POR/POD combination then conducting with our transmission provider will become very difficult. This would not have the effect that the Commission wanted as far as transparency. The explosion of data from ten flow gates to thousands of POR/PODs on the OASIS site will make it difficult to do business. BPA already provides its' customers with an easy to use tools to calculated the impact a request has on a flow gate. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response:	
The Southeast Coalition	Please see below. ATCID, TRMID, and CBMID Documentation: Transmission Service Providers should make their ATCID, TRMID, and CBMID documentation publicly available as soon as these documents are ready but no later than 60 days before implementation. This is a very important issue for market participants who need to be aware of the TSP changes with enough lead time so that they can adjust their business processes accordingly. For those regions which have not had CBM in the past but TSPs decide to set aside transmission capacity for this purpose, according to the Standard, the CBMID should be posted 90 days before implementation to allow for consultation with NERC and a meaningful vetting of issues. Response: NAESB will be addressing the posting of information to market participants. Stakeholders Participation: Stakeholders' participation in the development and continued improvement of ATC standards and associated implementation is a key element to achieve success. NERC itself recognized the benefit and significance of the stakeholder process in the development of reliability standards. Order 693 at Cite 183. Thus, establishing forums and processes for stakeholders' on-going participation at NERC and regional levels is a MUST. These stakeholder processes are required to vet issues and gain support for the initial approval of the ATC standard and on-going changes to it. NERC should clearly set out and document the processes by which comments and suggestion of stakeholders will be gathered, evaluated, and incorporated in the Standard.

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	Response: NERC utilizes an ANSI-accredited process to ensure stakeholder participation, and encourages participation in any of its standards development efforts. Distribution Factor Cut-Off: MOD-030 (R10). Requirement 10 of MOD-030 establishes the mathematical equation to convert AFC values to ATC values and sets the distribution factor cut-off to 3% for ATC calculations. The following statement is included in requirement 10 of MOD-030: "a flowgate is impacted by a path if the Distribution Factor for that path is greater than 3%". Although most TSPs currently use a 3% distribution factor cut-off, there is no need to "hard-code" a value in the Standard and, by doing so, take away the flexibility of selecting a more appropriate value which could be set on a per flowgate basis. Furthermore, the TLR process uses a 5% distribution factor cut-off for transmission service curtailments which raises a potential conflict with the 3% cut-off value proposed for ATC calculation purposes. NERC should address the difference between distribution factor cut-off values for ATC calculations and the TLR process to ensure that this difference does not create undue discrimination. Additionally, a minimum value of 3% for distribution factor cut-off could be included in the ATC standard provided TSPs are given flexibility to use a higher cut-off value which could be set on a per flowgate basis. Further, consistent with the transparency requirement of Order 890, TSPs should be required to provide justification for the distribution factor cut-off value(s) used in their ATC calculations. Response: All of the cutoffs have been examined by the standard drafting team and have been set to appropriate levels. Some flexibility has been added to the cutoffs. Requiring justification of cutoff levels did not seem appropriate because it would be challenging to evaluate the validity of such a study. ETC Calculation and Base Case Contingency Overloads: MOD-030 (R6). Requirement 6 of MOD-030 attempts to define calculation of ETC based on flowgate impacts of various transmission service and load components. However, the ETC calculation as defined in requirement 6 is loose and unclear. More importantly, this requirement - as currently stated in the Standard – does not ensure that TSPs do not overstate flowgate capacity set aside for ETC purposes. FERC, in Order 890 Cite 243 & 244, has directed NERC to define ETC in a transparent and consistent manner to reduce the potential for undue discrimination. The following is an extract of Order 890 Cite 243: "To achieve greater consistency in ETC calculations and further reduce the potential for undue discrimination, the Commission adopts the NOPR proposal and directs public utilities, working through NERC and NAESB, to develop a consistent approach for determining the amount of transfer capability a transmission provider may set aside for its native load and other committed uses". In some regions, overstatement of ETC leads to the appearance of "Base Case Contingency Overloads" (BCOs) which effectively means that the ETC impact on certain OTDF flowgates is greater than the flowgates capacity and thus, these flowgates are overloaded in the ATC power flow models. BCOs can be expressed by the following relationship: BCO on a flowgate = ETC impact on the flowgate > Flowgate TFC BCOs can occur in any of the ATC calculation time frames and may be spread over an entire region or be localized. In some TSP areas, BCOs have become a chronic situation and are mainly due to modeling flaws in the calculation of ETC. This causes serious problems for customers trying to get access to the transmission system. One of the main causes of chronic BCOs is the dispatch model which does not take into account transmission limitations and thus, yields unrealistic results. Requirement 6 of MOD-030 does not address the dispatch model in enough detail to prevent unrealistic ETC results

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	nor includes sanity checks to validate ETC calculations. Furthermore, TSPs are not required to show that the dispatch model in their ATC calculations is feasible and resembles actual system operation. Thus, it is our opinion that the ATC standard has not fully met the ETC calculation requirement established in Order 890 at Cite 243 & 244. We believe that, in the calculation of ETC, all resources should be dispatched in a feasible and realistic manner such that transmission limitations are respected to the extent possible. The ATC standard should include clear & detailed guidelines for dispatching generating resources so that accurate and realistic models are used in ATC calculations which in turn should yield realistic ETC values. Response: In MOD-030, the SDT has required the use of dispatch modeling information to determine these impacts, and based on other industry comments, have clarified that the processes used should be contained in the ATCID (pursuant to R3.1). The SDT believes this should help address some of the concerns you describe. With regard to BCOs, we believe this concern should be pursued through NERC Compliance, as this would seem to be either a violation of TPL-001 or it will become a violation of MOD-001 R8. As required in Order 890 Cite 290 & 291, TSPs must be required to benchmark ETC calculations against real-time flows to ensure that these values are not being overstated. This will go a long way in reducing the potential for undue discrimination. Furthermore, TSPs should be required to identify and report, on a periodic basis, all BCOs over 5% and chronic BCOs to NERC for further investigation and action. Response: This will be addressed in NERC's future work on these and other standards. Monthly ATC Values: MOD-001 (R2.3). Requirement 2.3 of MOD-001 states that TSPs shall calculate monthly ATC values at least for the current month plus the next 12 months. This requirement should clarify that TSPs currently calculating and posting monthly ATC values for a longer time period should continue doing so. For example, some TSPs have been posting monthly ATC values for 18 months which is useful in providing information to the market and enabling new business. The requirement should be drafted to encourage such TSPs to continue their existing posting practices rather than falling back to the minimum requirement. Response: Entities are free to post more data than is required by the standard. Outages and Monthly ATC Values: The Standard does not address in enough detail the modeling of transmission and generation outages in the monthly models used for monthly ATC/AFC calculation. Currently, there are no consistent practices in the industry for including or excluding outages of short duration, i.e. a few hours or days, in the monthly ATC calculations. Consistent with the Order 890 goals of accuracy and transparency, NERC should set clear guidelines on the duration and type of outages to be included in the calculation of monthly ATCs so that this process is transparent and consistent across the various regions. Response: The Drafting Team has incorporated requirements in MOD-001 for the TSP to describe in their ATCID how/when outage criteria such as duration impacts ATC calculations. Dispatch Model and Must Run Units: The Standard has little detail and, practically, no guidelines on the dispatch model used in ATC/AFC calculations,

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	except for the following statement included throughout the Standard: "Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run as they are expected to run". This is a high level statement that needs to be developed into clear and measurable requirements to ensure consistency and fairness in ATC calculations. The dispatch model is the most important single factor in the determination of ATC values and, in particular, the modeling of Must Run Units, which is a critical issue. Consistent with the transparency requirement of Order 890, the generation dispatch model used in ATC calculations must be transparent and this issue must be addressed by the Standard. To reduce both the potential for undue discrimination and the number of "phantom congestion" incidents, and to improve accuracy of ATC calculations, NERC must develop detailed requirements for the dispatch model used in ATC calculations and establish measurements to evaluate compliance with the requirements. These requirements should be focused on the development and use of dispatch models that are realistic and consistent with well-established operational practices. To ensure that the model resembles actual system operation, the dispatch model should be benchmarked against real-time dispatch and consistency checks should be performed across the various ATC time frames Response: The SDT believes this to be outside the scope of the ATC standards. The SDT encourages you to submit a SAR, requesting a new standard be written to deal with modeling of dispatch.
Response: Please see in-line responses.	
Southern Company Transmission	MOD-001 Comments: R10. The language "any Transmission Service Provider, Planning Coordinator, Reliability Coordinator, or Transmission Operator, each Transmission Service Provider shall begin to make available on the schedule specified by the requester (but no more frequently than once per hour" is too broad. "Any" provider, operator, etc. does not have reliability need for this information on an hourly basis. Much of the information does not change on an hourly basis. Please consider rewording as follows. Proposed wording: any Transmission Service Provider, Planning Coordinator, Reliability Coordinator, or Transmission Operator having a reliability need, each Transmission Service Provider shall begin to make available on a schedule mutually agreed to by the requester and the provider. Response: NERC cannot easily create any measures or compliance around the concept of "mutual agreement;" it becomes difficult to assign responsibility. Similarly, determination of "reliability need" is problematic. It is the belief of the drafting team that the language has been crafted in such a way that such compliance would not be difficult (i.e., since the requirement is to make available instead of provide, all this information could simply be posted on a secure website and downloaded by the requester once an hour). MOD-028 Comments: R3. The existing wording for R3 (and R4) is very difficult to follow. Also, it appears that the drafting team intends that a peak and an off-peak TTC value will be calculated each day. Please consider using wording such as the following to add clarity. Proposed wording: R3. When calculating TTC values (for intra-day and next day) for Posted Paths, the Transmission Operator shall include the following data for the Transmission Service Provider's Area. The Transmission Operator shall also include comparable data associated with external Facilities that are explicitly represented in the Transmission model, as provided by adjacent Transmission Service Providers, and by any other Transmission Service

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	Providers with which coordination agreements have been executed. The Transmission Operator shall include (at a minimum): R3.1. Expected generation and Transmission outages, additions, and retirements. R3.2. Load forecasts for the on-peak periods and the off-peak periods being calculated. At a minimum, a peak value and an off-peak value shall be calculated for each day. R3.3. Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run, (within or out of economic dispatch) as they are expected to run. R4. Wording similar to R3 can be used in R4 (as shown below). Alternately, R4 could simply be combined into R3 by changing "(for intra-day and next day)" in the first sentence to "(for intra-day through Month 13.)" Proposed wording: R4. When calculating TTC values (for time periods beyond next day) for Posted Paths, the Transmission Operator shall include the following data for the Transmission Service Provider's Area. The Transmission Operator shall also include comparable data associated with external Facilities that are explicitly represented in the Transmission model, as provided by adjacent Transmission Service Providers, and by any other Transmission Service Providers with which coordination agreements have been executed. The Transmission Operator shall include (at a minimum): R4.1. Expected generation and Transmission outages, additions, and retirements. R4.2. Peak Load forecasts for the periods being calculated. R4.3. Unit commitment and dispatch order, to include all designated network resources and other resources that are committed or have the legal obligation to run, (within or out of economic dispatch) as they are expected to run. Response: The drafting team incorporated your suggestions based on the language above for R3 and R4. R5.3. R5 appears to apply to all TTC calculations, however R5.3 appears to be specific to monthly analysis; "the expected schedules using monthly or longer firm Transmission service". Please consider using the same wording as used in MOD-30 R4. Proposed wording: When calculating TTCs for Posted Paths, the Transmission Service Provider shall Use assumptions consistent with the assumptions used in operations studies and planning studies for the applicable time periods, including: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning] R5.1. Use all Contingencies meeting the criteria described in its ATCID. R5.2. Respect any contractual allocations of TTC. R5.3. Modeling the impact of point-to-point reservations as follows: Response: The restriction to consider only monthly or longer reservations has been removed. Also, the term "interface point" is used several times both in MOD-28 and MOD-30. Please consider a more appropriate term such as balancing area. Response: The SDT has modified the standard to be more explicit. Additional flexibility has also been provided with

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	regard to source/sink modeling. R6.1. For Daily TTCs, it has been common practice to use the Monthly TTC value up until a few days prior to when the Daily service commences. This is done because weather and outage information is not substantially more accurate 7 days out than it is 30 days out. Day specific calculations are then performed several times during the current week as weather and outage information becomes more clear. Please consider the following wording. Proposed wording: R6.1. At least once in the calendar week prior to the specified period for TTCs used in hourly, and daily ATC calculations. Response: The standard has been modified with your suggested wording. R7. The wording in R7 appears to describe transfers involving single balancing area. Also, the wording does not mention contingency analysis. Please consider the following wording. Proposed wording: Determine the first contingency incremental Transfer Capability for each Posted Path by increasing generation and/or decreasing load within the source Balancing Authority area(s) and decreasing generation and/or increasing load within the sink Balancing Authority area(s) until either: Response: The drafting team believes reaching (respecting) SOL's incorporates contingencies into the process. The wording in b) is confusing. This also might fit better as another bullet under a). Please consider rewording b) and adding it as a bullet under a). Response: R7 has been rewritten to clarify the intent of the drafting team. The language in c) "sum the incremental Transfer Capability and all impacts of Firm Transmission Service that were included in the study model" requires some clarification. It would be helpful to clarify that it may not be appropriate to represent TTC as a simple sum of FCITC and net base transfers. If base transfers are in the same direction as the TTC being calculated, (i.e. base imports modeled when calculating import TTC), a simple summation is appropriate (TTCimport= FCITC + base imports). However, if base transfers are in the opposite direction to the TTC being calculated (i.e. base exports when calculating import TTC), a simple summation is not appropriate (TTCimport= FCITC - base exports is not accurate). The reason is that the counterflow effect of the base transfer usually does not correspond to a 1:1 increase in FCITC, and hence, summing a "negative" base transfer may significantly understate or overstate the TTC. The drafting team appears to have decided to address counterflow impacts in the calculation of ATC in R11 and R12. This approach will work if coordinated with the treatment of base flows in R7c&d. Please consider adding language such as the following. Proposed wording: "Base transfers in the same direction as a TTC path shall be summed with the Incremental Transfer Capability to determine TTC. Base transfers in the opposite direction of a TTC path (i.e. net base exports when calculating import TTC and net base imports when calculating export TTC), which create counterflow effects that cannot generally be reconciled by a simple summation, shall be addressed in the calculation of TTC/ATC as described in the Transmission Operator's ATCID document." Response: The Drafting Team has clarified the language as follows: "-The sum of the incremental Transfer Capability and the impacts of Firm Transmission Services, as described in the Transmission Service Provider's ATCID, that were included in the study model, or." R9. Need to add Conditional Firm Service to the ETCF equation.

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	Response: The Drafting Team believes that conditional firm would be included with Firm service. GFF needs to have the phase "reserved on posted Paths" added similar to NITSF. Response: The Drafting Team modify the language as follows: "GFF is the firm capacity set aside for Grandfathered Transmission Service and bundled contracts for energy and Transmission, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "Safe Harbor Tariff" accepted by FERC on ATC Paths that serve as interfaces with other Balancing Authorities." R10. GFNF needs to have the phrase "reserved on posted Paths" added similar to NITSNF. Response: The Drafting Team modify the language as follows: "GFNF is the non-firm capacity set aside for Grandfathered Transmission Service and bundled contracts for energy and Transmission, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "Safe Harbor Tariff" accepted by FERC on ATC Paths that serve as interfaces with other Balancing Authorities." R11. To the extent base transfers provide counterflow impacts, these are already embedded in the TTC values. Is the "CounterflowsF" component of the equation intended to adjust the impact of counterflows resulting from the base transfers, or is it intended to account for counterflow impacts related to new transmission service commitments made prior to new models and transfer capabilities being developed? Please add clarification. Response: It is not the intent of the Drafting Team to include those counterflows already considered within the TTC calculation, but those not included in the TTC consistent with the transmission provider's ATCID. R12. Same comments as R11. Response: It is not the intent of the Drafting Team to include those counterflows already considered within the TTC calculation, but those not included in the TTC consistent with the transmission provider's ATCID. Also, please consider using the term TRMNf instead of TRMu. Response: We have added an parenthetical to indicated that the "U" stands for "Unreleased" CBM should not be in the ATCNf equation as this will result in double counting. CBM is a reservation of TTC which prevents it from being sold on a firm basis. This capacity is sold on a non-firm basis. When an LSE needs to utilize the capacity it reserved as CBM to address a capacity shortfall, the LSE submits a transmission service request providing the specific source and sink information and referencing the need to access CBM capacity. To the extent the CBM capacity had been sold non-firm, those non-firm schedules would be curtailed to enable the LSE's to schedule its firm usage of CBM. This TSR or the subsequent schedule would be reflected in the ETCf value. double count example) ATCnf = TTC - ETCf (includes 100 sched) -CBMs (100). Please consider this definition change. Proposed wording: ETCf is the sum of existing firm Transmission commitments for the Posted Path during that period, which will include any transactions scheduled utilizing CBM capacity,

Commenter	Other Comments
	Response: We have clarified the definition of CBMs to state: "CBMs is the Capacity Benefit Margin for the ATC Path that has been scheduled without a separate reservation during that period" Please consider this definition for postbacks. Proposed wording: PostbacksNF are increases to ATC values resulting from transmission service being redirected by customers to other paths or from transmission service not being scheduled by customers during that period, as defined in Business Practices Response: The SDT has clarified the term post back by incorporating the following definition: "Postbacks are positive adjustments to ATC or AFC as defined in Business Practices. Such Business Practices may include processing of redirects and unscheduled service." Note that NAESB will be defining specifically what values should be considered when determining Postbacks.MOD-30 Comments R2.1.1. This does not appear to be a criteria. Response: The Standard Drafting Team (SDT) agrees. This requirement has been changed to reflect a more reasonable scope. R2.1.2. This language is confusing regarding first three limiting elements. Also, planning and operating contingencies may include all elements, circumventing the concept of using representative flowgates. Please add clarification of what is intended. Response: The language has been modified to be clearer. R2.1.3 Any limiting element interconnection wide-seems overly broad. Should this be limited to those in which the TSPs area had some minimum impact? The SDT agrees. We added the phrase, "within the last 12 months" to this requirement to limit the scope. R2.3. Since SOL is associated with contingency loading, the TFC is associated with the thermal ratings of the facility, not necessarily the SOL of the flowgate. Please see suggested TFC definition. Response: Flowgates usually have contingencies also, the associated TFC would be the SOL value. R3 This section describes modeling requirements. It does not include provisions for outages, load forecasts, etc. R5 discusses outages when calculating AFCs. Is this intended to be done by inclusion in the modeling? If so, should this be moved into R3? Similarly, R6 discusses peak load forecasts when determining the impact to ETC. Is this intended to be included in the modeling. If so, should this be moved into R3? Response: R3 discusses where the TSP obtains the model from and how often. R5 discusses using the models and other data to calculate AFCs. R9. See comments related to CBM in R12 of Mod 28. Response: See response related to CBM in R12 of Mod 28. R10. This language is confusing. Also, although "P" is defined, it is not used in the equation. Please consider adding some simple language such as the following. Proposed wording: "TTC is determined by dividing the most limiting flowgate capacity associated with a posted path by the path's distribution factor for that flowgate." Response: The equation has been updated to use the defined "P". With this correction, the SDT believes the

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	language as written is clear.
Response: Please see in-line responses.	
SPP	MOD-001-1 R1 1.Is it correct that R1 assumes that all the Transmission Operators within the Tariff footprint of a Transmission Providers shall agree upon the applicable ATC Methodology for the Tariff footprint and the TSP shall base the ATC Calculations and the ATCID document on the selected ATC methodology or methodologies. Meaning R1 and R2 are related. Response: It is correct that 1 and 2 are related, but it is not correct to assume that the Transmission Operators "will agree," although if they do so, it will result in a significantly easier implementation. 2.Is it correct R1 assumes that a TSP can only have one methodology for the time frame specified in R2.1. Same for R2.2 and R2.3. They can be different for R2.1 and R2.2 or R2.3. Response: R1 was not intended to be that restrictive. It has been reworded to clarify that one method must be used consistently for each path for each timeframe, but not for all paths for each timeframe. 3.The MOD-001-1 responsibilities of Transmission Operator are not fully clear. Is MOD-001-1 assuming that a Transmission Operator can calculate ATC based on his selected ATC Methodology for his Operator Area independent from TSP for purpose of evaluating some of his internal Service Requests and that TSP can have a different Methodology for the Tariff footprint that includes Operator Area of TOP. Meaning no relation between R1 and R2, TOP and TSP can have different methodologies for ATC Calculations. Response: The SDT has clarified the standard to be clearer as follows: R2.Each Transmission Service Provider shall calculate ATC values for the time periods listed below using the ATC methodology or methodologies selected by their Transmission Operators. R8 1.Is MOD -001-1 assuming that somehow the Transmission Operator is calculating TTC, AFC or ATC or any other data that will be used for purpose of evaluating Service Requests. Response: It assumes that the Transmission Operator is determining TTC, as described in the individual methodology standards. 2. What is the list of assumptions that are referred to in R8. Response: The Drafting Team could not develop a comprehensive, exclusive list of assumptions, but has added a partial list of examples in the measure, M6. R10.13 1.If a TSP uses flow gate Methodology (MOD-030-1) what ETC need to be posted, the ETC on flow gate basis as specified in R7 MOD-030-1 or a ETC on path basis converted from ETC flow gate basis to ETC path basis using

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	conversion specified in R9 MOD-030-1. Response: These standards do not address posting requirements. 2.Is it a correct assumption that ATC, ETC and TTC posted for a path can be values from 3 different constraints, so the numbers itself don't add up. Is this in line with what FERC had in mind when requesting posting of TTC, ATC and ETC. Response: While it is possible that these numbers may not line up completely in all methodologies (i.e., Flowgate methodology due to ETC being determined on a Flowgate basis vs. ATC and TTC on a path basis), we don not believe this to be problematic. Note that these standards to not address posting requirements. 3.There are "rumors" that Scenario Analyzer is not considered being compliant by FERC with R10.3 standards . Are you aware of any additional NERC or NAESB requirements that describe what is considered being compliant with R10.13, posting ATC, ETC, TTC. Not the "what" requirement but the "how" requirement. Response: These standards to not address posting requirements. It is the understanding of the drafting team that while FERC is not opposed to the use of Scenario Analyzer, they have not confirmed that it alone meets the posting requirements of Orders 889 or 890. M2 1.Do we need to be compliant with the requirements of MOD-030 (selected ATC Methodology) or are we audit against the description of ATCID Document Response: In cases where you are allowed to deviate from the standard, the requirements will indicate that implementing as defined in the ATCID is acceptable, and you will be measured against the ATCID. M7 1. Same question as listed under R8. Response: It assumes that the Transmission Operator is determining TTC, as described in the individual methodology standards. MOD-004-1 R5 1.We think this should be a TSP responsibility and not a TP responsibility. What is reason this was assigned to Transmission Planner. Response: The SDT believes the Transmission Planner is responsible based on the duration of the request (greater than one year). MOD-008-1 R1 and R2 1.What is the reasoning behind making TSP responsible for the ATCID Document and CBMID document and making

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	TOP responsible for TRMID Document. We think TRMID should be a TSP responsibility also. Response: The SDT believes the functional model assigns responsibilities like those described in the TRM standard to the Transmission Operator. MOD-030-1 R2 1.What is the reasoning behind making TOP solely responsible to identify flow gates. We think both TSP and TOP are responsible, TOP for his Operating Area and TSP for the Tariff footprint and neighboring footprints. Response: The SDT believes the functional model assigns this responsibility to the Transmission Operator. R3 1.What is the reasoning behind making TOP responsible to maintain a transmission model to determine AFC. We think TSP should be responsible, to model the Tariff footprint and neighboring footprints as complete as possible. Response: The SDT believes the functional model assigns this responsibility to the Transmission Operator. R4.2 1.What is the reasoning behind requirement of higher granularity for AFC Calculations. (using Source and not POR). We think it should be allowed to calculate impacts on POR / POD basis (grouping of commonly dispatched resources within BA Area) and not with higher granularity. (Source) It is not required to schedule the Confirmed Reservation with same granularity. Response: The standard has been modified to allow the flexibility requested. 2. What is meant with "interface points with adjacent TSP". The 1tier BA Area of TSP? Response: The requirement has bee rewritten to more clearly refer to the first-tier Balancing Authority. R5.2 1.What is definition of external (third party) flow gate. Is it something like: third party flow gate is flow gate for which the limiting equipment of the monitored element is not in one of the TOP Areas of the Tariff footprint of the TSP. Response: R5.2 (now R5.3) was modified to remove third party and clarify language as "…Transmission Service Provider that calculates AFC for that Flowgate as the AFC." 2.What if RC footprint doesn't match the Tariff footprint. Are we required to use AFC overwrite from some one else if it is our RC flow gate however not our Tariff flow gate. Response: Yes, if the flowgate meets the requirements provided by Old R5.2 now R5.3 as modified. R6.2 1.What is the definition of "expected to be scheduled". Does this mean TSP can use judgment ? Response: Yes, but note that the judgment that is used must be documented in the ATCID as required in R3.1 of MOD-001. For example, you may use seasonal or historical trends to guide expectations.

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	2.What is the definition of "Included in the model ", probably refers to included in calculations referred to in R6.1.1 – R6.1.4 Response: This interpretation is correct. R9 1.MOD-001-1 requires posting of ETC. If a TSP uses Flowgate Methodology does he need to convert ETC (flow gate based) to ETC (path based) using same formula as R9. Or does he need to post ETC flow gate based, result of R7 and R8 requirements of MOD-030-1. Response: As stated in MOD-001 R10.13 the data can be shared in its present version. No conversion is necessary if it is requested. M2 1. See R2 question. Response: Please see response to R2 question. M7 1. See R3 question. Response: Please see response to R3 question. M10 1. What about using outages for Monthly time frame? We only use outages if they last more than 15 days in that Month. Response: MOD-001 now required that the ATCID specify outage processing rules for use when calculating ATC,
Response:	
Tacoma Power	1) Tacoma Power supports the comments of the WECC MIC MIS ATC Drafting Team in regard to this question. Please see responses to the WECC MIC MIS ATC Drafting Team. 2) In reference to MOD-030-1/R10, the requirement should be altered as follows: "The Transmission Service Provider shall [insert] provide a tool to [end insert] convert Flowgate AFCs to ATCs (and TFCs to TTCs) for Posted Paths. . . ." BPA calculates flowgate AFC's for its network and provides a tool for AFC-to-ATC conversion (in BPA's case, Power Utilization Factor Calculators). At this time, this is sufficient for transmission customer needs and that the posting of ATCs, as opposed to AFCs, would result in less transparency due to the sheer number of combinations that could be required to be posted. Response: The standards do not preclude the use of a tool to create ATCs from AFCs; nor do they require the posting of ATCs.
Response:	
Tri-State Generation and Transmission Association	General comments: Calculation and posting of hourly ATC will require knowledge of actual, preschedule, and real-time loads and other

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	information. Tri-State is concerned that such information is to be shared only with TOs and other reliability entities, and encourages the drafting team to retain this limited distribution feature. On another level, compilation of this data comprises another set of confidential information the TO/TSP must track. These are now limited to transmission entities, but all it would take to violate confidentiality is one stroke of the pen - or one knowledgeable hacker. Response: The SDT understands your concern, and expects entities to take appropriate steps to ensure such compromises do not occur. The standard does not require validation. Tri-State finds that this may be a serious shortcoming of the proposed standards. Without some mechanism to verify actual flows from time to time, including loop-flow accommodation, the standards are nothing more than a documentation and data storage burden to utilities. It is difficult to imagine a simple validation method and process, but if there was one in place it might be possible to evaluate how accurate ATC values were after the fact. Response: NERC will consider this suggestion in future work to the standards. Related to this, no load-forecast probability level is specified for calculation of TRM/CBM/ETC. While we use low-exceedance probability forecasts for long-range transmission studies, this is not appropriate for short term ATC calculations. On the hourly time-frame, this would be manifested as load forecast bias. In other words, the firm ATC calculation process would naturally include some load margin to ensure that resulting ATC values will meet a defined risk level. Risk-level is a matter of company policy, so ATC will not necessarily be consistent from one utility to another. However, there should be a requirement to state the forecast probability level. Response: The load forecast probability you describe is no longer intended to be incorporated within the ETC or CBM; it is to be accounted for in TRM.
Response:	
WECC MIC MIS ATC TF Drafting Team	AFFIRMATIVE COMMENTS: The NERC Team and those listed above are reminded that the WECC MIC MIS ATC TF Drafting Team has solicited its responses face-to-face from 50+ individuals on 11/28/07 in Portland (attendance sheet retained by WECC and can be made available on request) and has also been supported by the ongoing technical support from the 40+ members of the WECC MIC MIS ATC Advisory Panel (16 separate entities) over the last year of drafting. As such, the WECC Team comments have been widely vetted and represent a substantial base of technical knowledge and veracity and are not merely the comments of a single entity. The WECC Team and those listed above make the following “positive” proactive comments that the below listed features and attributes are essential to the standards as proposed and should be retained in the event a counter-position may be suggested by any singular entity. GENERAL 1) The Team and those listed above support retention of the three methods recognizing the differences between the Rated System Path (MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028).

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	2) The Team and those listed above strongly support the retention of the proposed one-year implementation period. 3) The Team and those listed above support allowing NAESB to address all "posting" issues as they directly affect OASIS. MOD-001 UMBRELLA 1) The Team and those listed above support allowing the use of more than one methodology for calculation of ATC by any one entity. For example, the Team supports allowing any entity to use the Flowgate methodology inside their affected area while also using the Rated System Path methodology at its boundaries. 2) The Team and those listed above support allowing each entity to specify in its ATCID how it will treat counterflows / schedules. (R4., R5.) 3) The Team and those listed above support the aggregation of transmission capacity for grandfathered contracts when shared with neighboring requestors. 4) The Team and those listed above support the specifically limited universe of entities to which data sharing is required as prescribed in R10. 5) The Team and those listed above are in support of changing the Violation Risk Factors as specifically commented on by SERC. MOD-029 RATED SYSTEM PATH TTC, ETC & ATC 1) The Team and those listed above strongly support retention of the requirement(s) in R2.2 that accommodate paths which are "flow limited" by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing practices without re-inventing the wheel where no such effort is required to meet FERC's goals of transparency and consistency. 2) The Team and those listed above strongly support retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. 3) The Team and those listed above strongly support retention of the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. 4) The Team and those listed above strongly support retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts, associated litigation and potential renegotiation of associated operational agreements while supporting FERC's mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required.

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	5) The Team and those listed above strongly support the adoption of a definition for counterflow to clarify its application in each equation. MOD-004 CBM 1) The Team and those listed above support the concept of allowing the LSE to decide how much CBM it needs to satisfy its resource adequacy requirements and the TSP determining how the total CBM requirement for all requesting LSE's is allocated among paths. This is the proper division of labor. 2) The Team and those listed above strongly support allowing the LSE scheduling rights to the CBM after declaration of an EEA2 or higher condition. MOD-30 1) The Team and those listed above support the MOD-30, R3 and R6 requirements only as to those sub-bullets addressing the most reasonable approach to how often information should be updated.
Response: Thank you for your supportive comments.	
WestConnect Transfer Capability Workgroup	In General the WestConnect Teams agrees with the WECC Comments. In addition the WestConnect Team adds the following comment. Response: Please see responses to the WECC MIC MIS ATC Drafting Team. Order 890 stresses transparency for ATC. The Team does not believe that Implementation Documents are transparent to the transmission users in that there are no requirements for the documents to be made available to the users. The WestConnect Team suggests that all the Implementation Documents be made public on the TSP's OASIS. Response: NAESB will address OASIS posting requirements.
Response: Please see in-line responses.	
Western Area Power Administration – RMR	AFFIRMATIVE COMMENTS: The NERC Team is reminded that the WECC MIC MIS ATC TF Drafting Team has solicited its responses face-to-face from 50+ individuals on 11/28/07 in Portland (attendance sheet retained by WECC and can be made available on request) and has also been supported by the ongoing technical support from the 43 members of the WECC MIC MIS ATC Advisory Panel (16 separate entities) over the last year of drafting. As such, the WECC Team comments have been widely vetted and represent a substantial base of technical knowledge and veracity and are not merely the comments of a single entity. The WECC Team makes the following "positive" proactive comments that the below listed features and attributes should be retained in the event a counter-position may be suggested by any singular entity. GENERAL 1) The Team supports retention of the three methods recognizing the differences between the Rated System Path

Commenter	Other Comments
	(MOD-029), Flowgate Methodology (MOD-030) and the Area Interchange Methodology (MOD-028). 2) The Team strongly supports the retention of the proposed one-year implementation period. 3) The Team supports allowing NAESB to address all "posting" issues as they directly affect OASIS. MOD-001 UMBRELLA 1) The Team supports allowing the use of more than one methodology for calculation of ATC by any one entity. For example, the Team supports allowing any entity to use the Flowgate methodology inside their affected area while also using the Rated System Path methodology at its boundaries. 2) The Team supports allowing each entity to specify in its ATCID how it will treat counterflows / schedules. (R4., R5.) 3) The Team supports the aggregation of transmission capacity for grandfathered contracts when shared with neighboring requestors. 4) The Team supports the specifically limited universe of entities to which data sharing is required as prescribed in R10. 5) The Team supports those comments submitted by SERC specifying suggested changes to the VSLs. However, this Team makes no comment on the VSLs as they affect MOD-28. Response: Please see responses to SERC comments. MOD-029 RATED SYSTEM PATH TTC, ETC & ATC 1) The Team strongly supports retention of the requirement(s) in R2.2 that accommodate paths which are "flow limited" by allowing the rating in the flow limited direction to be equal to the rating in the reliability limited direction. This accommodates existing practices without re-inventing the wheel where no such effort is required to meet FERC's goals of transparency and consistency. 2) The Team strongly supports retention of the requirement(s) in R2.5 verifying that a given Posted Path does not adversely impact the TTC value of any existing path. 3) The Team strongly supports retention of the requirement(s) in R2.7 allowing the retention of existing and operationally proven TTCs without requiring a superfluous and redundant re-rating. 4) The Team strongly supports retention of the requirement(s) in R2.6 allowing for allocation of TTC via contract. This avoids the needless renegotiation of contracts, associated litigation and potential renegotiation of associated operational agreements while supporting FERC's mandate of transparency and consistency via MOD-01, R.3.6 wherein disclosure of allocation methodologies is required. 5) The Team strongly supports the adoption of a definition for counterflow to clarify its application in each equation." MOD-004 CBM 1) The Team supports the concept of allowing the LSE to decide how much CBM it needs to satisfy its resource adequacy requirements and the TSP determining how the total CBM requirement for all requesting LSE's is allocated among paths. This is the proper division of labor. 2) The Team strongly supports allowing the LSE scheduling rights to the CBM after declaration of an EEA2 or higher condition. MOD-30 1) The Team supports the MOD-30, R3 and R6 requirements as representing the most reasonable approach to

Commenter	Other Comments
	frequency of updating information.
Response: Thank you for your supportive comments. Please see in-line responses.	