The ATC Standard Drafting Team thanks all commenters who submitted comments on Draft 1 of the Available Transfer Capability (ATC) Standard (MOD-001). The standard was posted for a 30-day public comment period from February 15 through March 16, 2007. The drafting team asked stakeholders to provide feedback on the standard through a special standard Comment Form. There were 35 sets of comments, including comments from more than 91 different people from more than 52 companies representing 8 of the 10 Industry Segments as shown in the table on the following pages.

Since the drafting team posted its first draft of MOD-001, FERC issued Order 890 and Order 693 – with very specific directives relative to ATC. The drafting team made significant changes to the first draft of MOD-001 in response to stakeholder comments and in response to the FERC Orders.

The changes to MOD-001 resulting from stakeholder comments and FERC directives were so extensive that the revised standard bears very little resemblance to the first draft of MOD-001.

- There was no consensus on several of the proposed definitions, and those that were not supported by stakeholders have either been removed or revised.

- The drafting team added much more detail to each of the methods of determining ATC and its related components and subdivided the requirements into a greater number of standards as follow:

  - MOD-001 - This is now an "umbrella" standard and contains the 'generic' requirements applicable to all methods of determining ATC. All of the equations have been removed from this standard.
  - MOD-028 – This standard addresses requirements unique to the Network Response method of determining ATC.
  - MOD-029 – This standard addresses requirements unique to the Rated System Path method of determining ATC.
  - MOD-030 – This standard addresses requirements unique to the Flowgate Network Response method of determining ATC, including requirements to convert AFC to ATC
  - MOD-004 – This standard addresses requirements for Capacity Benefit Margin (CBM)
  - MOD-008 – This standard addresses requirements for Transmission Reliability Margin (TRM).

In this "Consideration of Comments" document stakeholder comments have been organized so that it is easier to see the responses associated with each question. All comments received on the 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 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 Development Procedures: http://www.nerc.com/standards/newstandardsprocess.html.

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
1.	John Bussman	AECI	✓				✓	✓				
2.	Anita Lee (G1)	AESO		✓								
3.	Darrel Pace (G5)	AL Electric Coop Inc										
4.	Helen Stines (G5)	Alcoa Power Generating, Inc										
5.	Marion Lucas (G5)	Alcoa Power Generating, Inc										
6.	Eugene Warnecke (G5)	Ameren										
7.	E. Nick Henery (G2)	APPA	✓									
8.	Jerry Smith (G7) (I)	APS	✓							✓		
9.	Kiet Nguyen (G5)	Assoc Electric Coop, Inc										
10.	Zack Stica (G5)	Assoc Electric Coop, Inc										
11.	Chris Bradley (G5)	Bg Rivers Electric Corp										
12.	Abbey Nulph	BPA	✓		✓		✓	✓				
13.	Rebecca Berdahl (G7)	BPA										
14.	Steve Knudsen (G7) (I)	BPA	✓		✓		✓	✓				
15.	Brent Kingsford (G1) (I)	CAISO		✓								
16.	Dave Lunceford (G7)	CAISO										
17.	Robert Walker	Cargill Power Markets, LLC		✓				✓				
18.	Ed Thompson (G3)	ConEdison										
19.	Greg Rowland	Duke Energy	✓		✓		✓	✓				
20.	Bob Crosier (G5)	E.ON U.S. Services Inc.										
21.	Joachim Francois (G5)	Entergy										
22.	Narinder Saini	Entergy Services, Inc.	✓									
23.	Steve Myers	ERCOT		✓								✓
24.	Bob Schoneck	Florida Power & Light Company	✓									
25.	Don McInnis	Florida Power & Light Company	✓									
26.	Kiko Barredo	Florida Power & Light Company	✓									
27.	John Odom	Florida Reliability Coordinating Council										✓
28.	L. Earl Fair (G2)	Gainesville Regional Utilities	✓									
29.	Robin Wiley (G5)	Georgia Transmission Corporation										
30.	Ross Kovacs (G5)	Georgia Transmission Corporation										
31.	Kevin Conway	Grant County PUD #2 of WA				✓						

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
32.	Roger Champagne	HQTE	✓									
33.	Biju Gopi (G3)	IESO		✓								
34.	Ron Falsetti (G1) (I)	IESO		✓								
35.	Lou Ann Westerfieldd (G7)	IPUC										
36.	Kathleen Goodman (G3) (I)	ISO-NE		✓								
37.	Matt Goldberg (G1)	ISO-NE		✓								
38.	Brian Thumm	ITC Transmission	✓									
39.	Michael Gammon	Kansas City Power & Light	✓									
40.	Sueyen McMahon (G7)	LADWP										
41.	Allan Silk	Manitoba Hydro	✓		✓		✓	✓				
42.	Jerry Tang (G5)	MEAG Power	✓									
43.	Dennis Kimm	MidAmerican Energy Co						✓				
44.	Larry Middleton (G5)	Midwest ISO										
45.	Renuka Chatterjee (G5)	Midwest ISO										
46.	Bill Phillips (G1)	MISO		✓								
47.	Greg Campoli (G3)	New York ISO		✓								
48.	Michael Calimano	New York ISO		✓								
49.	Matt Schull (I) (G2)	North Carolina MPA	✓									
50.	Guy V. Zito (G3)	NPCC										✓
51.	Mike Calimano (G1)	NYISO		✓								
52.	Ralph Rufrano (G3)	NYPA	✓									
53.	Ralph Rufrano (G3)	NYPA	✓									
54.	Al Adamson (G3)	NYSRC										✓
55.	Mark Ringhausen	ODEC				✓						
56.	Chifong Thomas	Pacific Gas & Electric Company	✓									
57.	Alicia Daughtery (G1)	PJM		✓								
58.	Donald Williams (G5)	PJM										
59.	Brett Koelsch	Progress Energy Carolinas	✓		✓		✓	✓				
60.	Phil Creech (G5)	Progress Energy Carolinas										
61.	James Eckelkamp	Progress Energy Marketing					✓					
62.	Al McMeekin (G4) (G5)	SC Electric and Gas	✓									
63.	Ckay Young (G4)	SC Electric and Gas	✓									
64.	Gene Delk (G4) (G5)	SC Electric and Gas	✓									
65.	Stan Shealy (G4)	SC Electric and Gas	✓									
66.	Carter Edge (G5)	SEPA										
67.	Derelyn Smith (G5)	SEPA										

Commenter		Organization	Industry Segment									
			1	2	3	4	5	6	7	8	9	10
68.	John Troha (G5)	SERC										
69.	Ken Keels (G5)	SERC										✓
70.	Bob Schwermann (G7)	SMUD										
71.	Shannon Black (G7)	SMUD										
72.	Tadd Simms (G7)	SMUD										
73.	Chad Cooper (G5)	SC Electric and Gas										
74.	Stan Shealy (G5)	SC Electric and Gas										
75.	Bryan Hill (G5)	Southern Co Services										
76.	DuShaune Carter (G5) (G6)	Southern Co Services										
77.	Doug McLaughlin (G6)	Southern Co Services	✓									
78.	Jim Busbin (G6)	Southern Co Services	✓									
79.	John Lucas (G6)	Southern Co Services	✓									
80.	Keith Calhoun (G6)	Southern Co Services	✓									
81.	Marc Butts (G6)	Southern Co Services	✓									
82.	Roman Carter (G6)	Southern Co Services	✓									
83.	Ron Carlesn (G6)	Southern CoServices	✓									
84.	Steve Corbin (G6)	Southern Co Services	✓									
85.	Charles Yeung (G1)	SPP										✓
86.	Jonathan Hayes (G5)	SPP										
87.	Terri Kuehneman (G7)	SRP										
88.	Ann Scott	Tenaska						✓				
89.	Raquel Agular (G7)	Tucson Electric	✓									
90.	Doug Bailey (G5)	TVA										
91.	Mike Wells (G7)	WECC			✓	✓	✓					

G1 – ISO/RTO Council
G2 - NPPA
G3 - NPCC CP9 Reliability Standards WG
G4 – SCE&G
G5 – SERC ATC WG
G6 – Southern Co
G7 - WECC MIC MIS ATC Task Force

Index to Questions, Comments and Responses:

1. **This is the proposed definition for 'Existing Transmission Commitments (ETCs)' — Any combination of Native Load uses, Contingency Reserves not included in Transmission Reliability Margin or Capacity Benefit Margin, existing commitments for purchases, exchanges, deliveries, or sales, existing commitments for transmission service, and other pending potential uses of Transfer Capability. Is this definition sufficient to calculate the ETC in a consistent and reliable manner? If not, please explain.**

Summary Consideration: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify (in MOD-028, MOD-029, and MOD-030) the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.

Question #1			
Commenter	**Yes**	**No**	**Comment**
ERCOT			ERCOT does not have a transmission service market. Therefore, this concept does not have meaning in ERCOT operations as described in this definition.
Response: Agreed. However, if ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
APPA		☑	The definition is too vague to be used as a major component of the ATC Calculations. Therefore a Standard needs to be developed to determine the rules for what is ETC, where to post ETC, and the requirements for archiving the ETC for future Compliance Records and Auditing.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.			
BPA		☑	This definition merely describes a universe of explicit contractual or planning commitments that can be included in the calculation of ETC. To actually calculate ETC, however, these commitments must be translated into a representation of power transfers, i.e., the use of transfer capability. BPA does not agree that ETC should be addressed as a subcomponent of MOD-001-1 as suggested in P243 or Order 890; rather, it should be addressed in its own standard.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the			

Question #1			
Commenter	**Yes**	**No**	**Comment**
components.			
Cargill		☑	Phrase "other pending potential uses" too broad and open to interpretation and could allow discrimination. Order 890 states that ETC should include: native load commitments, grandfathered transmission rights, point-to-point reservations, rollover rights, and other uses identified through the NERC process. We feel that "other pending potential uses" does not comply with Order 890. All components of ETC should be specifically defined.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components, and includes a clearer definition of what was intended with the phrase, **"**pending potential uses of Transfer Capability".			
Duke Energy		☑	The definition of ETC is too ill defined. There probably needs to be a separate standard for ETC (as exists for TRM and CBM). "Native load" should be "Network/Native load". All Contingency Reserves has too general to be used for ETC calculation - only reserves considered under TRM and CBM should be allowable for ETC calculation. What are the "existing commitments for purchases, exchanges, deliveries, or sales" that do not fall under the "existing commitments for transmission service" category? This phrase should be eliminated from the definition.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. The phrase, 'existing commitments for transmission service' is not used in the revised standards (MOD-001, MOD-028, MOD-09-29, MOD-030).			
Entergy		☑	Definition of ETC is broad and can not be used to calculate the ETC in a consistent and reliable manner. Since ETC will vary depending on what ATC calculations this is used for, its components can vary. For example, for Firm ATC calculation, there is no need to include non-firm reservations. A detailed Standard could to be developed or details included in MOD-001 for ETC calculations that should describe requirements and components to be included in ETC calculations. However, in view of para 243 of FERC Order 890, ETC should be addressed by including the requirements in MOD-001 rather than through a separate reliability standard.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.			
Grant County PUD		☑	I have no specific suggestions, but in reading the definition for the first time, I am not sure how to interpret this. I have had to read it several times, and could interperet the defintion several ways as to our situation. Dynamic (and or psudo tie) uses for wind, and hydro generation, grandfathered system rights, and flow through from other systems that don't follow schedule paths, but physical paths, could all be problematic.

Question #1			
Commenter	Yes	No	Comment
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.			
ITC Transco		☑	Other pending potential uses" does not sound like an existing commitment. The definition should reference "other uses" or "other pending uses" or "other committed uses" but a "potential use" is not a commitment. There are lots of potential uses of the transmission system, but the only ones that matter in the context of this definition are those for which transmission capacity needs to be reserved.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. The proposed requirements provide an interpretation of what was intended with the use of the phrase, 'other pending potential uses'.			
KCPL		☑	This definition is open ended. It would be better as a definition to include all components that can be thought of and amend the definition as the need arises. This definition needs to stand alone and not make reference to TRM and CBM. If there are items missing from the TRM and CBM that need to included in them, then it should be included and not left for ETC to clean up.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. Note that the drafting team did use CBM and TRM in the revised standards (MOD-028, MOD-09, and MOD-030) because these acronyms were used in FERC Order 890.			
Manitoba Hydro		☑	Manitoba Hydro believes that the definition is close but you would have to develop the definition further to describe when it is appropriate to describe reserves as ETC.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.			
MidAmerican		☑	The definition of ETC must be modified to comply with Order 890, Paragraph 244. In addition, the definition does not define "other pending potential uses" of Transfer Capability, or explain how the other individual components of ETC are to be calculated.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. The proposed requirements provide an interpretation of what was intended with the use of the phrase 'other pending potential uses'.			

Question #1			
Commenter	Yes	No	Comment
MISO		☑	The definition for ETC is very generic. With the FERC Order 890 requirements of transparency in ATC/AFC calculations, this definition needs to be revisited to add more speficity to it. The definition specifically needs to include modeling of transmission commitments due to transmission service from other transmission providers. Midwest ISO is currently addressing this through two approaches – 1. Seams agreements that address modeling of transmission commitments from other entities. 2. a forecast error term which is currently under development that will address AFC predictions in real time to accommodate for errors in load, generation outage and loopflow forecasts. The standard needs to be revisited to make the computation of transmission commitments in both AFC and ATC methodologies transparent to transmission customers. Include thirdy party generation to load impacts.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. Transparency will be a key element in all standards developed pertaining to ATC. The Team will address modeling and forecasting concerns.			
MRO		☑	It is not clear in the definition whether the words existing commitments is to apply only to purchases or also exchanges, deliveries, or sales. In other words, is it the intent of the Drafting Team that only existing commitments for exchanges, deliveries, or sales be included in ETC? If it is the latter than the definition should be changed to say existing commitments for exchanges, existing commitments for deliveries, or existing commitments for sales or else use punctuation such as semi-colons to make clear the meaning. If it is the former than the MRO suggests that exchanges deliveries, or sales be moved before the words existing commitments for purchases, such as exchanges, deliveries, or sales, existing commitments for purchases, existing commitments for transmission services, etc.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. Note that in the revised standards (MOD-001, MOD-028, MOD-029, MOD-030) the term, 'existing commitments' is not used.			
ODEC		☑	The last catch all phrase of 'other pending potential uses of Transfer Capability' causes great concern. What does this mean? It is not clear, therefore, the definion of ETC is not clear. Should non-firm schedules be included, it is not clear from this definion, but it needs to be very clear so everyone is calulcating ETC the same way.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. . The revised standards (MOD-001, MOD-028, MOD-029, MOD-030) do not include the phrase, 'other pending potential uses'.			
SCE&G and SERC ATCWG Southern		☑	The ETC definition reference to "Native Load uses" is not applicable to ATC calculations. By definition, a transfer analysis determines the amount of import (or export) capacity possible in addition to the native load service modeled in the base case. Internal transfers to serve network loads are not included in TTC values and should not be subtracted from TTC to obtain ATC. Conversely, since

Question #1			
Commenter	**Yes**	**No**	**Comment**
			TFC is similar to a facility rating, not a (n-1) transfer analysis , the impacts of serving native load must be considered in calculating AFC and are therefore appropriate in an AFC calculation. Either the ETC definition should be changed to reflect the differences between ATC and AFC calculations or the ATC formula should be changed to remove ETC from the calculation. This could be accomplished by using the following ATC calculations. Firm ATC = TTC - CBM - TRM - Firm Interface Commitments Non-firm ATC = TTC - All Interface Commitments + Postbacks of Unscheduled Service In addition, the ETC definition should be modified to remove references to Contingency Reserves, which are not an Existing Transmission Commitment. The ATC equations allow for uncertainties such as CBM and TRM. To the extent additional reserve margins are required, they should accounted for as such in the AFC or ATC equations, not by lumping them into ETC. Also, references to pending uses should be removed. ETC should include only commitments, not potential uses. A suggested ETC definition is provided below. ETC: Used in the context of calculating AFC, ETC reflects the impacts of power flows associated with serving native loads, commitments for firm and non-firm transmission service, and any other commitments for transmission service not covered by OATT requirements.
Response: Due to the different methods for determining TTC and ATC these comments may apply in some regions and not in other regions. Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. NAESB is expected to write a business practice that will provide more details for some of these items – for example NAESB is expected to clarify what can be included in Native Load.			
WECC ATC Team		☑	Although the definition is sufficient to “describe” Existing Transmission Commitments, it is not sufficient to “calculate the ETC.” ETC is an essential variable in the ATC calculation on par with TTC, CBM and TRM. As such, ETC should be addressed in its own freestanding standard to be consistent with the other ATC variables and to further promote clarity, consistency and transparency of this essential ATC component. This group does not concur that ETC should be addressed as a subcomponent of MOD-01 as stipulated in P243 of Order 890. To bring the definition in line with Order 890, P. 244, this Team suggests: The following language should be used as the definition for Existing Transmission Commitments.

Question #1			
Commenter	**Yes**	**No**	**Comment**
			To bring the definition into accord with Order 890, the Team suggests striking any reference to Contingency Reserves from the definition. Existing Transmission Commitments (ETC): Any combination of: 1. Native Load commitments (including network service), 2. Load forecast error 3. Losses 4. Existing commitments for energy purchases, exchanges, deliveries, or sales and existing commitments for transmission service, 5. Appropriate point-to-point reservations 6. Rollover rights associated with long-term service 7. Other pending potential uses of transfer capability, either TTC or AFC, identified through the NERC process.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components.			
IESO	☑	☑	We agree with most of the components except "…other pending potential uses of Transfer Capability". This component is subject to interpretation and it is difficult to demonstrate a quantifiable need for the inclusion of this component. Also, we question the need to specify "exchanges" and "deliveries" given that "purchases" and "sales" are already included in the definition.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. The revised standards (MOD-001, MOD-028, MOD-029, and MOD-030) do not include the phrase, 'other pending potential uses'.			
NYISO CAISO ISO-NE	☑		We agree with most of the components except "other pending potential uses of Transfer Capability". This component is subject to interpretation and is difficult to demonstrate the need and quantify it for inclusion. Also, we question the need to specify "exchanges" and "deliveries" given that purchases and sales are already included.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the			

Question #1			
Commenter	**Yes**	**No**	**Comment**
components. The revised standards (MOD-001, MOD-028, MOD-029, and MOD-030) do not include the phrase, 'other pending potential uses'.			
HQT	☑		We question the use of "other pending potential uses of Transfer Capability". This component is subject to interpretation and is difficult to demonstrate the need and quantify it for inclusion.
Response: Most commenters disagreed with the proposed definition – several suggestions were provided for improving the definition, all requiring more details. The drafting team elected to remove the definition, and instead specify the components of ETC as bulleted requirements. The proposed requirements include the components that go into ETC and provide a detailed method for determining each of the components. The revised standards (MOD-001, MOD-028, MOD-029, and MOD-030) do not include the phrase, 'other pending potential uses'.			
FRCC	☑		
NPCC CP9	☑		
Progress Energy	☑		
AECI	☑		
SPP	☑		
APS	☑		

2. **This is the proposed definition for 'Transmission Service Request' — A service requested by the Transmission Customer to the Transmission Service Provider that may move energy from a Point of Receipt to a Point of Delivery. Should this definition be expanded or changed?**

Summary Consideration: There was an error in the question – the proposed definition that was posted with the standard did not include the word, 'may – the proposed definition posted with the standard was:

Transmission Service Request: A service requested by the Transmission Customer to the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.

The proposed definition uses the already approved definition of 'Transmission Service' and adds words to support 'request'. The approved definition of Transmission Service is: Services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.

The drafting team did not make any changes to the proposed definition.

<table>
<tr><th colspan="4">Question #2</th></tr>
<tr><th>Commenter</th><th>Yes</th><th>No</th><th>Comment</th></tr>
<tr><td>ERCOT</td><td></td><td></td><td>ERCOT does not have a transmission service market. Therefore, this concept does not have meaning in ERCOT operations as described in this definition.</td></tr>
<tr><td colspan="4">Response: Agreed. However, if ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.

As such, we suggest that ERCOT consider this as a possible avenue for further exploration.</td></tr>
<tr><td>APPA</td><td>☑</td><td></td><td>A Transmission Service Request is a request to reserve Transmission Capacity. If accepted and confirmed, it is not necessary for the Transmission Customer to move energy on this Transmission Capacity. In fact, it may be used for operating reserves and energy would only be scheduled on this capacity if there was an emergency. The definition should read in a manner that the Transmission Customer is requesting Transmission Capacity from a point of receipt and points of delivery.</td></tr>
<tr><td colspan="4">Response: Agreed. The purpose of this definition was not to imply that energy must be scheduled or moved along the path for which the Transmission Capacity was reserved. The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery." This should only imply that the ability to move energy along a transmission path should be available, if necessary.</td></tr>
</table>

Question #2			
Commenter	**Yes**	**No**	**Comment**
BPA	☑		The definition as written implies that the request is for the physical movement of power from a specific generator to a requested point of delivery. In fact, the underlying nature of the service requested is to inject power into the grid at at a point of receipt, and to withdraw a like amount of power at a specific point on the grid for the benefit of an identified load. It is also not clear that a request for Network Integration Transmission Service would fall within this definition, because it may involve multiple PORs and PODs.
Response: The purpose of this definition was not to imply that energy must be scheduled or moved along the path for which the Transmission Capacity was reserved. The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
CAISO ISO-NE	☑		Definition is already sufficient and should not be expanded or changed. The definition should be modified to recognize the need for transmission requests for A/S capacity, not just actual energy. Insert "**and/or Ancillary/Services"** after the word "energy". The SDT should also review the definition of transmission service for consistency. The definition should include reference to ultimate Source and Sink. Add to end of proposed definition "… and from ultimate Source to ultimate Sink."
Response: The SDT thinks the comment "Definition is already sufficient and should not be expanded or changed" was made in error. The SDT does not agree the ultimate Source and Sink are a requirement of every Transmission Service Request. The reservation of Ancillary Services is a separate FERC requirement. The drafting team believes that Ancillary Services are not part of ATC/AFC, and should not be included in the definition of a transmission service request. The NERC glossary already has a definition for Ancillary Services.			
Duke Energy	☑		'Transmission Service Request' - An OASIS request by the Transmission Customer to reserve transmission capacity for the purpose of moving energy from a point of receipt to a point of delivery.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
FRCC	☑		Should specify that it must be done on OASIS and should be broad enough to include network integration transmission service also. Suggested wording: A service requested on the OASIS by a transmission customer of the transmission service provider to move energy out of, across, or into the transmission service provider's transmission system.
Response: The proposed definition of Transmission Service Request was intended to be very general and not to define a detailed process.			

Question #2			
Commenter	**Yes**	**No**	**Comment**
The intent was to expand upon the already approved term, “Transmission Service,” in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is “services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.”			
Grant County PUD	☑		Who's POR or POD? I am sure I know what the intent is, some may read this, as written to mean the whole path.
Response: The intent was to expand upon the already approved term, “Transmission Service,” in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is “services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.”			
IRC	☑		The definition should be modified to recognize the need for transmission requests for A/S capacity, not just actual energy. Insert “and/or A/S” after the word “energy”. The SDT should also review the definition of transmission service for consistency. The definition should include reference to ultimate Source and Sink. Add to end of proposed definition “… and from ultimate Source to ultimate Sink.”
Response: The proposed definition of Transmission Service Request was intended to be very general and not to define a detailed process. The intent was to expand upon the already approved term, “Transmission Service,” in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is “services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.” Ultimate Source and Sink are not required of every Transmission Service Request.			
ITC Transco	☑		It may be semantics, but NITS generally does not have "a point" of receipt or delivery. The definition could refer to sources and sinks rather than PORs and PODs. Also, why is this term being defined? It is virtually identical to the definition of Transmission Service, only with the phrase "provided to" replaced by "requested by." The Standards should not define the obvious.
Response: NITS should have a separate request for each different POR/POD combination for ATC calculation purposes. The intent was to expand upon the already approved term, “Transmission Service,” in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is “services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.”			
MidAmerican	☑	☑	This is not a proposed definition. This is the current definition in the NERC glossary. The new definition should defines the transmission service request as a request for transmitting capacity and energy.
Response: The intent was to expand upon the already approved term, “Transmission Service,” in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is “services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery.”			
MISO	☑		This definition itself would have been fine if the terms "Point of Receipt" and "Point of Delivery" were consistently treated by the various transmission providers. With the FERC order 890 requirements of consistency in AFC/ATC calculations, the standards needs to be revisited to address the consistent

Question #2			
Commenter	**Yes**	**No**	**Comment**
			and transparent treatment of Point of Receipt, Point of Delivery, Source and Sink usage as applicable to a TSR within AFC/ATC calculations. A suggested industry wide definition for Transmission Service Request could be "a request for using the transmission system submitted to a transmission provider (typically through an OASIS system) to move power (MWs) either into, out of, within or across the footprint of the transmission provider (with specific start time and stop times, class of service (firm/non-firm) and service increment (hourly, daily weekly etc.,)"
Response: The SDT has addressed the directives in FERC order 890 and has made some conforming changes to the standard as suggested. The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
MRO	☑		The OATT definition for Point-To-Point Transmission Service indicates that it is a service for the receipt of capacity and energy at designated Points of Receipt and the transmission of such capacity and energy to designated Points of Delivery. The definition of Transmission Service Request should be revised to state that it is a request to move CAPACITY and energy from a Point of Receipt to a Point of Delivery. The added word is stated in all caps.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
NCMPA	☑		A Transmission Service Request is a request to reserve Transmission Capacity. If accepted and confirmed, it is not necessary for the Transmission Customer to move energy on this Transmission Capacity. In fact, it may be used for operating reserves and energy would only be scheduled on this capacity if there was an emergency. The definition should read in a manner that the Transmission Customer is requesting Transmission Capacity from a point of receipt and points of delivery.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
NYISO	☑		Definition is already sufficient and should not be expanded or changed. The definition should be modified to recognize the need for transmission requests for A/S capacity, not just actual energy. Insert "and/or A/S" after the word "energy." The SDT should also review the definition of transmission service for consistency.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
Southern	☑		Is the service definition to include point-to-point and network. Suggested TSR definition is provided below: TSR: The act of making a request for reservation and transmission of capacity and energy on either a

Question #2			
Commenter	**Yes**	**No**	**Comment**
			firm or non-firm basis from the Point(s) or Receipt to the Point(s) of Delivery under Part II or III of the Tariff.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery." .			
SPP	☑		Definition should include reference to Source, Sink . Add to end of proposed definition …… and from ultimate Source to ultimate Sink.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery." The ultimate Source and Sink are not a requirement of every Transmission Service Request.			
Entergy	☑		
HQT	☑	☑	Point of receipt and point of delivery shall be defined. Considerations shall be taken for POR and POD from different asynchronous Interconnection.
Response: The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery." Point of Receipt and Point of Delivery are already approved terms in the NERC Glossary.			
ODEC		☑	TSR is just a request for service. Definion reads that way so it is okay.
Response: Agree.			
KCPL		☑	This definition has already been adopted in the current NERC Glossary and is sufficient.
Response: Not exactly – the definition in the NERC Glossary only addressed Transmission Service. The intent was to expand upon the already approved term, "Transmission Service," in the NERC Glossary to describe the act of making a request for Transmission Service. The definition of Transmission Service in the NERC Glossary is "services provided to the Transmission Customer by the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery."			
IESO		☑	
Manitoba Hydro		☑	
Progress Energy		☑	
SCE&G and SERC ATCWG		☑	
NPCC CP9		☑	
Cargill		☑	

Question #2			
Commenter	**Yes**	**No**	**Comment**
AECI		☑	
APS		☑	
WECC ATC Team		☑	

3. **This is the proposed definition for 'Flowgate' — A single transmission element, group of transmission elements that may include associated contingency(ies) intended to model MW flow impact relating to transmission limitations and transmission service usage. Transfer Distribution Factors are used to approximate MW flow impact on the flowgate caused by power transfers.**

This is the definition of Flowgate in the NERC Glossary of Terms Used in Reliability Standards: A designated point on the transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions.

Which definition do you prefer?

Summary Consideration: Based on stakeholder comments, the drafting team removed the second sentence from the proposed definition so that the revised proposed definition is:

> A single transmission element, or a group of transmission elements, or a single transmission element with one or more contingencies, or a group of transmission elements with one or more contingencies intended to model MW flow impact relating to transmission limitations and transmission service usage.

Question #3			
Commenter	**Proposed**	**Already Approved**	**Comment**
ERCOT			ERCOT does not typically use the term "Flowgate". ERCOT analysis considers monitored elements and a list of contingencies used in contingency analysis. However, the definition of monitored element, while similar to Flowgate, does not require the inclusion of associated contingencies. Both definitions, as prescribed, do not have meaning in ERCOT operations.
Response: Agreed. However, if ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
APPA	☑		Flowgate are also used in the Western Interconnection where there is not an IDC.
BPA	☑		Although the proposed definition is superior to the existing NERC definition, BPA

Question #3			
Commenter	**Proposed**	**Already Approved**	**Comment**
			believes that it may be too expansive. Specifically, the proposed definition does not clarify what is contemplated by the term "any associated contingencies". If the proposed standards are intended to ensure specificity and transparency of the contingencies, margins and/or uncertainties that may be considered when determining ATC, then BPA thinks any contingencies should be explicitly identified and quantified in the determination of TTC/TFC, TRM and/or CBM, and not in the definition of a flowgate. Also, it is not clear why a definition for transfer distribution factors is included in the definition of a flowgate. It would seem more appropriate to provide a separate stand-alone definition of transfer distribution factors.
Response: The Drafting Team feels the word contingencies is an industry accepted term that is defined in the NERC glossary as, "The unexpected failure or outage of a system component, such as a generator, transmission line, circuit breaker, switch or other electrical element." By using the term "Any associated contingencies", flexibility is given to allow a flowgate to be defined in such a way to keep the system reliable. The second sentence is not a definition of transfer distribution factors. It was intended to show how the MW impact of a power transfer can be applied to a flowgate. The Drafting Team removed the sentence that included text about transfer distribution factors.			
Duke Energy	☑		Delete the second sentence of the proposed definition.
Response: The Drafting Team agrees and removed the second sentence from the definition.			
FRCC	☑		Last sentence of new definition is not necessary. It is extraneous to the definition.
Response: The Drafting Team agrees and removed the second sentence from the definition.			
HQT	☑		"any associated contingency" needs to be explained. Why should contingencies be associated to an element or group of transmission elements?
Response: The majority of monitored elements have a worst contingency that has the largest negative impact on the flows on that monitored element. When using flowgates to analyze a transmission system, instead of studying all contingencies for a monitored element, the worst contingency may be coupled with the monitored element and is called a flowgate. That is why when defining a flowgate the flexibility is given to include "any associated contingency or contingencies". However, as defined, it is not necessary to associate a flowgate with a contingency.			
KCPL	☑		Propose the following refinement to the proposed definition: Flowgate - a single transmission element or group of transmission elements that may include an associated transmission contingency(ies) intended to model MW flow impact relating to transmission limitations and transmission service usage by the use of Transfer Distribution Factors. Transmission Distribution Factor is not included in the NERC Glossary. Should Transmission Distribution Factor be defined or should it be excluded from the above definition?
Response: The Drafting Team agrees and removed the second sentence from the definition.			
ODEC	☑		I prefer the new defiinion, but think we might be able to improve on it.

Question #3			
Commenter	**Proposed**	**Already Approved**	**Comment**
Response: Several commenters agreed that the definition needs modification and the Drafting Team agrees and removed the second sentence from the definition.			
Southern	☑		Make sure that the correlation to other standards is correct when making this change.
Response: We agree. The other standards will be examined.			
SCE&G and SERC ATCWG	☑		
SPP	☑		
WECC ATC Team	☑		
MEAG Power	☑		
MidAmerican	☑		
MRO	☑		
NYISO	☑		
AECI	☑		
APS	☑		
CAISO	☑		
IESO	☑		
IRC	☑		
ISO-NE	☑		
ITC Transco	☑		
Entergy	☑		
Progress Energy	☑		
Cargill		☑	But change to, "A designated point, element or group of elements on the transmission system through which the Interchange Distribution Calculator calculates the power flow from Interchange Transactions."
Response: Because the Western Interconnection does not use an IDC, the drafting team felt it should be removed from the definition. Flowgates can also be used in different types of load flow analysis not just in the IDC and therefore we felt a more general definition was warranted.			

Question #3			
Commenter	Proposed	Already Approved	Comment
PG&E		☑	The alternative definition is confusing by including contingenies with transmission elements. It seems to assume that the contingencies that should be considered for each flowgate are fixed, but in reality, the contingencies that would have the most impacts on the power flow through a flowgate changes as the system change.
Response: Flowgates are not necessarily only a monitored element. The majority of monitored elements have a worst contingency that has the largest negative impact on the flows on that monitored element. When using flowgates to analyze a transmission system, instead of studying all contingencies for a monitored element, the worst contingency is coupled with the monitored element and is called a flowgate. It is true that the contingencies that would have the most impacts on the power flow through an element can change as a system changes. That is why it is important to reevaluate flowgates often.			
Grant County PUD		☑	We start to create a problem if standards have their own meanings for a term. This creates an abiguity and needs to be avoided at all costs.
Response: The drafting team agrees. We are proposing changing the definition in the NERC Glossary which is used by all standards.			
Manitoba Hydro		☑	Between the two definitions the second is clear enough to be used in a standard. Manitoba Hydro believes you could work on the proposed definition to improve it without changing the meaning. For example, the phrase "model MW flow impact relating to transmission limitations and transmission service usage" could be replaced with "model congestion through all Horizons" I suggest that the team has erred in including the contingencies in the definition of the flowgate. The contingency may define what type of flowgate it is, e.g. OTDF as compared to PTDF, and will certainly define where the location of the flowgate is but it does not define what a flowgate is. A flowgate could be created by a planned/forced transmission outage, a planned/forced generator outage, or a by an interregional stability concern. It may be good practice to include the contingency in the naming of flowgates, e.g. x for loss of y, but in my opinion y is not part of the flowgate. In defining a flowgate as a single transmission element or a group of transmission elements, I believe the team would be doing a great service to the industry by determining if one type of flowgate, single transmission element or group of transmission elements, is preferable. There is a concern that multi-facility flowgates provide less overall reliability (by their proxy nature) than single element flowgates. The team should also determine if and when it is appropriate to use proxy flowgates. Finally I believe "that Transfer Distribution Factors are used to approximate MW flow on a Flowgate… " is actually a second definition (Flowgate Impact). The information is useful but extraneous when defining what a flowgate is.
Response: Because the Western Interconnection does not use an IDC, the drafting team felt it should be removed from the definition. Flowgates can also be used in different types of load flow analysis not just in the IDC and therefore we felt a more general definition was			

Question #3			
Commenter	**Proposed**	**Already Approved**	**Comment**
warranted. Flowgates are not necessarily only a monitored element. The majority of monitored elements have a worst contingency that has the largest negative impact on the flows on that monitored element. When using flowgates to analyze a transmission system, instead of studying all contingencies for a monitored element, the worst contingency is coupled with the monitored element and is called a flowgate. That is why when defining a flowgate the flexibility is given to include “any associated contingency(ies)”. The Drafting Team feels the word contingencies is an industry accepted term that is defined in the NERC glossary as, “The unexpected failure or outage of a system component, such as a generator, transmission line, circuit breaker, switch or other electrical element.” By using the term “Any associated contingencies”, flexibility is given to allow a flowgate to be defined in such a way to keep the system reliable. The second sentence is not a definition of flow impact. It was intended to show how the MW impact of a power transfer can be applied to a flowgate. The Drafting Team now feels this second sentence is superfluous and has removed it.			
MISO			Neither – The proposed definition and NERC definition creates the impression that any set of transmission elements could be used to make up a flowgate resulting in inconsistencies in flowgate usage between selling transmission service and curtailing transmission service. "Flowgates are pre determined set of constraints on the transmission system that are expected to experience loading problems in real-time. " This should result in neighbouring transmission providers using consistent set of flowgates for evaluating transmission service. The requirements should address making this list of flowgates and their parameters transparent.
Response: The drafting team is strengthening the coordination and transparency in the standards referring to flowgates. The revised proposed standards do address the transparency of flowgates and their parameters and also addresses the coordination of flowgates.			

4. The drafting team believes that formal definitions are needed for the various time frames used in the standard. As a straw man, the drafting team would like to have industry comment on the proposed definitions below:

Operating Horizon — Time frames encompassing same-day and real-time periods.
Scheduling Horizon — Time frames encompassing the day-ahead period.
Operations Planning Horizon — Time frames beyond the Scheduling Horizon up to 13 months
Long-term Planning Horizon — Time frames beyond the Operations Planning Horizon

Do you think that the above terms need to be defined for use in this standard — and if you do, then do you agree with the proposed definitions?

☐ N/A — these terms do not need to be defined for use in this standard

☐ The terms do need to be defined and I do agree with the proposed definitions

☐ The terms do need to be defined but I don't agree with the proposed definitions

Summary Consideration:
There was no consensus on this issue and rather than define these terms, the drafting team defaulted to using the descriptive language and terms used by FERC in Order 890.

Question #4				
Commenter	**N/A**	**Do need to be defined and do agree.**	**Do need to be defined but don't agree.**	**Comment**
CAISO	☑			We do not agree but if there is a need to reference time periods in the requirements, they should be specified in the requirements themselves and not as universal terms due to the lack of specificity in these.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
Duke Energy	☑			Need to define the precise time periods in Operating Horizon and Scheduling Horizon (i.e. 12:00 midnight, etc.)
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
Entergy	☑			Time frames (real-time; same day; day-ahead; and from day-ahead up to 13 months) as included in the standard are clear. There is no need to define these terms in this standard as these may conflict with the intent of these terms used in other standards.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
IRC ISO-NE	☑			We do not agree but if there is a need to reference time periods in the requirements, they should be specified in the requirements themselves and not as universal terms due to the lack of specificity in these.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				

Question #4				
Commenter	**N/A**	**Do need to be defined and do agree.**	**Do need to be defined but don't agree.**	**Comment**
MidAmerican	☑			MidAmerican is unable to find any of these terms in the standard as it's currently drafted. If these terms are used in the standard, these terms should be revised to use 12 months or longer to refer to the long-term planning horizon and operations planning horizon for up to 12 months as used in other standards such as TPL-001 through TPL-004. To the extent these terms *are* used in the standard, we believe the resolution of this question should be deferred until the standard is redrafted to be compliant with order No. 890. If the proposed definitions are retained, it would appear that new definitions would be required for these terms: – day-ahead – real-time (Although this term is already defined in the NERC Glossary of Terms, the intent in MOD-001 may not match that existing definition.) – same-day – 13 months (This should be changed to 12 months to be consistent with the definition that is being clarified by TPL-001 through TPL-004.)
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
MISO	☑			These terms and frequency of calculations are business practices of each individual transmission provider. Defining these terms in the standard and only transmission providers using Network Response Method (AFC/ATC) calculations does not appear to be consistent with Order 890 requirements of consistency. The requirements should more along the lines of allowing each Transmission provider irrespective of the methodology used to make available business practices that describe the time horizons and frequency of calculations.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
NYISO	☑			

Question #4				
Commenter	**N/A**	**Do need to be defined and do agree.**	**Do need to be defined but don't agree.**	**Comment**
NCMPA		☑		Should the Scheduling Horizon be defined as "Time frames encompassing the *business* day-ahead period"? Most transmission customers schedule on Friday for Saturday, Sunday and Monday deliveries. Also, some transmission provider OASIS business practices recognize business days rather than calendar days. (e.g. Some TPs sell non-firm hourly transmission after noon for the next business day, which on Friday includes Saturday, Sunday and Monday.)
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
WECC ATC Team		☑		These definitions do not agree with the definitions identified in Order 890 (see P323) as follows: Operating Horizon – day ahead and pre-schedule Scheduling Horizon – same day and real-time Planning Horizon – beyond the operating horizon The fact that FERC and NERC do not agree on the definition of these terms confirms the need to formalize the definition.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
FRCC		☑		Requirement R11.5 should use the term " Long-term planning horizon" as defined above rather than " for use in the 13 months and longer time frame".
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
HQT		☑		Considerations should be made for the transition from the Scheduling and the operating. Exemple transition is performed each day at 16:00
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
ODEC		☑		
IESO		☑		
KCPL		☑		
AECI		☑		
BPA		☑		
APPA			☑	This Standard does not need to redefine what the planners and operators

Question #4				
Commenter	**N/A**	**Do need to be defined and do agree.**	**Do need to be defined but don't agree.**	**Comment**
				of the BES has already defined. The Regions, Reliability Coordinator, Planners and Transmission Operators have established what is the Planning Horizons (T >= 1 Year) and Operating Horizon (T< 1 Year).
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
APS			☑	To avoid confusion and future problems, the terms definitions should be consistent with Order 890. In which case, Operations and Long-Term Planning Horizons would not be broken out, rather would simply be "Planning Horizon."
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
ERCOT			☑	I am concerned that there may be multiple efforts underway on various SARs and Standards as well as the Operating Limit Definition Task Force that may be using variations of this concept. I do agree that a uniform understanding and set of terms for these timeframes would be useful and may help to avoid contradictions and confusion, but I am uncertain whether this standard is the place for this to be decided. They should not be offered as "definitions", which I understand the standards development process requires to become a part of the NERC Glossary. Perhaps the standard should clarify what is meant for the purposes of this standard, but it should not be proposed as official "definitions" which must apply in all standards. In general, I believe that all of the horizons listed, with the exception of the "Scheduling Horizon" exist with some consistency of understanding (although not always with exactly the same durations specified). The Operations Planning "horizon" is typically discussed as representing from Real-Time through Day-Ahead and on up to one year. The "Planning Horizon" is typically discussed as representing one year and longer; this would correspond closely, but not exactly with the "Long-term Planning Horizon" proposed above. Some difficulty arises because many of the differing contractual agreements, organizational arrangements, and market rules define these terms differently at different locations. This may be true even for such arrangements which cross Regions or even Interconnections.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				

Question #4				
Commenter	N/A	Do need to be defined and do agree.	Do need to be defined but don't agree.	Comment
Grant County PUD			☑	I would avoid the need to create more defined terms. Long lists of defined terms cause confusion and misunderstanding. Perhaps a simpler solution would be to use the term in the text, explain it there when it is first introduced, and then continue to use the term. This makes the document a little easier to read, and keeps the definition in context. It is my experience that in the effort to create a good document, we write at a level that is above many readers comprehension level.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
Manitoba Hydro			☑	In the Operations Planning Horizon, I believe that the word "up" should be removed. It is important to coordinate the length of the Horizons. This will allow all transmission providers to use similar assumptions when studying congestion on flowgates.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
ITC Transco			☑	For bettor or for worse, the Standards are now using violation mitigation time horizons. These include time horizons for "Long Term Planning," "Operations Planning," "Same Day Operations," "Real-Time Operations," and "Operations Assessment." The Transmission Planning Standards (notably TPL-001 through -004) have also had a near-term and a longer-term planning horizon to further segment the Long-term Planning Horizon. Rather that create yet another set of time horizons for this standard, NERC should consider standardizing the time horizons, or at least re-using some of them when they could suffice for a particular scenario. In this instance, it appears that the time horizons for MOD-001 could be made to work with the Time Horizons for violation mitigation with only a little bit of tweaking.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
MRO			☑	These terms should be used consistently across the standards and inserted in the NERC glossary. Having individual definitions in an individual standard will only lead to confusion. The Operations Planning Horizon should be less than one year. Other NERC standards such as TPL-001 through TPL-004 are established assuming that one year or more falls into the Long-term Planning Horizon.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
Progress Energy			☑	Differentiating between the Operating and Scheduling Horizons is unnecessary; There should only be one term for real time, current day, and next day operating periods. We would like to see "Operations" refer to

Question #4				
Commenter	**N/A**	**Do need to be defined and do agree.**	**Do need to be defined but don't agree.**	**Comment**
				real time, today, and next day. "Operations Planning Horizon" should be changed to "Near-Term Planning Horizon".
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
Southern			☑	Scheduling and Operating definitions need to be swapped. These are defined in Order 890 paragraph 323.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				
SPP			☑	We think terms need to be defined however they should be more general to allow for regional differences.
Response: At this point in time, the SDT has elected to use the horizons defined in order 890.				

5. Do you agree with the remaining definition of terms used in the proposed standard? If not, please explain which terms need refinement and how.

Summary Consideration:
Most commenters suggested that the following terms need improved definitions and rather than try and obtain consensus on new definitions, the drafting team has elected to eliminate these as 'defined' terms:

- Rated System Path Method
- Network Response Method
- Existing Transmission Commitments

No changes were made to the following proposed definitions:

- Available Flowgate Capability (AFC
- Flowgate
- Total Flowgate Capability (TFC)
- Transmission Reservation
- Transmission Service Request

<table>
<tr><th colspan="4">Question #5</th></tr>
<tr><th>Commenter</th><th>Agree</th><th>Disagree</th><th>Comment</th></tr>
<tr><td>ERCOT</td><td></td><td></td><td>ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.</td></tr>
<tr><td colspan="4">Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.

As such, we suggest that ERCOT consider this as a possible avenue for further exploration.</td></tr>
<tr><td>APPA</td><td></td><td>☑</td><td>This Standard Drafting Team should not try to define terms that have been used by planners, operators, and Reliability Coordinators for many years. The terms Rated System Path (RSP) Method and Network Response (NR) Method have already been defined or described in many white papers for operators and planners. Why is the following an incorrect statement; "The method (RSP, NR, or Flowgate) will be determined by the method that the planners and operators use for that part of the Bulk Electric System."</td></tr>
<tr><td colspan="4">Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.</td></tr>
</table>

Question #5			
Commenter	**Agree**	**Disagree**	**Comment**
BPA		☑	The definition of Network Response Method does not convey any substantive characteristics that describe what it is, or how to distinguish the method from the Rated System Path Method. The definition for Rated System Path likewise is insufficiently described and appears to merely describe a method that relies on a calculation of TTC for one or more paths. Since both methods appear to be based on the same formula (ATC/AFC = TTC/TFC-ETC-TRM-CBM), it is unclear what the substantive distinction is between the two methods. The Long-Term AFC/ATC Task Force April 14, 2005 report did not suggest that there were two fundamentally different methodological approaches to determining ATC. BPA recommends that the NERC ATC drafting team defer any efforts to refine the definitions of Rated System Path Method and Network Response Method until the standard requirements for calculating TFC, TRM, CBM and ETC are developed.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
KCPL		☑	Available Flowgate Capacity: The definition should end at "Existing Transmission Commitments". If "retail customer service" should be included in ETC, then it should be in the definition and subsequent reliability standards for the development of ETC.
Response: The drafting team is not going to pursue definitions for 'Available Flowgate Capability' and 'Existing Transmission Commitments.'			
MISO		☑	The definitions do not include TTC and ATC. All definitions related to this standard should be in a single place (TFC and AFC are defined). The Rated System Path method and the Network Response Method are both approaches for facilitating the processing of Transmission Service Request and need to be measured against similar requirements.
Response: The ATC data exchange requirements are in the next version of the standards and clarify the difference. There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms. Note that TTC and ATC are already defined and are in the NERC Glossary of Reliability Terms.			
Duke Energy		☑	The definitions of Network Response Method and Rated System Path Method are too vague.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
Entergy		☑	Definitions of Network Response Method and Rated System Path Method are not clear. It is not clear what is meant by "…customer Demand, generation resources, and the Transmission systems are closely interconnected" in Network Response Method, as they are always closely interconnected. This definition does not reflect that the Transfer Capability is calculated using response of the system or by simulating the impact of flows on the system. The Rated System Path Method appears to be using only the critical path

Question #5			
Commenter	**Agree**	**Disagree**	**Comment**
			ratings. It is not clear how critical paths are determined and what ratings are used for those. Since there is no difference in calculation of ATCs by either Network Response Method or Rated System Path Method, there does not seem to be any need for including the definition in this standard. If these definitions are applicable only for TTC calculations, these terms should be defined and included in standard dealing with TTC (FAC-012). If included in FAC-012, these definitions should reflect clearly how calculations are performed under each method.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
MRO		☑	a. The definition for AFC and ETC does not specifically refer to market flows. Are these considered a part of ETC or are they not to be included in the calculation of AFC? Please clarify where these are to be dealt with in the calculations. b. There is no specific reference to confirmed or non-confirmed transmission reservations in either AFC or ETC. Are these to be included in ETC? Please clarify the definitions in regard to such reservations.
Response: The requirements for ETC are embedded in the three standards that include the details for three different methods for calculating ATC (MOD-028, MOD-029 and MOD-030). The drafting team is not going to pursue a definition 'Existing Transmission Commitments.' The revised standards include more specific requirements for constraints in determining ETC and contain much more explicit requirements for determining AFC.			
Grant County PUD		☑	I have no problems with the definitions themselves. I do stress again to avoid long lists of defined terms, since they make the document more difficult to read, and comprehend. One other point would be that if these terms are used in other standards, they could be defined slightly different causing confusion.
Response: There wasn't consensus on most of the proposed definitions, and the drafting team eliminated most of these.			
Progress Energy		☑	The definition of ETC should include the phrase "including retail customer service" and then that parenthetical should be removed from the definition of ATC; Clarification is needed for the Network Response Method and Rated System Path Method to reconcile with the 1995 and 1996 documents.
Response: Retail customer service is included in Native Load uses. There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
Southern		☑	Define network response and rated system path method more implicit (wording and intent) to the methods of ATC and AFC. Look more to the explanations in the 96 documents (pp15). The present definitions for Network Response Method and Rated System Path Method are unclear and do not adequately describe the three methods in the standard. Throughout the document, the three methods are Rated System Path Method, Network Response ATC Method and Network Response AFC Method. The two terms were taken from the 1996 document. Network Response Method that is described in that document appears to reflect the AFC process. A suggestion would be to used the Network

Question #5			
Commenter	**Agree**	**Disagree**	**Comment**
			Response Method for the AFC process and the Area Interchange Method (1995 document) for the ATC process.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
WECC ATC Team		☑	The Network Response Method definition needs clarity and a stronger description. The NERC Team indicates in Q7 that there is a difference between the Network Response Methodology-ATC and Network Response Methodology-AFC that is not yet apparent. If this is correct, a separate free standing definition would be warranted for each of the methodologies.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
SCE&G and SERC ATCWG		☑	Clarification is needed for the Network Response Method and Rated System Path Method to reconcile with the 1995 and 1996 documents. As example, R1 is confusing using the definitions as stated in current draft. NRM has been applied to two separate calculations (FCITC and AFC). In R1, add "not used for AFC" following "Network Response Methodology" in the parenthetical.
Response: There was no consensus on the proposed definitions for Rated System Path and Network Response and the drafting team will not try to include these as defined terms.			
ODEC		☑	
CAISO IRC ISO-NE SPP	☑		Remaining definitions: AFC, Network Response Method, Rated System Path Method, TFC, Transmission Reservation are OK.
Response: Many stakeholders disagreed with the proposed definitions for AFC, Network Response Method, Rated System Path Method and			
MidAmerican	☑		The AFC definition is acceptable, but the equation in R4 does not match the definition. The equation in R4 should read: AFC = TFC – TRM – CBM – ETC
Response: The revised standard that addresses AFC (MOD-030) does not include any formal equations. Here is one of the requirements being proposed in the set of standards to address ATC – the new requirements are much more explicit: The Transmission Service Provider shall calculate Firm AFC by reducing the TFC by the sum of the firm Existing Transmission Commitments (ETCs), the Capacity Benefit Margin (CBM), and the Transmission Reliability Margin (TRM) allocated to the Flowgate.			
HQT	☑		
IESO	☑		

Question #5			
Commenter	**Agree**	**Disagree**	**Comment**
ITC Transco	☑		
Manitoba Hydro	☑		
FRCC	☑		
AECI	☑		
APS	☑		
NPCC CP9	☑		
NYISO	☑		

6. The proposed standard assigns all requirements for developing ATC and AFC methodologies and values to the Transmission Service Provider. Do you agree with this? If not, please explain why.

Summary Consideration: Most commenters seemed to agree. The group will look at ensuring compliance is measurable, as well as consider overall coordination and review requirements. MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC.

Question #6			
Commenter	**Yes**	**No**	**Comment**
APPA		☑	As written the Standard is unclear and could not be audited for compliance. Numerous requirements have been omitted or written so incomplete that it is uncertain what a Transmission Service Provider is to do to provide a accurate ATC/AFC that is consistent with other TSPs. Requirements listed in MOD-001, particularly for flowgate, are the responsibility of the planners and operators for determining transfer capability. Many of the requirements, particularly for Flowgate are rules for determining ETC, not posting ATC values.
Response: The drafting team recognizes these concerns, and will endeavor to ensure that compliance can be addressed as the compliance elements are written.			
ERCOT		☑	The transmission service provider seems appropriate, however, there is need for a broader oversight or review to coordinate. Without such an "umbrella" there is likely to be differing values calculated by different transmission service providers for the same parts of the transmission system.
Response: To improve the accuracy of the values calculated, this standard requires the Transmission Service Provider to share and/or coordinate the data used to determine ATC and AFC with other TSPs and affected entities. However, even with this level of coordination, the calculated values for ATC and AFC can inherently be different between TSPs due to the differing of inputs (i.e. transmission service that is sold).			
Progress Energy		☑	The standard should assign all requirements for developing ATC to the TSP ; AFC is just an engine. But "YES", the TSP, regardless of the engine and/or inputs it uses, should be responsible for developing its ATC methodology.
Response: MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. In MOD-030, there are requirements to convert AFC to ATC.			
Entergy	☑		Since ATC and AFC calculations are performed for selling the Transmission Service (Capability) to customers based on the Open Access Transmission Tariff which is administered by the Transmission Service Provider, it makes sense to assign requirements for ATC and AFC calculations to Transmission Service Providers.
Response: Agreed.			
MISO	☑		The standard is very generic for the ATC methodology/rated system path method. The standard does not provide for transparent and consistent computation of ETC which is the biggest driver in ATC/AFC calculations. To address the Order 890 requirements of consistency and transparency, the standard

Question #6			
Commenter	**Yes**	**No**	**Comment**
			needs to be methodology neutral.
Response: MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. In MOD-030, there are requirements to convert AFC to ATC. MOD-029 contains requirements for the Rated System Path method of determining ATC and also includes related requirements for ETC. The modifications are aimed at meeting stakeholder comments as well as the directives in Order 890.			
FRCC	☑		The B.A. and LSE should have obligations to provide the information in R6 i.e. dispatch order, forecasted loads, etc that are applicable.
Response: These supporting tasks are at a much lower level than the level envisioned in this set of proposed standards. The revised proposed set of standards for calculating ATC do not contain any requirements for the BA or LSE.			
Grant County PUD	☑		This is consistent with the Functional Model.
Response: Agreed.			
ODEC	☑		Transmission Provider should be calculating the ATC and AFC by following details standards from NERC/NAESB on how to perform this task.
Response: MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. NAESB is working on associated business practices that include tasks such as posting documents.			
AECI	☑		
APS	☑		
BPA	☑		
CAISO	☑		
Duke Energy	☑		
HQT	☑		
IESO	☑		
IRC	☑		
ISO-NE	☑		
ITC Transco	☑		
KCPL	☑		
Manitoba Hydro	☑		

Question #6			
Commenter	**Yes**	**No**	**Comment**
MidAmerican	☑		
MRO	☑		
NCMPA	☑		
NPCC CP9	☑		
NYISO	☑		
Southern	☑		
SPP	☑		
WECC ATC Team	☑		

7. In Requirements 1 and 4, the standard drafting team has identified three methodologies in which the ATC and AFC are calculated (Rated System Path — ATC, Network Response — ATC and Network Response — AFC, methodologies). Should the drafting team consider other methodologies? (Note that the difference between the Rated System Path methodology for calculating ATC and the Network Response methodology for calculating ATC use identical equations, but there are distinct differences between these methodologies that will become more clear when the drafting team issues its proposed changes to the standards that address Total Transfer Capability or Transfer Capability.) Please explain.

Summary Consideration: The team recognizes that there are questions and concerns regarding this question. MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. This division of methodologies is supported by the language in FERC Order 693.

<table>
<tr><th colspan="4">Question #7</th></tr>
<tr><th>Commenter</th><th>Yes</th><th>No</th><th>Comment</th></tr>
<tr><td>ERCOT</td><td></td><td></td><td>ERCOT does not use these values in its operations.</td></tr>
<tr><td colspan="4">Response: Agreed. However, if ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.

As such, we suggest that ERCOT consider this as a possible avenue for further exploration.</td></tr>
<tr><td>PG&E</td><td></td><td></td><td>More detail on each of the methodology is needed for meaningful comment. I look forward to more information.</td></tr>
<tr><td colspan="4">Response: Please see the revised set of ATC-related standards.</td></tr>
<tr><td>APPA</td><td></td><td>☑</td><td>1. A Transmission Service Provider (TSP) function will only sell excess transmission capacity and not determine what methodology that is used to plan and operate the BES. How would a TSP come up with a different method when it is the planners and operators that determine a method?
2. Requirements 1 and 4 do not address the formula for determining non-firm ATC;
3. does not address if TSP is Monthly, Daily, or Hourly in Requirement 1;
4. and does not address how many values of Monthly Daily, and Hourly ATC should be posted.
5. In addition, Requirement 4 does not address how the TSP will determine an ATC from the AFC calculations? How will these be handled?</td></tr>
<tr><td colspan="4">Response: 1. The team recognizes this concern, and revised the standard to clarify that the TSP must 'agree upon' the method with its Planning Coordinator and Reliability Coordinator.
2. Please see the revised standards for ATC – they do include requirements to differentiate between calculations for 'firm' and 'non-firm' ATC as proposed.</td></tr>
</table>

Question #7			
Commenter	Yes	No	Comment
3. Please see the revised standards for ATC- the revised standards to provide specificity regarding the frequency for calculating ATC. 4. Posting of ATC values is handled by NAESB. 5. Please see the proposed standard that addresses AFC (MOD-030) – this standard does include requirements that address converting AFC to ATC.			
CAISO		☑	We think those are the common used methodologies, we don't know of any others that are widely used. However, we do not understand why AFC calculation must be tied with the Network Response methodology. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates themselves could become the Rated Paths. Hence, we question the need for the qualifying statement – "using a Network Response Methodology" in parentheses, after "calculates AFC" in each of R4, R5 and R6.
Response: The intent of the AFC approach was to describe how a single request can impact multiple posted ATC values. Since a request made to a TSP using the Rated System Path methodology would only impact one posted ATC value, it does not make sense to associate the AFC with the Rated System Path methodology			
Entergy		☑	There does not appear to be any difference for ATC calculations for Network Response Method and Rated System Path Method, therefore for the purpose of ATC calculations it does not matter how TTCs are calculated. If the difference will become clear in the TTC calculation method standard, then these definitions and methodologies should be included in that standard (FAC-012) and removed from this standard. There are clearly two methods of Transmission Capability calculations, ATC method and AFC method and only these should be included in the current standard.
Response: Agree. Please see the revised set of ATC standards – the requirements for calculating ATC using the Network Response Method are in MOD-028 – and the requirements for calculating ATC using the Rated System Path method are in MOD-029. Each of these standards contains much more detail in calculating ATC and no longer use 'formulas.'			
FRCC		☑	The standard should allow a Transmission Provider flexibility to use different methodologies depending on seam and other factors.
Response: A TSP should be allowed to use more than one ATC approach so long as the same approach is utilized consistently for all customers on a given POR-POD path for a specific time horizon. This is stated more clearly in the revised MOD-001.			
Grant County PUD		☑	However, the standard should be written in a way that if there are other methodologies, now or in the future, they could somehow be accomodated. This thought is based on the concept that the new methodology is defensible.
Response: The inclusion of any methodologies that are not identified in the final set of ATC standards must occur through the NERC standard development process.			
IRC		☑	We think those are the common used methodologies, we don't know of any others that are widely used. However, we do not understand why AFC calculation must be tied with the Network Response methodology. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates themselves could become the Rated Paths. Hence, we question the need for the qualifying statement – "using a Network Response Methodology" in parentheses, after "calculates AFC" in each of R4, R5 and R6.
Response: The intent of the AFC approach was to describe how a single request can impact multiple posted ATC values. Since a request made to a TSP using			

Question #7			
Commenter	**Yes**	**No**	**Comment**
the Rated System Path methodology would only impact one posted ATC value, it does not make sense to associate the AFC with the Rated System Path methodology			
ISO-NE		☑	We think those are the common used methodologies, we don't know of any others that are widely used. However, we do not understand why AFC calculation must be tied with the Network Response methodology. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates themselves could become the Rated Paths. Hence, we question the need for the qualifying statement – "using a Network Response Methodology" in parentheses, after "calculates AFC" in each of R4, R5 and R6.
Response: The intent of the AFC approach was to describe how a single request can impact multiple posted ATC values. Since a request made to a TSP using the Rated System Path methodology would only impact one posted ATC value, it does not make sense to associate the AFC with the Rated System Path methodology			
Manitoba Hydro		☑	think it is of paramount importance that only one methodology is used within an interconnection (i.e. the east and the west can use different methodologies but within each interconnection should only use one methodology). My reasoning for this is is tied to consistent assumptions. Each transmission privider will develop and study flowgates using a single methodology. If a neighbouring transmission provider is studying inpacts on that flowgate using a different set of assumptions or methodolgy then reliability would be inpacted.
Response: The drafting team has recognized two fundamentally different approaches to calculating ATC and believes these two approaches can be used in a reliable manner within the same interconnection.			
NYISO		☑	We think those are the common used methodologies, we don't know of any others that are widely used. However, we do not understand why AFC calculation must be tied with the Network Response methodology. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates themselves could become the Rated Paths. Hence, we question the need for the qualifying statement – "using a Network Response Methodology" in parentheses, after "calculates AFC" in each of R4, R5 and R6. The NYISO is concerned that the requirements identified in the standard may becoming to much of a 'how' vs. a 'what' needs to be done for reliability. The drafting team may not be able to satisfy all TSP and their associated Market Design requirements.
Response: The intent of the AFC approach was to describe how a single request can impact multiple posted ATC values. Since a request made to a TSP using the Rated System Path methodology would only impact one posted ATC value, it does not make sense to associate the AFC with the Rated System Path methodology			
ODEC		☑	These three are enough… It would be preferable to have only one for standardization across the NERC footprint.
Response: The drafting team has recognized two fundamentally different approaches to calculating ATC and believes these two approaches can be used in a reliable manner within the same interconnection.			
Southern		☑	1. As discussed in ETC definition, ETC as currently defined is not applicable to the ATC calculation. 2. ETC should be replaced by firm and non-firm interface usage. 3. Also, ATC should be expanded into separate firm and non-firm ATC calculations. 4. Internal native load serving uses are not a component of ATC.

Question #7			
Commenter	**Yes**	**No**	**Comment**
			5. Non-firm ATC should reflect that CBM (and often TRM) are not deducted and also should reflect the postback of unscheduled service. 6. Some discussion of adjustments for redirected service in interface usage amounts should be included. 7. Indication of whether TTC values reflect simultaneous or non-simultaneous values should also be included. 8. AFC should be expanded into separate firm and non-firm AFC calculations. 9. Non-firm AFC should reflect that CBM (and often TRM) are not deducted and also should reflect the postback of unscheduled service. 10. The formula seems to indicate TRM and CBM are MW values. Some TPs address TRM by derating TFC values by a percentage, such as 5%. Some discussion of this practice or alternate formulas for AFC for those utilizing this practice should be included. The alternate approach should include discussion of how TFC values are affected for both firm and non-firm AFC. 11. The formula does not include how counterflows are treated. 12. Since TFC is similar to a facility rating, not a (n-1) transfer analysis, the impacts of counterflows must be considered in calculating AFC and are therefore appropriate in an AFC calculation. 13. Similarly, some discussion should be included of how inadvertent flows from neighboring areas (loop flows) are considered. 14. An additional formula should be modified will be required to include the calculation of ATC from AFC. 15. Some discussion of what rating is used for TFC (static, Rate A, Rate B, ambient adjusted, etc.) is used in which horizons should be included.
Response: 1,2,6: Please see the detailed requirements relative to ETC in the proposed MOD-028, MOD-029 and MOD-030. The new requirements support the FERC directives relative to ETC. 3,5,8,9 :Please see the detailed requirements relative to the calculation of ATC and AFC in MOD-028, MOD-029 and MOD-030. The new requirements are much more explicit than those in the first draft of MOD-001. 4: Internal native load is not directly a component of ATC, but should be considered as part of ETC. 7: Please review the new set of proposed standards and let us know if you still feel that this distinction is necessary.			
SPP		☑	We think those are the common used methodologies, we don't know of any others.
Response: Agree.			
WECC ATC Team		☑	For purposes of MOD-01, the WECC Team does not believe the standing NERC / NAESB ATC Drafting Team should entertain any additional methodologies. Preclusion at this stage does not foreclose the future use of the NERC SAR process should a more efficacious approach arise from within the industry.
Response: Agree.			
BPA		☑	
APS		☑	
Duke Energy		☑	
KCPL		☑	
IESO	☑	☑	We are not suggesting that the SDT consider other methodologies. However, we do not understand why AFC calculation must be tied with the Network Response methodology only. Use of Flowgate, and determining TFC and calculating AFC on the identified Flowgates can be applied to the Rated System Path methodology as well. In this case, the Flowgates

Question #7			
Commenter	**Yes**	**No**	**Comment**
			themselves could become the Rated Paths. Hence, we question the need for the qualifying statement – "using a Network Response Methodology" in parentheses, after "calculates AFC" in each of the requirements R4, R5 and R6.
Response: The intent of the AFC approach was to describe how a single request can impact multiple posted ATC values. Since a request made to a TSP using the Rated System Path methodology would only impact one posted ATC value, it does not make sense to associate the AFC with the Rated System Path methodology			
MidAmerican	☑	☑	It should require that each of the three methodologies be standardized such that any provider utilizing that methodology can duplicate the results from the input data.
Response: It is the intent of the Drafting Team to ensure enough information is provided regarding the ATC calculations that this is possible.			
HQT	☑		1. R5, R6, R7 Companion's requirements for Rated system path are not specified 2. R1 requires that TTC/TFC be calculate first then ATC/AFC : TTC/TFC - TRM-CBM-ETC. The TSP shall have the possibility to calcualte available Incremental ATC (IATC) ATC/AFC first based on ETC than TTC/TFC should equal: TTC = IATC+ETC. 3. R9 TSP methodology shall be consistently tied with the "path" and TSP may use different set of assumptions pending the time frame for which the TTC,ATC, etc are calculated
Response: 1. The requirements R5, R6 and R7 are not required to perform the ATC calculation associated with the Rated System Path methodology. (Note that the original MOD-001 has now been subdivided and expanded – the requirements for calculating ATC using the Rated System Path method are now in MOD-029) 2. Please see the revised set of standards – these contain much more detail on these calculations. 3. Please see the revised set of standards - the Rated System Path methodology for calculating ATC is addressed in MOD-029 in much more detail than originally proposed. Each of the three new standards contains its own set of requirements – and there are variations as you proposed.			
ITC Transco	☑		The drafting team should consider other methodologies if they are aware of any entities using another methodology and achieving reliable results.
Response: Based on FERC directives, the Drafting Team was given the objective to minimize the number of methodologies utilized in the industry to promote consistency. If there are other methodologies successfully utilized in the industry, those entities are responsible to bring them to the NERC Drafting Team for consideration during this drafting process.			
MISO	☑		Same comment as previously; to address the Order 890 requirements of consistency and transparency, the standard needs to be methodology neutral.
Response: The MOD's need to be methodology specific, and more details are included in the revised set of standards. The exchange of data among TSPs should be consistent and is addressed in the revised MOD-001.			
MRO	☑		Contract Path Methodology should be considered.
Response: Please review the proposed standard for 'Rated System Path'.			
Progress Energy	☑		All methodologies that are used to calculate ATC should be included in this standard.
Response: Based on FERC directives, the Drafting Team was given the objective to minimize the number of methodologies utilized in the industry to promote consistency. If there are other methodologies successfully utilized in the industry, those entities are responsible to bring them to the NERC Drafting Team for consideration during this drafting process.			
AECI	☑		

8. In Requirement 2, the Transmission Service Provide that calculates ATC is required to recalculate ATC when there is a change to one of the values used to calculate ATC-TTC, TRM, CBM or ETC. When TTC, TRM, CBM or ETC changes, how much time should the Transmission Service Provider have to perform its recalculation of ATC?

Summary Consideration: There was no consensus on this issue. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.

<table>
<tr><th colspan="2">Question #8</th></tr>
<tr><th>Commenter</th><th>Comment</th></tr>
<tr><td>APPA</td><td>This will depend on if you are talking about Monthly, Daily, or Hourly ATC. If you are talking about Hourly ATC the change will need to be made quickly; however, if the ETC for Monthly changes the need to repost is not so important since the need for the Transmission capacity is much further into the future.</td></tr>
<tr><td colspan="2">Response: Agree.</td></tr>
<tr><td>APS</td><td>The Transmission Service Provider should have no more than an hour to perform its recalculation of ATC. In the west, the clock should only start after it is determined that the TTC needs changing.</td></tr>
<tr><td colspan="2">Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.</td></tr>
<tr><td>BPA</td><td>The transmission service provider should recalculate ATC contemporaneously with any formal changes in TTC, TRM or CBM. The transmission provider should recalculate ATC immediately upon any event that changes ETC in the Operating Horizon and scheduling horizon. The transmission provider should recalculate ATC within two business days of any changes in ETC that affect the Operations Planning Horizon or beyond.</td></tr>
<tr><td colspan="2">Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.</td></tr>
<tr><td>Entergy</td><td>Calculation and posting of ATC for Constrained Path is included in FERC Order 889 section 37.6(3)(i)(C)(2) as "The capability posted ……… must be updated when transactions are reserved or service ends or whenever the TTC estimate for the Path changes by more than 10 percent. Calculations and posting of ATC for Unconstrained Paths are included in FERC Order 889 section 37.6(3)(ii)(A) as " ….These postings are to be updated whenever the ATC value changes for more than 20 percent. " Therefore, calculation of ATC values on all paths when any of the components changes may not be required. If the ATC is recalculated and not posted it does not do any good. Timing of Posting on OASIS should determine when the ATC and AFC values should be recalculated. Since these timing requirements will be included in NAESB Business Practice Standard there is no need for a requirement R2 in MOD-001 for recalculation of ATC values.</td></tr>
<tr><td colspan="2">Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.</td></tr>
<tr><td>ERCOT</td><td>ERCOT does not have a transmission service market and does not use this methodology.</td></tr>
<tr><td colspan="2">Response: Agreed. However, if ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits</td></tr>
</table>

Question #8	
Commenter	**Comment**
one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.	
FRCC	The amount of time needs to correlate with the product and the timeframe effected. For example, an ETC change in future month 8 the length of time to update the posting should be days. If a line trips changing the TTC for the next day then the length of time to update should be hours.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
Grant County PUD	Specifying a time is difficult, since it is arbitrary. If the process is automated, it could be immediately. If it is manual, more time is needed. If extensive study is needed, it could take some time, especially if it has to be coordinated with another TSP. It should be as soon as reasonably practicable.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
HQT	Will depend on the Time Frame.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
IESO	No more than 1 hour.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
SPP	We think one day is reasonable in case TTC, TRM or CBM changes. If ETC changes re-calculation should be done within 1 of 2 hours. TTC typically only changes with upgrade of the flow gate element. TRM values change when the TP re-calculates the TRM values, twice a year or something like that. So TTC and TRM don't change on a daily basis, more on a Seasonal Basis. It can take SAS 70 related Change Control Approvals to get the values changed in the AFC databases. Getting approvals can take an hour or more if it is defined as an Emergency Change. After adding the new values to the AFC databases, it can take an hour or more before all Horizons are updated in Oasis Automation. The EMS AFC Calculator has to re-run all hours and days of the Horizons and that takes a little more than an hour. So starting from the time a new TRM or TTC value is submitted to TP, it can take a few hours before it is in Oasis and Oasis Automation. Also in many cases the Transmission owner doesn't immediately inform the TP of an upgrade the minute it happens, most of time a few days later. So it is in general not considered critical to immediately update the ATC and AFC values when TTC or TRM changes.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
IRC ISO-NE	We think one day is reasonable in case of TTC, TRM or CBM changes. If ETC changes, then re-calculation should be done within 1 or 2 hours.

Question #8	
Commenter	**Comment**
NYISO CAISO	
Response: It is not clear why you should differentiate the reason for the change in ATC, but rather that a change in ATC has occurred. The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
KCPL	Recalculation of ATC may be in the OATT agreements and is not needed here.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
Manitoba Hydro	In an automated system, why wouldn't this be immediately (or as soon as the information is loaded into the system that calculates ATC/AFC.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
MidAmerican	The timing requirements of R2 should be the same as the timing requirements of R7.
Response: In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
MISO	The calculation frequency should be the same regardless of the calculation methodology.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
MRO	Once the TSP is aware that something has changed, then the TSP has to determine what changes in the components are appropriate via analysis which is often times off-line, then changes are perhaps incorporated into an automatic process for ATC postings. From the question it is the MRO's opinion that the Drafting Team is interested in getting a reading on the time required to post a change in ATCs once the amount of component change is determined. The entire process from the time that it is clear that a component needs to be changed to when new ATCs are posted typically takes two weeks. The time once the changes in the components are determined is typically a one day process. It is presumed that the latter time frame is the time frame in which the Drafting Team is interested.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
ODEC	It needs to be a short time, but reasonable to meet for the TSP. I would say 15 minutes or less.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
Progress Energy	For ATC calculations and posting of next-hour up through the next 14 days, the TSP should be given one hour to recalculate it's ATC and then it should post the new value as soon as practicable. For all longer term ATC calculations (e.g. 15 days out and further), ATC calculations and posting should have more time.
Response: The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
Southern	We agree with this requirement for ATC. We do not agree that TTC should be recalculated whenever a parameter

Question #8	
Commenter	**Comment**
	changes.
Response: This question is related to timing of recalculation of ATC. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	
WECC ATC Team	The WECC Team concurs that ATC should be recalculated anytime there is a change to any of the ATC variables. However, once the ATC is recalculated, the periodicity of posting the ATC is a business practice that should be deferred to NAESB.
Response: Agree. The frequency of updates should be consistent, regardless of methodology. In the revised MOD-001, the drafting team provided a minimum frequency for recalculating ATC without focusing on 'changes to inputs'.	

9. Do agree you with the frequency of exchanging data as specified Requirement 6?

Summary Consideration: There was no consensus on the appropriate frequency for exchanging data. One of the goals of this standard is to significantly increase the coordination between all Transmission Service Providers. Sharing data between providers is one of the keys to make this happen. If any transmission provider feels it should have data from one of its neighbors, the neighboring TSP should make all efforts to share this data with a frequency that makes the data useful.
The drafting team modified the data sharing requirement to clarify that the **all** TSPs must share data, not just those TSPs that are using the AFC methodology, but did not include a specific time constraint for this exchange. Additional specificity on timing of the data to be exchanged may be included in future drafts.

Question #9			
Commenter	**Yes**	**No**	**Comment**
APS			Not applicable.
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
Duke Energy			Frequency should be as agreed upon or 30 days.
Response: Exchanging hourly AFC values every 30 days doesn't seem to make much sense. Some data needs to be provided at a more frequent interval.			
WECC ATC Team			The question is specific to entities using the AFC methodology and should be reserved for comment by those entities.
Response: All entities are encouraged to provide comments that will assist the drafting team in developing this standard. Many entities that don't use an AFC methodology may be impacted by that methodology.			
BPA		☑	Requirement 6 appears to only apply to a transmission service provider that calculates AFC. BPA declines comment on this provision until such time as the distinction between the various methods becomes more clear. (see response to question #5.)
Response: All entities are encouraged to provide comments that will assist the drafting team in developing this standard. Many entities that don't use an AFC methodology may be impacted by that methodology.			
Entergy		☑	A limit of 7 days does not appear real. The Data Exchange should be on an agreed upon schedule as some data like line and generation outages, if exchanged within 7 days may not be of any use for calculations of real time or day ahead ATCs and AFCs. Since the data is exchanged for coordinating

Question #9			
Commenter	**Yes**	**No**	**Comment**
			ATCs and AFCs it should be left to the entities that need this information to develop frequency of daa exchange rather than this standard putting some upper limit. In addition, current Requirement 6 applies only to Transmission Service Providers using AFC Method. Data need to be exchanged for ATC calculation also for coordination with the neighboring systems. Several items in Requirement 6 are applicable to ATC calculation such as TTC, ETC etc. This is especially true if a Transmission Provider is using a Network Response Method for calculation of ATC values.
Response: Your comments are very valid. The requirement has been reworded to include all TSPs that use any method of calculating ATC and the list of data to be exchanged between TSPs is identical..			
FRCC		☑	General requirement of (7) calendar days referenced in general requirement R6 is inconsistent with the individual requirements contained in R6.1.-r6.10 which often reference specific time frames example R6.10 says " when revised once per hour" or R6.2 that states " as changes occur."
Response: Your comments are very valid. The requirement has been reworded to include all TSPs that use any method of calculating ATC and the list of data to be exchanged between TSPs is identical. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
ISO-NE		☑	While the seven days timeframe may be appropriate, the requirement's lack of specificity for the start of this timeframe (i.e. Before changes, after a change, after seven days from an agreement) is confusing. Is "as agreed upon" acceptable if it is greater than every seven days?
Response: Your comment is very valid. The reference to 7 days was confusing and has been omitted in the revised standard. The requirement has been reworded to include all TSPs that use any method of calculating ATC and the list of data to be exchanged between TSPs is identical..			
MidAmerican		☑	In the Eastern Interconnection, the timing requirements of R6 should match the related timing requirements of the MISO/MAPP/PJM/SPP/TVA SOAs/JOAs.
Response: The requirement has been reworded to include all TSPs that use any method of calculating ATC and the list of data to be exchanged between TSPs is identical. Please advise us if the revised requirement causes a conflict.			
MISO		☑	The frequency does not allow for any analysis before the ATC/AFC values are posted to the OASIS. The requirements should be more along the lines of using same ATC/AFC values and providing the same to the neighbouring transmission providers.
Response: The comment is a very valid. The requirement has been reworded to include all TSPs that use any method of calculating ATC and the list of data to be exchanged between TSPs is identical..			
MRO		☑	If the Transmission Service Reservation information can be provided every hour why can not the requirements of R6.5, R6.6, and R6.7 be revised to provide hourly reporting as well?
Response: The requirements for updating flowgates are now contained in MOD-030. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
SCE&G and SERC ATCWG		☑	It is unclear whether data exchange is for forward looking or historical time periods. The requirement for beginning data exchange within 7 days is ambitious. A realistic time frame would be 90 days if it is forward-looking.

Question #9			
Commenter	**Yes**	**No**	**Comment**
Response: The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
Progress Energy		☑	The intent of R6 is unclear. It is unclear whether data exchange is for forward looking or historical time periods. The requirement for beginning data exchange within 7 days is ambitious. A realistic time frame would be 90 days if it is forward looking.
Response: The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
IESO	☑	☑	We agree with the frequency of exchanging data as specified in Requirement 6. However, we do not agree with the sub-requirement 6.5. Not all TSPs perform load forecasting. They should not be required to provide this information. Beside, load forecast information is already included in the base model a TSP uses in calculating AFCs. This is met by virtue of meeting R6.4.
Response: The response to this is conditional upon finding out the frequency of update on the base model. Is the load forecast and model used a seasonal, monthly, weekly, or daily update? Updating uses of the transmission system, either with a model or data the goes into the model needs to be done.			
Southern	☑	☑	The posting and reposting of data in the OASIS system needs to be taken out of this standard and requirements be put into NAESB standards. Most of this we already do. G&T outages on SDX, dispatch order would be new, power flow model on request, load forecast will be posted on OASIS, Flowgates OK, TFC-our ratings are provided in our cases today, ETC=TSRs is on OASIS] Question: Is R6 dictating duplication of already available information in a different format? Also, does 6.8 require 168 models to be created each hour, or just changes in 168 hours of AFC values based upon changes in transmission service requests? Same question for daily. The document refers to OASIS several times. Why specify update intervals here rather than simply referring to FERC OASIS requirements or NAESB business practices? This sets up possible conflict. There is no reliability driver for these particular update frequencies.
Response: R6 does not address the OASIS system in any manner. R6 is meant to require the sharing of data from the provider to entities that need the data. R6.8 is meant to be AFC values on that provider's flowgates. The requirement to exchange AFC is not in the revised standard for calculating AFC. In the revised set of standards, there is a timing requirement for posting AFC and ATC – and a separate requirement for 'exchanging data' between TSPs. If you are already providing data to a specific location and someone needing that data can get it from that same location, you can agree to use that location as a means to provide the data. The drafting team is working closely with NAESB to ensure that there is no duplication in the final, combined set of reliability standards and business practices.			
APPA	☑		The need to exchange data will depend upon which component is changing. If the TTC or TFC is changing in the operating time horizon the Reliability Coordinator will need to exchange this information quickly to several Reliability Functions including Transmission Service Providers. Again in the operating time horizons if the ETC, CBM, or TRM changes the Transmission Service Providers

Question #9			
Commenter	**Yes**	**No**	**Comment**
			need to recalculate ATC and post this new information quickly to keep the Transmission Customers updated in the quick moving operating horizon.
Response: The question is not answered in the response, but the drafting team agrees with the comments.			
CAISO	☑		While the seven days timeframe may be appropriate, the requirement's lack of specificity for the start of this timeframe (i.e. Before changes, after a change, after seven days from an agreement) is confusing. Is "as agreed upon" acceptable if it is greater than every seven days?
Response: Your comment is very valid. The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
Grant County PUD	☑		As long as this is not overly burdensome on smaller TSPs.
Response: The standard's requirements are not linked to size.			
IRC	☑		While the seven days timeframe may be appropriate, the requirement's lack of specificity for the start of this timeframe (ie. Before changes, after a change, after seven days from an agreement) is confusing. Is "as agreed upon" acceptable if it is greater than every seven days?
Response: Your comment is very valid. The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
NYISO	☑		While the seven days timeframe may be appropriate, the requirement's lack of specificity for the start of this timeframe (i.e. Before changes, after a change, after seven days from an agreement) is confusing. Is "as agreed upon" acceptable if it is greater than every seven days?
Response: Your comment is very valid. The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
SPP	☑		The requirement's are very general and don't specify data exchange before changes, after a change, after seven days from an agreement. It is not clear if "as agreed upon" is acceptable if it is greater than every seven days.
Response: The reference to 7 days is confusing and is not contained in the revised standard. There was no consensus on how often data needs to be exchanged and the drafting team is trying to get agreement on what data needs to be exchanged before adding more requirements on how often the exchange must take place.			
AECI	☑		
HQT	☑		
ITC Transco	☑		
KCPL	☑		
Manitoba Hydro	☑		

Question #9			
Commenter	**Yes**	**No**	**Comment**
ODEC	☑		

10. Requirement 9 indicates that the Transmission Service Provider shall have and consistently use only one methodology for the Transmission Service Provider's entire system in which the ATC or AFC are calculated (Rated System Path — ATC, Network Response — ATC and Network Response — AFC, methodologies). If choosing just one of these methods is not sufficient for your system, please explain why.

Summary Consideration: The Standards Drafting Team (SDT) has reconsidered the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001 posting and revised the requirement. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses but must have agreement on the method or methods with its Planning Coordinator and Reliability Coordinator.

Question #10			
Commenter	**Yes**	**No**	**Comment**
APPA		☑	This Standard is written to make the industry believe that only one ATC will be calculated for each Transmission Service Provider. In reality, the TSP will post several ATCs; one ATC for each path or network the TSP is marketing transmission capacity. Each individual path or network will only use one method, but a TSP's planners may use different methods to plan and operate different paths in their system. MISO and PJM are entities that use two methods to market transmission capacity in its system. They only uses AFC at the borders or seams of their system to determine how much transmission capacity is available at their seams, while they use LMP to determine how much transmission capacity is available on their interior system. BPA will use flowgates to determine how much ATC is available to its Transmission Customer on the interior of their system, while BPA uses Transfer Path on its seams to determine how much transmission capacity is available to Transmission Customers exterior to their system.
Response: The standard was revised to clarify that each TSP calculates ATC for each constrained path or AFC for each constrained flowgate/cutplane. TSPs will be permitted to use as many of the proposed methods as the TSP chooses, however, the TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
BPA		☑	The substantive differences between the three aforementioned methods are not yet clear. However, if multiple methods are determined to be valid and acceptable approaches to calculating ATC/AFC, then the transmission provider should be able to employ multiple methods for calculating ATC/AFC on different parts of the transmission system, provided the various methods are applied consistently and are transparent.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, the TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
CAISO	☑		Comments: We question why the SDT requires this single methodology. The SDT should provide an explanation of the reliability problem(s) associated with applying more than one methodology as long as any methodology used is used consistently with transparency.

Question #10			
Commenter	**Yes**	**No**	**Comment**
			E.g. - CAISO currently uses one method on its ties (rated path)to other TSPs and one method for internal (network response). Additionally, for ties if adjacent TSPs use differing methodologies, the rating would not agree, so are we looking at a situation where one methodology may have to be used for each interconnection? *The CAISO agrees with the WECC MIC MIS ATC Task Force that this requirement should be eliminated or the word sole removed.*
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
Cargill			No comment.
Duke Energy			One methodology is sufficient for Duke Energy.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
Entergy			Only one method for calculation of ATC or AFC should be used for each system so that there is consistency between the method used for approving transmission service requests and for planning and operation of the system as required in R 11.2. In case more than one method is used it will be difficult to make these methods consistent.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.			

Question #10			
Commenter	**Yes**	**No**	**Comment**
As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
FRCC	☑		ifferent method are needed to address seams issues between areas that select different methodologies, different methods may be applicable to different interfaces etc. The transmission provider should have the flexibility to select the appropriate method.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
Grant County PUD		☑	Its hard to answer this question without more detail to the ATC calculations.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
HQT		☑	Methodology choice shall be solely based on the system topology and the path requirements.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used..			
IESO	☑	☑	See comments under Q7 on Rated Path Methodology – AFC (not included in the 3 methods).
Response: See the response to your comments on Question 7.			
IRC	☑		We question why the SDT requires this single methodology. The SDT should provide an explanation of the reliability problem(s) associated with applying more than one methodology. *E.g. - CAISO currently uses one method on its ties (rated path)to other TSPs and one method for internal (network response). Additionally, for ties if adjacent TSPs use differing methodologies, the rating would not agree, so are we looking*
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			

Question #10			
Commenter	**Yes**	**No**	**Comment**
ISO-NE	☑		We question why the SDT requires this single methodology. The SDT should provide an explanation of the reliability problem(s) associated with applying more than one methodology.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
KCPL		☑	
Manitoba Hydro			Requirement 9 should be interconnection wide. TSPs do not only calculate ATC on their own systems, they calculate inpacts on a set of flowgates on neighbouring systems. Using a differing methodology would needless impact reliability on those systems.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
MidAmerican		☑	A single methodology should be required not only within each TSP's system, but across a larger footprint, such as an RRO.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
MISO			If the questions is one method only for one TP, the answer is no. Due to contract obligations between transmission providers, there is a need to maitain a few contract paths while maintaining Network response method for AFC/ATC calculations.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
MRO			Transmission Service Provider may use contract Path methodology in addition to one of the methods provided in the proposed NERC standard.
Response: If MRO uses a method not captured in this proposed standard, please explain such method to the SDT.			
NYISO	☑		We question why the SDT requires this single methodology. The SDT should provide an explanation of the reliability problem(s) associated with applying more than one methodology.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one			

Question #10			
Commenter	**Yes**	**No**	**Comment**
ATC/AFC method in the original MOD-001.			
Progress Energy			One methodology should be used for the TSP's system. Change "its sole" to "a single" or to "one". Also, the standard should have only one requirement that defines the when and where of ATC methodology ; If you want the same process to be applied across the TSP's whole system and across all time horizons then say that plainly in one requirement instead of splitting the where and when between R9 and R11.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
SCE&G and SERC ATCWG			Change "its sole" to "a single" or to "one." The statement in the question above is clear — the language of the requirement was not as clearly stated.
Response: The Standards Drafting Team (SDT) has reconsidered the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001 posting and revised the requirement. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there will be a requirement that each TSP choose one method for each path/flowgate/cutplane.			
Southern			One methodology is sufficient. For ATC, although there mat be situations where multiple approaches are appropriate to address radial vs. interdependent portions of a system. Also, flexibility may be required in calculating TTC. For example posting non-simultaneous values on radial interfaces and simultaneous values on interdependent paths.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
SPP	☑		We convert AFC to ATC numbers on OASIS, however we start off from AFC numbers that are calculated using one and same methodology.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
WECC ATC Team			This requirement is unnecessary and should be deleted. If the NERC team will not delete the Requirement, at minimum the word "sole" must be deleted from the Requirement. If, for example, a TSP has operational needs that dictate the use of the AFC Methodology for paths within its network and the Rated System Path for interfaces with its neighbors, either of these

Question #10			
Commenter	**Yes**	**No**	**Comment**
			methodologies is allowed under MOD-01. So long as the TSP consistently and transparently applies any of the NERC approved methodologies to it facilities and communicates that application to all appropriate entities, this approach should be allowed as it has met FERC's core purposes without disrupting operations. In contrast, this constrictive approach over reaches the FERC mandate of consistency and transparency, increases the potential for seams between interchanges and otherwise imposes a burden to alter operations where no remedy is needed. In support of the WECC Team's position: FERC found in Order 890 that "the potential for undue discrimination stems from two main sources: (1) variability in the calculation of the components that are used to determine ATC and (2) the lack of a detailed description of the ATC calculation methodology and the underlying assumptions used by the transmission provider." P. 209. Neither of these concerns is at issue should a TSP use more than one NERC authorized methodology. Further, FERC found that so long as "all of the ATC components and certain data inputs and assumptions are consistent, the three ATC calculation methodologies being finalized by NERC through the reliability standards development process will produce predictable and sufficiently accurate, consistent, equivalent, and replicable results. It is therefore not necessary to require a single industry-wide ATC calculation methodology. *The Commission instead concludes that use of the ATC calculation methodologies included in reliability standards currently being developed by NERC is acceptable."* P. 210.
Response: The Standards Drafting Team (SDT) has removed the requirement that each Transmission Service Provider (TSP) use only one ATC/AFC method in the original MOD-001. While one methodology may be sufficient for a TSP, limiting all TSPs to use of only one method for their systems may hinder reliability. Therefore, TSPs will be permitted to use as many of the proposed methods as the TSP chooses; however, there is a requirement that each TSP must have agreement with its Planning Coordinator and Reliability Coordinator on which method or methods will be used.			
AECI	☑		
APS	☑		

11. Do you think that Requirement 13 in this proposed standard is necessary?

R13. If the Transmission Service Provider approves a Transmission Service Request using a value other than and less than its value for ATC or AFC, then the Transmission Service Provider shall identify how it calculated the lesser value.

Summary Consideration: The drafting team has removed this requirement, as Order 890 seems to already address the issue.

Question #11			
Commenter	**Yes**	**No**	**Comment**
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
APS			Requirement 13 needs clarification, not sure if agree or disagree.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
Manitoba Hydro			It is hard to say as requirement 13 seems unclear.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
WECC ATC Team			The WECC Team would like an example as to why the NERC Team believes this Requirement is necessary. The WECC Team believes that if ATC is posted on OASIS, the entire posted amount must be made available for purchase. For example, if an entity requests 100 MW of legitimately posted ATC and the TSP refuses the 100 MW request but grants 80 MW instead, that TSP must provide to the requesting entity a full and written explanation of why the full 100 MWs of posted ATC were not made available.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
APPA		☑	It is not necessary in this Standard. It will be necessary to explain difference in one of the Standards that spell out the rules for TTC, ETC, CBM or TRM. This is part of the posted assumptions that is

Question #11			
Commenter	**Yes**	**No**	**Comment**
			necessary for the Transmission Service Provider to post when showing the values of the components that was used to calculate the number for ATC. MOD-001 is only for the rule of calculating ATC, i.e. maximum time between calculations and rules for recalculations; and posting ATC values and posting values and assumptions for the components. Rules for the components are in other standards.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
IRC CAISO ISO-NE		☑	Approving a request with insufficient AFC might happen for next hour Non-Firm if available flow gate capacity in real time justifies accepting a Non-Firm request, while Non-Firm AFC (that still has some unused Reservations included in end-result) is insufficient. This is a common practice and should not have to be documented (justified) after the fact. It might happen also if a re-dispatch agreement is accepted by a TP that requires a Transmission Customer to re-dispatch a certain amount to cover for the negative AFC created on flow gate by accepting Reservation. This is documented by the TP. Approving a service request at a value less than the ATC or AFC is a commercial issue, which does not affect reliability. This issue should be addressed in the Business Practice.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
BPA		☑	BPA does not understand requirement 13 as written. A transmission provider would normally approve a transmission request if transfer capability required by the request is LESS than the value of ATC available. If the transmission provider approves a request using a value for ATC lower than posted ATC, then the transmission provider should not have to identify or explain its actions. On the other hand, it would make sense to require an explanation if a transmission provider approves a transmission request using a value for ATC that is HIGHER than the value of ATC that is posted.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
Duke Energy		☑	Delete Requirement 13.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
ITC Transco		☑	The requirement is curious. If a service request is approved, who cares if the Service Provider used an ATC/AFC lower than its posted ATC/AFC? I'd be more concerned about a TSR that was rejected because of a lower ATC/AFC, and would want to know how the TSP calculated the lesser value.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
Grant County PUD		☑	No one would have an issue if the Transmission Service Requests are approved. When they are denied justification needs to be made.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			

Question #11			
Commenter	**Yes**	**No**	**Comment**
IESO		☑	Requirement 13 is not required. Approving a service request at a value less than the ATC or AFC is a commercial issue, which does not affect reliability. This issue can be addressed in the Business Practice.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
MISO		☑	This requires policing the tags after the fact, and really has nothing to do with the calculation of ATC/AFC.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
Southern		☑	This was put in here to cover the AFC's AFTFC (?). If this requirement stays in the standard, a suggested rewording is needed. A value "less than" automatically implies a value "other than." The requirement states, "If the TSP approves a TSR...." What if the TSP denies a TSR? This reads like a policy, not a reliability requirement. TSPs already have requirements under the OATT to provide justifications from approving/denying service.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
SPP		☑	It might happen for next hour Non-Firm if available flow gate capacity in real time justifies accepting Non-Firm request, while Non-Firm AFC (that still has some unused Reservations included in end-result) is un-sufficient. This is a common practice and should not have to be documented (justified) after fact. It might happen also if a re-dispatch agreement is accepted by TP that requires a Transmission Customer to re-dispatch a certain amount to cover for the negative AFC created on flow gate by accepting Reservation. This is documented by TP.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
Progress Energy		☑	
Entergy	☑		Transmission Service Provider may allocate capability of transmission element to different users based on their ownership interest and any other agreements. This requirement allows use of different ATC or AFC values based on such arrangements. However, it does not have to be limited to only lesser of the calculated value used for approving Transmission Service Request. In case a Transmission Service Provider is using higher than the calculated value (in some emergency cases, TP may use emergency rating of limiting line/equipment which may result in higher than the normal calculated ATC value), it may be putting the reliability of the system at risk. Therefore, the Transmission Service Provider should identify how it determines ATC values for approving Transmission Service Requests if those are different from the calculated values, whether higher or lesser than the calculated value.

Question #11			
Commenter	**Yes**	**No**	**Comment**
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
FRCC	☑		There is a strong reliability need for this. It is believed that the word " posted" needs to be inserted in front of the word value in the statement " other than and less than its value" i.e. the statement should read " other than and less than its posted value."
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
KCPL	☑		Please consider changing "identify how it calculated" to "provide the basis for calculating" in the R13 Reliability Standard. I think it is more important to know why the value changed rather than how the value changed.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
MidAmerican	☑		The phrasing of R13 should be clarified. As currently drafted, it reads: If the Transmission Service Provider approves a Transmission Service Request using a value other than and less than its value for ATC or AFC, then the Transmission Service Provider shall identify how it calculated the lesser value. MidAmerican believes this is intended to mean, and should be clarified to say: If the Transmission Service Provider denies a Transmission Service Request for less than its value for ATC or AFC (or for less than its share of ATC or AFC on reciprocal coordinated flowgates), then the Transmission Service Provider shall identify why the service was denied. This calculation methodology should also be posted.
Response: The drafting team has removed this requirement, as Order 890 seems to already address the issue.			
AECI	☑		
HQT	☑		
MRO	☑		
NCMPA	☑		

12. Do you agree with the other proposed requirements included in the proposed standard? If not please explain with which requirements you do not agree and why.

Summary Consideration: There were many suggestions to modify the requirements in MOD-001. MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. Each of the three standards that addresses one of the methods of determining ATC also includes related requirements for TTC (or TFC) and ETC.

Many stakeholders indicated that R14 should be removed and the drafting team did remove this requirement.

Question #12			
Commenter	**Yes**	**No**	**Comment**
APPA		☑	Many of the requirements listed in MOD-001 are requirements needed in the Standards that set the rules for TTC, TFC, CBM, TRM, and ETC. The characteristic of each component will be made available to the industry if the Standards for the components are written properly. If MOD-001 is written in a manner that requires those characteristic to be provided to the TSP and require the TSP the post characteristics the SDT will meet its obligations. R14 should be eliminated. Requiring the same ultimate source and ultimate sink on the Transmission Service Request and the Interchange Transaction Tag will harm commercial use of transmission service. It will force transmission users to redirect transmission service on OASIS every time a source or sink changes, even within the same control areas, while providing little, if any, benefit for reliability. If the drafting team feels this requirement is still needed, it should be passed to NAESB for inclusion as a business practice.
Response: General: The drafting team agrees. R14: The drafting team removed R14. Note that Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so eventually we will need to add a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated).			
APS		☑	The requirements in R11.2, R11.3, R11.4, R11.5 and R12 do not apply to entities that use the Rated System Path method and should not apply to their ATC calculations. For those that use the Rated System Path method these requirments should apply to the TTC calculations.
Response: The drafting team agrees that these requirements do not apply to ATC calculations for Rated System Path method. Please see the revised set of standards – the requirements for the Rated System Path method are now contained in MOD-029.			
BPA		☑	See BPA's response to question 19.
Response: See drafting team response to Q19.			
CAISO	☑	☑	R6.8.1 We are not re-sinking 7 days of hourly values every hour, however the way Oasis Automation

Question #12			
Commenter	**Yes**	**No**	**Comment**
ISO-NE IRC NYISO			works it updates AFC with every Reservation that is submitted and with every Reservations that changes status. (for example Study→refused). R6.8.3 and R6.8.2 is same, if you have daily AFC for 30 days, you automatically have weeklies for 4 weeks, however not weekly value but daily values to represent the AFC of the 4 weeks. If that is the intension then we agree. R6.9 Not sure what ETC is intended to be included in R6.9, Gen to Load ETC only or also ETC as result of Reservations? TP's typically exchange Net Interchange based on Schedules and sometimes reservations. However that assumes that all Reservations will be scheduled. It doesn't reflect directional ETC. A combination of ETC for a Gen to Load situation and the Reservations as referenced in R6.10 will result in the "true" ETC of the system. It can not be provided in an initial Power Flow Model. R6.10 We don't think the "once per hour" should apply to all types of Reservations such as Weekly, Monthly and Yearly. It should be based on term of Reservation. R7 This requirement might have to be split up in a requirement for the Sending Entity and a requirement for the Receiving Entity. The Receiving Entity could update the AFC data on an hourly basis. If the Sending Entity doesn't update the data on an hourly basis, it is not effective. R11.2 The term "same criteria" is too general, it should be more specific. R11.4 The term "Identify contingencies" is too general. It is unclear whether this refer to outages or the contingency elements of flow gates. R12 – First, this requirement should be placed under R11, because R11 contains the items that must be 'identified' in the TSPs ATC methodology Second, exchanging data with neighboring TSPs is important only if the data held by one TSP is necessary for another TSP to calculate its ATC. Therefore, R12 should be redrafted to read as follows: "Identify any other Transmission Service Providers from which data is received for use in calculating its ATC or AFC" Data exchanges that are required as part of the TTC calculation should be specified in the TTC Standard. R14 Over stringent, particularly if AFCs are not calculated to the level or scope of granularity.

Response:
R6.8.1. The requirement is to recalculate and update the AFC once per hour for the rolling 168 hours with updated information.
R6.8.2 and R6.8.3. The requirements are to recalculate the different products at specific frequency. Although the frequency is the same, the products are not and may be subject to different requirements for determining TRM, CBM, or ETC.

Question #12			
Commenter	Yes	No	Comment
R6.9: The revised standard does not list ETC as one of the types of data that must be exchanged between TSPs. R6.10: The requirement to exchange transmission service reservation information remains in the revised standard, but the timing element of the original requirement (to provide this once per hour when revised) has been removed R7: The standard was revised and no longer includes specific timing requirements for using the updated data. R11 This requirement was modified and is now addressed more specifically in each of the new standards that identifies the requirements for one of the three ATC calculation methodologies (MOD-028, MOD-029, MOD-030). Please see the proposed standards. R12: The revised MOD-001 requires the TSP to develop a document called "Available Transfer Capability Implementation Document" and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC. R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
SPP		☑	R6.8.1 We are not re-sinking 7 days of hourly values every hour, however the way Oasis Automation works it updates AFC with every Reservation that is submitted and with every Reservations that changes status. (for example Study refused). R6.8.3 and R6.8.2 is same, if you have daily AFC for 30 days, you automatically have weeklies for 4 weeks, however not weekly value but daily values to represent the AFC of the 4 weeks. If that is intension we are OK. R6.9 Not sure what ETC is intended to be included in R6.9, Gen to Load ETC only or also ETC as result of Reservations. TP's typically exchange Net Interchange based on Schedules and sometimes Reservations , however that assumes that all Reservations will be scheduled. It doesn't reflect directional ETC. A combination of ETC for a Gen to Load situation and the Reservations as referenced in R6.10 will result in the "true" ETC of the system. It can not be provided in an initial Power Flow Model. R6.10 We don't think the "once per hour" should apply to all types of Reservations such as Weekly, Monthly and Yearly. It should be based on term of Reservation. R7 This requirement might have to be split up in a requirement for the Sending Entity and a requirement for the Receiving Entity. We (receiving Entity) update the AFC data on an hourly basis however if the Sending Entity doesn't update the data on an hourly basis, it is not effective. R11.2 "same criteria" is to general, should be more specific. R11.4 "Identify contingencies" is to general. Does this refer to outages or the contingency elements of flow gates.

Question #12			
Commenter	**Yes**	**No**	**Comment**
			R14 Over stringent, particular if AFC aren't calculated to the level or scope of granularity.
Response: R6.8: The requirement is to recalculate and update the AFC once per hour for the rolling 168 hours with updated information. R6.8.2 and R6.8.3. The requirements are to recalculate the different products at specific frequency. Although the frequency is the same, the products are not and may be subject to different requirements for determining TRM, CBM, or ETC. R6.9: The revised standard does not list ETC as one of the types of data that must be exchanged between TSPs. R6.10: The requirement to exchange transmission service reservation information remains in the revised standard, but the timing element of the original requirement (to provide this once per hour when revised) has been removed R7: The standard was revised and no longer includes specific timing requirements for using the updated data. R11.2: This requirement was modified and is now addressed more specifically in each of the new standards that identifies the requirements for one of the three ATC calculation methodologies (MOD-028, MOD-029, MOD-030). Please see the proposed standards. R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
HQT		☑	Refer to 7 R12 – First, this requirement should be placed under R11, because R11 contains the items that must be 'identified' in the TSPs ATC methodology Second, exchanging data with neighboring TSPs is important only if the data held by one TSP is necessary for another TSP to calculate its ATC. Therefore, R12 should be redrafted to read as follows: •"Identify any other Transmission Service Providers from which data is received for use in calculating its ATC or AFC" Data exchanges that are required as part of the TTC calculation should be specified in the TTC Standard.
Response: R12: The revised MOD-001 requires the TSP to develop a document called "Available Transfer Capability Implementation Document" and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC. Note that the latest versions of the ATC-related standards include requirements for calculation of TTC within each of the three standards that addresses one of the methods of calculating ATC.			
Cargill		☑	We disagree with R14, which would require a Transmission Service Provider to require Transmission Customers to provide ultimate source and ultimate sink on Transmission Service Requests and further would require that Transmission Customers must use the same source and sink on Interchange Transaction Tags. Our reasons for not supporting this requirement are several, based on our belief that the requirement (1) is impractical under well-established trading and scheduling

Question #12			
Commenter	**Yes**	**No**	**Comment**
			practices, (2) has not been shown to be necessary to the reliability of the North American bulk electric system, (3) is not consistent with the Market Interface Principles, which are an integral part of NERC's Reliability Standards Development Procedure and (4) conflicts with Order 890. Further, it is not apparent from the records of the draft team's development process that due consideration was given to whether the source/sink requirement adheres to NERC's Reliability and Market Interface Principles. The source/sink requirement is incompatible with the market's trading and scheduling practices. Forward hedging is commonly transacted at Hubs, with the product defined as an "into-HUB," (e.g., into-Entergy). A supplier who delivers energy to an "into-Hub" sale cannot foresee where the buyer will ultimately sink the energy. That supplier may need to purchase transmission to the Hub's interface, but cannot know in advance what sink to input in a Transmission Service Request on an upstream system. Likewise, the buyer does not know the source until the time of day-ahead scheduling, and, therefore, cannot plan his transmission purchases to coordinate with his into-Hub energy purchase. The seller may choose to deliver the "into-HUB" energy at different interfaces day to day. When scheduling energy flows between regions, the timelines for notifying counterparties of sources/sinks may not be consistent. Though a Purchasing-Selling Entity may learn by 10:00 AM where his purchase is being generated for the next day, he may not know until 11:00 AM where that energy is sinking. The party responsible for transmission in the upstream path may have to submit a Transmission Service Request, due to a transmission provider's timing requirements, before the downstream must declare a sink. So transmission providers' timing requirements may not coincide with scheduling and tagging timelines. Further, characteristics of today's organized electricity markets are not compatible with the proposed source/sink requirement. When energy is sourced from an organized market (i.e./ LMP system), the actual generating source cannot be identified, as economic dispatch determines generation levels on 5-minute intervals. Thus, for a transaction tagged with a source in an LMP system, the Transmission Service Request and Interchange Transaction Tag may never match. Similarly, in the WECC when a Mid-C product is purchased and taken to delivery, it could be generated at any of numerous hydro-generation facilities, all included in the definition of the Mid-C energy product. The proposed source/sink requirement would put certain market participants at a disadvantage. A Purchasing-Selling Entity who intends to buy transmission to move purchased energy from a Hub to a customer who will transmit the energy downstream beyond the Hub is at the greatest disadvantage with a source/sink requirement. Such a Purchasing-Selling Entity, without known generation or load, may be ignorant of both the source and the sink until the time of scheduling. It is important that the proposed standard is incompatible with trading and scheduling practices. The following is taken from NERC's Reliability Standards Development Procedure: "While NERC reliability standards are intended to promote reliability, they must at the same time accommodate competitive electricity markets."

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Commenter	**Yes**	**No**	**Comment**
			The MOD-001-1 drafting team recognizes at least two distinct methods for ATC calculations, the Rated System Path Methodology and the Network Response Methodology. The addition of the source/sink requirement in R14, however, seems to ignore the key difference in the two methods. The Rated Path method looks at the capability of the direct wires between two points, and those points are not necessarily the source or the sink. The draft team's records do not disclose claims that the lack of the proposed source/sink requirement has degraded reliability in those systems where the Rated System Path method is employed. Apparently, source/sink requirements such as proposed in R14 are not necessary to the reliability of the North American Bulk Electric system for those areas using the Rated System Path method. In fact, it is documented in the draft team's working papers that source/sink modeling identification is "not relevant for Rated System Path Method for ATC Modeling." (See draft team's document titled NOPRitems.XLS at http://www.nerc.com/~filez/standards/MOD-V0-Revision-RF.html, dated 7/19/06.) The reason for the subsequent addition of the source/sink requirement to the proposed standard cannot be determined from the draft team's records. The impetus for the development and revision of MOD-001-1 was the Final Report of the Long-Term AFC/ATC Task Force. In that report, in the section titled "Source and Sink Points – Calculation Process for AFC/ATC," is the following statement: "The task force suggests that the sources and sinks (injections and withdrawals) used in the calculation of AFC/ATC and the evaluation of transmission service requests should replicate the anticipated use of service when utilized." (Emphasis added.) This statement assumes that requiring source/sink information with a Transmission Service Request and requiring that information to match the Interchange Transaction Tag is not necessary. The next sentence in the report states, "It is important that Transmission Service Providers have business practices outlining when they will allow confirmed transmission reservations to be used in a manner that is not equivalent to how the request for the service was evaluated." Once again, it is granted that source/sink information is not required to match from reservation to tag. And Appendix B of the report states the case even more plainly: "Source and sink points … do not necessarily correspond to the source or sink fields on a transmission reservation, but are constructs that mimic the expected actual change in generation dispatch that would be used to affect that power transfer in real-time." Further practical considerations show that the R14 source/sink requirement is not necessary to the reliability of the bulk electric system. For instance, Southwest Power Pool (SPP) employs an "electrical equivalent" concept. According to SPP's Business Practices an exception is allowed when the source/sink of a reservation does not match the source/sink of the tag, so long as the source/sink on the reservation is considered electrically equivalent to the source/sink on the tag. SPP also allows an exception when a customer combines two SPP reservations on the same tag, so long as one reservation has the correct source/sink (or electrical equivalent) and the PORs and PODs are contiguous, such a scheduled reservation/tag is valid. (See 4.3 of SPP's Open Access Transmission Tariff Business Practices.) Additionally, consider schedules that flow across DC ties. There is no

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Commenter	**Yes**	**No**	**Comment**
			need, for the purposes of calculating ATC, for transmission providers in the WECC to know where in the Eastern Interconnect a transaction flowing west to east on one of the DC ties is sinking. Likewise, for an energy schedule sourced in ERCOT to a sink in SERC, there is no need for the transmission providers in ERCOT to know the ultimate sink. And no need for the transmission providers in the Eastern Interconnect to know the ultimate source. Source/sink information matching from reservation to tag is not necessary to reliability in these cases. The proposed source/sink requirement conflicts with NERC's Reliability Standards Development Procedure, which includes two sets of guiding principles, Reliability Principles and Market Interface Principles. "Consideration of the market interface principles is intended to ensure that reliability standards are written such that they achieve their reliability objective without causing undue restrictions or adverse impacts on competitive electricity markets." Market Interface Principle 2 states, "An Organization Standard shall not give any market participant an unfair competitive advantage." As mentioned earlier, market participants without known generation resources or load obligations can be put at a definite disadvantage with the proposed source/sink requirement. Market Interface Principle 3 states, "An Organization Standard shall neither mandate nor prohibit any specific market structure." The indirect result of R14 would be to so inhibit markets operated with the Rated System Path Methodology so as to essentially prohibit the prevailing market structure operating where that method is employed. Transmission providers and customers would be forced to transact differently, potentially disrupting long-established and efficient markets. Most importantly, Market Interface Principle 4 states, "An Organization Standard shall not preclude market solutions to achieving compliance with that standard." The title of the standard at issue is ATC and AFC Calculation Methodologies. Yet no explanation can be found in the draft team's records as to how the source/sink requirement in R14 will improve ATC calculations. In reviewing the records of the drafting team, no examples can be found showing that the lack of the source/sink requirement causes degraded reliability. In fact, markets that do not require that ultimate source/sink be provided on a reservation and then match on an Interchange Transaction Tag have obviously determined and implemented solutions to calculating ATC, without such a requirement. The record of the drafting team simply does not provide evidence to the contrary. Finally, in reviewing FERC's Order 890, it is apparent that R14's source/sink requirement is inconsistent with established protocols for transmission service reservations. At paragraph 297 of Order 890 the Commission states, "Regarding transmission reservations modeling, we direct public utilities, working through NERC, to develop requirements in reliability standard MOD-001 that specify (1) a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown and (2) how to model existing reservations." Obviously, it is understood that not only existing reservations may not have provided source/sink information, but also, by distinguishing existing reservations, FERC has assumed that future transmission service requests may not provide source/sink information. Indeed the definition of Transmission Service

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			Reservation proposed in the MOD-001-0 standard references Point of Receipt and Point of Delivery, but not source and sink (see 2. at page 4 of this document.) In summary, the proposed source/sink requirement is inconsistent with established trading and scheduling protocols, is not necessary to the reliability of the bulk electric system, conflicts with the principles established to guide the development of reliability standards and is inconsistent with FERC Order 890. For the reasons stated herein, we disagree with the proposed source/sink requirement in MOD-001-1. Cargill
Response: R14: The drafting team removed R14 from MOD-001. Order 890 requires NERC to develop requirements in MOD-001 that specify “a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown” so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
Duke Energy		☑	As written with the requirement to provide ultimate source and ultimate sink, R14 should only apply to reservations and tags on systems that calculate AFC. In general, on systems that calculate ATC or AFC, source and sink granularity on the reservation must be sufficient to allow adequate assessment of the impact on the capacity offering (ATC or AFC). Source and sink granularity on the e-tag must be sufficient to allow adequate assessment of the e-tag’s impact on the transmission system. The Point of Receipt (POR) and the Point of Delivery (POD) must be the same on the reservation and the e-tag. If the source or sink on the e-tag is different from the source and sink on the reservation and the impact is substantially different from the expected impact of the reservation, the TP may deny or curtail the e-tag.
Response: R14: The drafting team removed R14 from MOD-001. Order 890 requires NERC to develop requirements in MOD-001 that specify “a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown” so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
Entergy		☑	(R3.) There is no need to include ATC and TTC values to be provided when requested within 7 days as these are expected to be posted on OASIS and be available per OATT requirement. (R4.) The equation assumes that the TRM, CBM and ETC are for each path that has a Distribution Factor factor to each flowgate. Therefore, the language in the standard should be changed to include "respective" before the Distribution Factor for TRM and CBM. In addition, the definition of Distribution Factor included in the NERC Standard Booklet "The portion of Interchange Transaction, typically expressed in per unit that flows across a transmission facility (Flowgate)" can only be used if the TRM, CBM and ETC are allocated on each Interchange Transaction which is from control area to control area. If the TRM, CBM and ETC standards do not require such allocation, the formula will be invalid. (R5.1) This requirement should also be applicable to ATC calculations if Transmission Service Provider uses impact on interface differently for the Firm and Non-Firm reservation. At a minimum Transmission Service Provider should be required to include method of adjusting the ATCs for Firm

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Commenter	**Yes**	**No**	**Comment**
			and Non-Firm Reservations for transparency purposes. (R5.2) Comment similar to that for R5.1 applies to this requirement as this requirement should be applicable to ATC calculation. (R 5.3) This requirement is poorly written as it is not clear what is required to be on OASIS, Is assumptions used for base case and transfer generation dispatch for both external and internal system need to be on OASIS? If so, it does not make sense. (R6.3) The monitoring of the requirement of exchanging generation dispatch order that is updated at least prior to each peak load season or the generation participation factors of all units on an affected Balancing Authority basis that is updated as required by changes in the status of the unit will be difficult as these are inconsistent. The participation factors theoretically will change any time the generator status changes and will have to be recalculated and shared with all entities. Transmission Service Providers should be required to exchange participation factors when updated and at a minimum prior to each peak load season rather than required to calculate when generator status changes. (R6.8) This requirement is applicable only to AFC calculations as AFC values for different periods need to be updated at certain interval. First this requirement is based on FERC Order 889 and is of commercial nature, therefore, it should be included in NAESB business practices. Secondly, this requirement is also applilcable to ATC values, if it is included in this standard, this should also be made applicable to ATC calculations. (R 6.10) Transmission Service Reservations are available on line on OASIS and need not be included in this standard to be exchanged. Also Transmission Service Reservations may be included in ETC when standard for ETC is developed. (R7) The requirement for updating AFC values should be in NAESB Business Practices. This requirement is also applicable to ATC calculations. (R11) There are more requirements to be included in the AFC methodlogy than the ATC methodology (R5 and R11 are applicable to AFC, and only R11 is applicable to ATC). There does not appear to be a requirement for Transmission Providers using ATC to include items in R1 - R3 in ATC calculation Methodology. It should be made consistent. (R12), (R13), (R14) These requirements can be included in R11 as additional sub requirements. There does not seem to be any justification to keep them as separate requirements and not to be included in the calculation methodology.
Response: R3: This information is needed for reliability-related needs. The requirement was revised and no longer includes any reference to the frequency for data exchange. R4 The requirements for calculating AFC have been moved into their own standard and include much greater specificity than the equation that was used in the first draft of MOD-001. Please see MOD-030. R5.1 The SDT agrees that this requirement applies to the rated system path methodology as far as requiring the Transmission Service Provider to identify his method of adjusting the ATCs for Firm and Non-Firm Reservations for transparency purposes. Please see the new requirements			

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Commenter	**Yes**	**No**	**Comment**
in MOD-028 and MOD-029. R5.3 The revised standard (MOD-001) and proposed new standards for calculating ATC (MOD-028, MOD-029 and MOD-030) do not include any references to OASIS. R6.3 The revised requirement for TSPs to exchange data still include the requirement to exchange the generation dispatch order, but the sub-requirement to update the order before each peak load season has been dropped from the revised requirement. R6.8 and R7. AFC values should be converted to ATC at the same intervals and should be updated at the same intervals as ATC and this is reflected in the revised MOD-001 and new MOD-030 R6.10 The requirement to post the latest ATC value on OASIS is being addressed in a NAESB business practice. R12. The revised MOD-001 requires the TSP to develop a document called "Available Transfer Capability Implementation Document" and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC. R13: The drafting team does not agree that R13 should be included in R11 as a sub-requirement. R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
Grant County PUD		☑	"R11.4 Identify the contingencies considered in the ATC and AFC calculation methodology". Is this appropriate? This could be an extensive list in some cases, it could create a security risk, or it could be leveraged for market power. "R14 The Transmission Service Provider shall require that the Transmission Customer provide both ultimate source and sink on the Transmission Service Request and shall require that that Transmission Customer use the same source and sink on the Interchange Transaction Tags." Shouldn't the TSP only focus on that part of the transmission that he is providing service for? POD and POR? I am not sure if the intent here is to do specific point of generation to point of usage scheduling. If it is, this is not appropriate for our situation. We meet our schedules with a portfolio of generation and meet our loads with a series of contiguous PORs. We do not to be overly specific and

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Commenter	**Yes**	**No**	**Comment**
			burdensome.
Response: R11.4: Including or addressing the contingencies considered is appropriate to ensure consistency and transparency. R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify “a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown” so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
IESO		☑	(i) The text box next to R5 says: [Please note that it may appear that the AFC methodology contains more requirements than that ATC methodology. Due to the characteristics of the ATC methodology, the corresponding level of detail will be contained in the standard that determines TTC (e.g. FAC 12 or FAC 13) when it is revised.] We interpret this text box applies to both R5 and R6. We agree that the two methods are different and therefore may need different detailed requirements in certain aspects. However, many of the sub-requirements in R5 and R6 appear to be applicable to the ATC calculation methodology as well hence the detailed requirements can also be addressed in this standard. Moreover, addressing detailed ATC calculation requirements in FAC-012 or –013 appears to be a misfit since the latter standards deal with Transfer Capabilities (and to be revised to deal with Total Transfer Capabilities as suggested in Q14, below), which are solely reliability parameters. Moreover, having the detailed ATC calculation requirements placed in a separate standard would leave room for confusion to the standard users. (ii) R6.5. Please see comments under Q9. (iii) R11.4 The contingencies considered and applied in determining the ATC or AFC would be the same sets used for operating studies and planning studies which could include all possible Category B and Category C contingencies on the TSP’s system. It would be near impossible to identify them all. This requirement is implied by R11.2, and where necessary, R11.2 can be expanded to ensure that the ATC and AFC shall be determined with the same set of contingency criteria applicable to the reliability assessment of the like time frame. R11.5 We do not understand this requirement. Does it mean that for ATC and AFC calculation, the model and assumptions must be the same as those used for expansion planning? Note that calculations of ATC and AFC need to consider planned outages to BES facilities, whereas expansion planning may not. Also, if this is the requirement, what are the parallel requirements for ATC and AFC calculation in time frames less than 13 months?
Response:			

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Commenter	**Yes**	**No**	**Comment**
Response to all comments: MOD-001 was revised and the intent of MOD-001 is now distributed between 4 standards – with MOD-001 as an 'umbrella' standard, and each of the other three standards (MOD-028, MOD-029, MOD-030) addressing one of the three methods of determining ATC. Each of the three standards that addresses one of the methods of determining ATC also includes related requirements for TTC (or TFC) and ETC. With this rearrangement, each of the 'new' standards includes much more definition than was included with the first draft of MOD-001. Please review the proposed standards.			
AECI	☑		
FRCC	☑		
ITC Transco	☑		
KCPL	☑		
MRO	☑		
MidAmerican		☑	As noted in our General Comments above, MidAmerican does not believe the standard as currently drafted complies with FERC Order No. 890.
Response: The drafting team agrees that the first draft of MOD-001 needed to be revised in order to comply with FERC Order 890. Please see the new set of standards that relate to ATC.			
MISO		☑	The standard needs to be revisited in light of the Order 890 to make sure consistent measures are applied to all calculations.
Response: The drafting team agrees that the first draft of MOD-001 needed to be revised in order to comply with FERC Order 890. Please see the new set of standards that relate to ATC.			
NCMPA		☑	R14 should be eliminated. The proposed source/sink requirement is inconsistent with established trading and scheduling protocols, is not necessary to the reliability of the bulk electric system and conflicts with the principles established to guide the development of reliability standards. Requiring the same ultimate source and ultimate sink on the Transmission Service Request and the Interchange Transaction Tag will harm commercial use of transmission service. It will force transmission users to redirect transmission service on OASIS every time a source or sink changes, even in cases where the source/sink combinations are electrically equivalent. This new practice will provide little, if any, benefit for reliability. If the drafting team feels this requirement is still needed, it should be passed to NAESB for inclusion as a business practice.
Response: R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			

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Commenter	**Yes**	**No**	**Comment**
NPCC CP9		☑	R12 – First, this requirement should be placed under R11, because R11 contains the items that must be 'identified' in the TSPs ATC methodology Second, exchanging data with neighboring TSPs is important only if the data held by one TSP is necessary for another TSP to calculate its ATC. Therefore, R12 should be redrafted to read as follows: "Identify any other Transmission Service Providers from which data is received for use in calculating its ATC or AFC" Data exchanges that are required as part of the TTC calculation should be specified in the TTC Standard.
Response: R12. The revised MOD-001 requires the TSP to develop a document called "Available Transfer Capability Implementation Document" and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC. Note that there under the drafting team's proposal, there will not be a separate standard to address TTC.			
NYISO	☑	☑	R 6 - We suggest that we require that a requester must demonstrate a reliability related need for the data. This will ensure an effort to provide the data is warranted. R 6.3 - It is unclear what the phrase 'generation dispatch order' refers to.
Response: R6: The requirement does include the proposed language. R6.3 – in the revised MOD-001 this is R6.2 and states: Generation dispatch, in the form of dispatch order, participation factors, or block dispatch. Please let us know if additional clarification is needed.			
ODEC		☑	I think we need to have a firm definion for the ATC/CBM/TRM terms before a final standard on them should be voted upon as this will impact the language in the standard.
Response: Agree. The standards on ATC/CBM/TRM/AFC/ETC should be voted upon as a complete package so that all definitions are understood in the context of related standards.			
Progress Energy Marketing		☑	Progress Energy Marketing disagree with R14, which would require Transmission Customers to provide ultimate source/sink on the Transmission Service Request. By your own definition, a Transmission Service Request is a service request by the Transmission Customer to the Transmission Service Provider to move energy from a Point of Receipt to a Point of Delivery. The ultimate source/sink requirement is incompatible with the market's trading and scheduling practices. Forward hedging is commonly transacted at Hubs, with the product defined as an "into-HUB". A supplier who delivers energy to an "into-HUB" sale cannot foresee where the buyer will ultimately sink the energy. The supplier may need to purchase transmission to the Hub's interface, but cannot know in advance what sink to input in a transmission Service Request on an upstream system. The ultimate source/sink requirement would have an adverse impact on market development as well

Question #12			
Commenter	**Yes**	**No**	**Comment**
			as market activity
Response: R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
Progress Energy		☑	R3 – What is the intent of this requirement? If the intent is to provide data within 7 days of the request then the requirement needs to be reworded. R8 – R14 should apply to "ATC" not "ATC and AFC" because AFC is just an ATC engine, and these requirements should be moved to the beginning of the standard, followed by the engine-specific calculation requirements. R11.2 – "internal expansion plan" does not apply within 13 month horizon. Should instead be "internal near-term planning" R11.5 – reject inclusion of "use the same power flow model" as this is impossible to apply. Many ATC models use NERC MMWG models as their basis. In planning studies, additional lower voltage detail is included. Also, the standard should have only one requirement that defines the when and where of ATC methodology ; If you want the same process to be applied across the whole system and across time horizons then say that plainly in one requirement instead of splitting the where and when between R9 and R11.
Response: R3: The revised standard does not include this requirement. R8 – R14 –Agree. The translation between AFC and ATC has been addressed in the proposed MOD-030. R11.2 and R11.5 The revised MOD-001 does not include these requirements. Note that the new standards (MOD-028, MOD-029 and MOD-030) try to achieve the same objective.			
SCE&G and SERC ATCWG		☑	R3 - The requirement is not clear on timeframes. Is it talking about the current ATC values or values into the future? If so, how far into the future. What is intent? If the intent is to create the obligation to provide current data within 7 days of the request, then the requirement needs to be reworded. R4 - IN AFC methodology, TRM and CBM are a flowgate attribute not a path attribute, therefore the formula should be modified. R5.1 and R5.2 - Needs clarification of the clause "with respect to how each is treated in the Transmission Service Provider's counter flow rules." This clause appears to limite consideration to counterflows only when other issues impact firm versus non-firm reservations and schedules. R5.3 - delete "on OASIS" since it is covered in R10. R6 - specify whether forward-looking or historical;

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			R6.1 and 6.2- "coordinated transmission system element" is not understood. Rephrase to state "coordinated schedules of transmission system elements to be taken out of service" R6.8.3 - This requirement should allow the use of a minimum daily value during a week for posting as weekly ATC. 6.10 - remove "when revised". R7 - state "at the minimum frequency" to be consistent with R6.8. R8-R14 all apply to ATC so remove "or AFC" - also move R8-R14 to the beginning of the standard, followed by the engine-specific calculation requirements. R11.2 - "internal expansion plan" does not apply within 13 month horizon. Should instead be "internal operational planning". R11.5, change "the same power flow models, and the same assumptions regarding load, generation dispatch, special protection systems, post contingency switching, and transmission and generation facility additions and retirements as those used in the expansion planning for the same time frame." to "power flow models containing assumptions consistent with expansion planning for the same time frame."
Response: R3. The revised standard does not include this requirement. R4 The SDT is unclear on the comment; however, TRM and CBM are attributes of all three methodologies. R5.1, R5.2 The revised MOD-001 requires all TSPs to identify how they account for counter-flows.. R5.3 The revised standard does not include this requirement. R6 The requirement to exchange data was updated and most of the sub-bullets were abbreviated to improve clarity – the sub-requirements that identified how often the data needed to be refreshed were removed. R7. This requirement was removed from the revised standard. R8-R14 The SDT revised MOD-001 so it only contains 'generic' ATC requirements applicable to all three methods of calculating ATC. Each of the three methods is treated in greater detail in a stand-alone standard (MOD-028, MOD-029, MOD-030) R11.2 and R11.5 The revised MOD-001 does not include these requirements. Note that the new standards (MOD-028, MOD-029 and MOD-030) try to achieve the same objective.			
Southern		☑	R1 and R4 for calculations both firm and non-firm. All references to TTC and TFC need to be move off to FAC 12 and 13. R11.2 phrase "internal expansion planning" be removed. R11.2-11.5 is referencing to TTC and TFC/AFC calculations should be moved to FAC 12-13. R7 what updated information should be coordinated and for what purpose? Is this not a posting issue? The posting and reposting of data in the OASIS system needs to be taken out of this standard and requirements be put into NAESB. R14 the ultimate source and sink hold for.
Response: R1 & R4 As TTC and TFC are both essential variables within the ATC calculation, they cannot be excluded from the formula. How these			

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Commenter	**Yes**	**No**	**Comment**
variables are calculated can be correctly addressed in the FACs. R11.2 and R11.5 The revised MOD-001 does not include these requirements. Note that the new standards (MOD-028, MOD-029 and MOD-030) try to achieve the same objective. R14. The SDT does not understand the intent of the comment "the ultimate source and sink hold for" – however the drafting team did remover R14 from the revised standard.			
Tenaska		☑	We disagree with R14 which requires the Transmission Service Provider to require Transmission Customers to provide ultimate source and sink on Transmission Service Requests and Transmission Customers must use the same source and sink on Interchange Transaction Tags. The main reasons we disagree with this requirement are that it is incompatible with current market trading and scheduling practices and is not always relevant. When a Transmission Customer reserves transmission for use in a trading hub transaction (e.g., "into Entergy", "into Southern"), it is not always possible for the Transmission Customer to know what the actual source or sink will be at the time of making the reservation. When the source or sink is within a pool, it is not possible to identify the actual generating source or ultimate sink.
Response: R14: The drafting team removed R14 from the revised standard. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.			
WECC ATC Team		☑	

13. Should the proposed standard include further standardization for the components of the calculation of ATC or AFC (i.e., should the proposed standard be more prescriptive regarding the consistency and standardization of determining TTC, TFC, ETC, TRM, and CBM)? If so, please explain.

Summary Consideration: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.

Question #13			
Commenter	**Yes**	**No**	**Comment**
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
Manitoba Hydro			With CBM I believe that the only reliability portion is the recognition of an adeqacy criteria (i.e. the LOLE study) Once that is established CBM could be defined many ways and is likely in the realm of NAESB.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
APPA		☑	MOD-001 should only deal with ATC? and AFC and not the components. The rules for consistent and accurate methods of determining the individual components will be very complicated and numerous. Attempting to place all of these rules for the components in MOD-001 will make MOD-001 very large and impossible to measure and monitor the requirements.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of			

Question #13			
Commenter	**Yes**	**No**	**Comment**
determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
APS		☑	There should be standardization of the components used in the calculation of ATC and AFC. These standards do not have to be in this standard, however if there are new standards for these components and the new standards should take into account this standard.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
WECC ATC Team		☑	As clarity is essential for each ATC variable, the WECC Team suggests that any further prescription or standardization is addressed in a free standing standard specifically addressing each variable of the ATC calculation. For example, a free standing standard should be initiated for ETC.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
BPA		☑	As written, the proposed standard does not achieve standardization, due in part to the uncertainties and lack of clarity in the variables within the ATC/AFC calculation. However, BPA supports development of individual standards for each variable within the ATC/AFC calculation.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
Duke Energy		☑	See response to Q. #1. TRM, CBM, etc, are defined in other standards.
Response: The drafting team has created separate standards for TRM and CBM.			
FRCC		☑	Separate standards are being developed that address the components.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
Grant County PUD		☑	Being too presciptive will raise issues of entities seeking exemptions for one reason or another, there

Question #13			
Commenter	**Yes**	**No**	**Comment**
			by confusing the compliance.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC. The drafting team is attempting to meet the FERC directives that aim to improve consistency and transparency in the processes used to determine ATC.			
HQT NPCC CP9		☑	Any additional standardization of the other components should be contained in those specific standards not in MOD-001. However, it is important that the details of the methodology for determining TTC, TFC, ETC, TRM and CBM must be permissive to allow for continued operation of markets in those TSPs that do not utilize a physical-rights based system for providing transmission service.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
AECI		☑	
ITC Transco		☑	
KCPL		☑	
MRO		☑	
Progress Energy		☑	
SCE&G and SERC ATCWG		☑	
Southern		☑	
Entergy	☑		Yes, these details should be included in standard for TTC, TFC, TRM and CBM.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
NYISO CAISO ISO-NE	☑		NERC should develop some general criteria: What should be included in the TTC, TFC, ETC, TRM, CBM? How should they be calculated (high level guidelines) and what the purpose is of including them in the AFC calculation?

Question #13			
Commenter	**Yes**	**No**	**Comment**
			Any additional standardization of the other components should be contained in those specific standards not in MOD-001. However, it is important that the details of the methodology for determining TTC, TFC, ETC, TRM and CBM must be permissive to allow for continued operation of markets in those TSPs that do not utilize a physical-rights based system for providing transmission service.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC. The SDT is trying to propose Standards that provide for consistency throughout each interconnection to the maximum extent possible taking into account variations in market designs while protecting the Bulk Power System reliability.			
IESO	☑		Some general criteria (the basis) for determining CBM and TRM should be developed so that a consistent approach is used by all TSPs.
Response: The drafting team has created separate standards for TRM and CBM.			
MidAmerican	☑		See General Comments above. In addition to changes required to comply with Order No. 890, the process should be standardized and transparent to the point that another provider, using the same methodology and input data, could duplicate the results of any provider.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
SPP	☑		We recommend developing some general criteria, what should be included in the TTC, TFC, ETC, TRM, CBM, and how they should be calculated (high level guidelines) and what the purpose is of including them in the AFC calculation.
Response: The drafting team has created separate standards for TRM and CBM. TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.			
MISO	☑		
ODEC	☑		

14. Do you agree that Total Transfer Capability (TTC) referenced in the MOD standards and Transfer Capability (TC) references in the FAC-012-1 and/or FAC-013-1 standards are the same and should be treated as such in developing this standard? If you don't believe these are the same, please explain what you feel are the differences between TC and TTC.

☐ Yes — TTC and TC are the same
☐ No — TTC and TC are not the same

Summary Consideration: TTC and TFC are addressed in the proposed standards (MOD-028, MOD-029, and MOD-030). TTC/TFC, ETC, and ATC/AFC are too intertwined to effectively split, and the drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.

Question #14			
Commenter	**Yes**	**No**	**Comment**
PG&E			Since the TC is reliability based, if TTC is not the same as TC, then TTC should be no higher than the TC determined by the Planning Coordinator in the planning horizon and the Reliability Coordinator in the operating horizon.
Response: The ATC Standards Drafting Team has been asked to develop a definition for TTC. If it is determined that TTC and TC are the same values in the planning and operating horizons, then one will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. A clear distinction would recognize that TTC should be no higher than the TC determined by the Planning Coordinator and the Reliability Coordinator in each of their timeframes.			
ERCOT		☑	As I recall, the FAC drafting team recognized similarities, but used a different name because they were not considered to be the same. The FAC standards relate more to operational system capabilities and different timeframes, not to the in-advance nature of TTC used in the transmission service market. The FAC drafting team included in the FAC standards that the TTC methodologies shall respect the System Operating Limits which relate to the TC described in the FAC standards.
Response: The TTC definition and the use of TTC in MOD-001-1 relate to all timeframes (operating and planning). The ATC Standards Drafting Team has been asked to develop a definition for TTC. If it is determined that TTC and TC are the same values in each timeframe, then one will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. TTC and TC (if TC is retained) definitions will respect System Operating Limits.			
Duke Energy		☑	FAC-012 should apply to TC, which indicates the ability to reliability move large amounts of power between regions, sub-regions and control areas. Test of TC identifies potential transfer limits that may result from loop flows, market activity or contingencies. TTC calculation is required to support market operation without impacting reliability in a negative manner.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. It is expected that the definition of TTC will identify potential transfer limits in each timeframe (e.g., planning horizon, operating horizon). Potential transfer limits in each timeframe may result from factors such as loop flows, market activity or contingencies, as well as support of market operation. It is expected that factors with the potential to cause a transfer limit can be included in the appropriate timeframe			

Question #14			
Commenter	**Yes**	**No**	**Comment**
of each TTC value. If it is determined that TTC and TC are the same values in each timeframe, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
MidAmerican		☑	Given the new requirements in Order No. 890, the definitions TTC and TC must be consistent since Order No. 890 requires consistent methodologies for use in i) planning, and ii) ATC or AFC calculations. It should be noted that TC is used for planning and security coordination purposes, while TTC is commercial in nature and must be updated with each ATC calculation to reflect operational conditions. As a result, there may be points in time when TC is not equal to TTC due to the frequency of updates.
Response: The TTC definition and the use of TTC in MOD-001-1 relate to all timeframes (operating and planning). The ATC Standards Drafting Team has been asked to develop a definition for TTC. If it is determined that TTC and TC are the same values in each timeframe, then one will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. TTC and TC (if TC is retained) definitions will respect System Operating Limits.			
MRO		☑	
IRC ISO-NE CAISO	☑	☑	This question should probably be asked of the drafting team of FAC-012-1 / FAC-013-1 if they have the same definition in mind. When reading FAC-012-1 it is optional to apply a described methodology to an operating and/or planning horizon. The TTC as described in MOD-001-1 should be applied to all Horizons listed under question 4 of the Comment Form. We believe TTC should be added into the FAC requirements as a defined term.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. For reference, the team asked the chairman of the FAC Standards Drafting Team this question, and his response was, "Transfer Capability as required in FAC 012 and Total Transfer Capability as required by MOD 001 are indeed the same quantities."			
NYISO	☑	☑	This question should probably be asked of the drafting team of FAC-012-1 / FAC-013-1 if they have the same definition in mind. When reading FAC-012-1 it is optional to apply a described methodology to an operating and/or planning horizon. The TTC as described in MOD-001-1 should be applied to all Horizons listed under question 4 of the Comment Form. We believe TTC should be added into the FAC requirements as a defined term. The Reliability Standards should consider a single term for all standards.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. For reference, the team asked the chairman of the FAC Standards Drafting Team this question, and his response was, "Transfer Capability as required in FAC 012 and Total Transfer Capability as required by MOD 001 are indeed the same quantities."			

Question #14			
Commenter	**Yes**	**No**	**Comment**
SPP			That question should probably be asked of the drafting team of FAC-012-1 / FAC-013-1 if they had same definition in mind. When reading FAC-012-1 it is optional to apply a described methodology to a operating and/or planning horizon. The TTC as described in MOD-001-1 should be applied to all Horizons listed under question 4. of the Comment Form. It looks like FAC-012-1 is more related to Reliability function (real time /semi real time) and MOD-001-1 is more related to Tariff function.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. For reference, the team asked the chairman of the FAC Standards Drafting Team this question, and his response was, "Transfer Capability as required in FAC 012 and Total Transfer Capability as required by MOD 001 are indeed the same quantities."			
HQT	☑		This question should probably be asked to the drafting team of FAC-012-1 / FAC-013-1 if they have the same definition in mind.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made. For reference, the team asked the chairman of the FAC Standards Drafting Team this question, and his response was, "Transfer Capability as required in FAC 012 and Total Transfer Capability as required by MOD 001 are indeed the same quantities."			
APPA	☑		TTC and TC are the same value determined by the planners or operation personnel for planning and operating horizons, respectively. It is recommended eliminating one of the terms to avoid confusion.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
BPA	☑		Uncertain. FAC-012 speaks to reliability margins that may be applied when calculating transfer capabilities. This may give rise to inconsistencies between TC which incorporates margins, and ATC standards which, as currently drafted, imply that TRM is calculated separately from TTC.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
Entergy	☑		TTC and TC are same. However FAC-012 is written for reliabiliy assessment of Bulk System. Since Transfer Capability calculations use same algorithm but different base case models, FAC-012 should be modified to include calculation of TTC that can be used for ATC calculations as described in MOD-001.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
FRCC	☑		The TTC definition should be retained.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions			

Question #14			
Commenter	**Yes**	**No**	**Comment**
definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
SCE&G and SERC ATCWG	☑		However, there are different definitions for TTC and TC. The definitions should be the same thus the current definition needs to be clarified.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
WECC ATC Team	☑		Additionally, the NERC Drafting Team should decide which of the NERC Glossary terms best describes this specific capacity and eliminate the other.
Response: The ATC Standards Drafting Team has been asked to create a clear distinction between TTC and TC or to eliminate one of the definitions. If it is determined that TTC and TC are the same values in the planning and operating horizons, then TC will be eliminated. If it is determined that a definition of TC is needed, then a clear distinction between TTC and TC will be made.			
Grant County PUD	☑		
IESO	☑		
APS	☑		
AECI	☑		
ITC Transco	☑		
KCPL	☑		
Manitoba Hydro	☑		
MEAG Power	☑		
MISO	☑		
ODEC	☑		
Southern	☑		

15. As mentioned in the introduction, the drafting team has deferred development of requirements for the calculation of Total Flowgate Capability (TFC) pending industry comments. The drafting team would like to know whether the industry believes that MOD-001-1 needs to address TFC methodology and documentation as opposed to having the TFC methodology addressed by revising the existing Facility Rating FAC-012-1 and/or FAC-013-1 standards. Please explain your answer:

Summary Consideration: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. The drafting team developed four proposed standards to address ATC – an 'umbrella' standard that provides a set of requirements that apply to all three methods of determining ATC, and then a separate standard for each of the three methods of determining ATC. Each of the standards that addresses a method for determining ATC, also contains the associated requirements for TTC and ETC.

Question #15			
Commenter	**Yes**	**No**	**Comment**
ERCOT			ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
Southern			The TFC methodology should be developed in the FAC12-13 standard and not in MOD-001.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
SPP			It looks like FAC-012-1 is more related to Reliability function and MOD-001-1 is more related to Tariff function. FAC-012 should probably describe how the Normal Rating and Emergency Rating should be calculated, using what weather conditions and what safety margin for equipment. MOD-001-1 could refer to those definitions and indicate (as an example) that Normal Rating could be used for single element PTDF flow gates and Emergency Rating for OTDF flow gates.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
MRO			Both MOD-001-1 and FAC-012-1 should reference the flowgate capability.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
AECI		☑	TFC is well defined in the definitiond of terms in the standard section.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary			

Question #15			
Commenter	**Yes**	**No**	**Comment**
consideration.			
APPA		☑	A Flowgate is another tool to plan and operate to the BES. The Flowgate development and assumptions will be developed by the planners or operation personnel depending on the time horizon. The flowgate rating is determined as part of the FAC package for system rating, SOL determinations, and TTC (TC) determinations.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
BPA		☑	TFC is similar to TC and should be addressed similarly to TC by revising the existing Facility Rating FAC-012-1.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
Entergy		☑	TFC and TTC methodology should be included in the same standard. Since FAC-012 includes TTC, the same standard should include requirements for TFC calculations.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
HQT		☑	If TFC is similar to TTC, it should be dealt in another Standard e.g. the same one that would deal with TTC.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
IESO		☑	TTC and TFC are reliability parameters that are determined by the facility rating methodologies stipulated in FAC-012 and FAC-013, and these values are not determined by the TSP. In ATC and AFC calculations, these values serve as the upper bound for assessing and managing available transmission services only.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
IRC ISO-NE CAISO		☑	TTC and TFC are reliability parameters that are determined by the transfer capability methodologies stipulated in FAC-012. These values are not determined by the TSP but by the RC or TOP. In ATC and AFC calculations, these values serve as the upper bound for assessing and managing available transmission services only
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
NYISO		☑	TTC and TFC are reliability parameters that are determined by the transfer capability methodologies stipulated in FAC-012. These values are not determined by the TSP but by the RC or TOP. In ATC and AFC calculations, these values serve as the upper bound for assessing and managing available transmission services only. The drafting team needs to work with FAC-012/013 to coordinate the determination of TTC and TFC. We believe these values are closely related and are the same on a closed interface.

Question #15			
Commenter	**Yes**	**No**	**Comment**
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
Manitoba Hydro		☑	I think that the team was well advised to defer this to the facility rating standard team. However a flowgate can be defined by single or multi elements. the team should ensure that the team developing FAC-012 and/or FAC-013 is cover both as well.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
MISO		☑	As explained earlier, the standard needs to be methodology neutral.
Response:			
PG&E			There is no reliability need to develop a TFC separate from that already developed in the FAC Standards by the Planning Coordinator in the planning horizon and the Reliability Coordinator in the operating horizon.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
Progress Energy	☑		<u>All</u> of the calculations related to ATC should be addressed in the same standard. PE suggests that all requirements be included in MOD-001.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
Duke Energy	☑		TFC and AFC need to be in the same standard because they are interlinked with market issues. FAC-012 and FAC-013 focus on calculation of TC for reliability studies.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
FRCC	☑		All transfer related matters need to be contained in one standard not spead out over multiple documents.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards Please see the summary consideration.			
SCE&G and SERC ATCWG	☑		All of the calculations related to ATC (TFC, TTC, AFC) should be addressed in the same standard. Suggest that all requirements be included in MOD-001 and that FAC-012 and FAC-103 should be retired.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			
KCPL	☑		The purpose of the MOD Reliability Standards is to provide the "how to" for modeling and determining operating parameters. The purpose of the FAC Reliability Standards is to provide "you will use" the results of the MOD to operate the bulk electric system. TFC methodology should be defined in the MOD and then how it is used in the FAC.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. Please see the summary consideration.			

Question #15			
Commenter	**Yes**	**No**	**Comment**
MidAmerican	☑		MOD-001 should address the methodology and documentation.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. The drafting team currently believes that			
WECC ATC Team	☑		TFC methodology should be addressed in the same standard as is TTC methodology. This is the logical parallelism to addressing AFC and ATC in the same standard.
Response: TTC/TFC, ETC, and ATC/AFC are intertwined, and cannot easily be split into multiple standards. The drafting team currently believes that			

16. When calculating ATC and monthly, daily, weekly, and hourly AFC values, what time horizon(s) for CBM should be used and which reliability function(s) should make the CBM calculations? Please explain

Summary Response:
The drafting team wanted input from all entities BEFORE writing the CBM standard and this was the most convenient place to ask this question. Based on stakeholder comments and FERC Orders 890 and 693, the drafting team has drafted a CBM standard (MOD-004) that includes the following:

- The TSP is assigned the responsibility for determining CBM
- The standard for CBM does not contain a requirement to update CBM on a fixed schedule as CBM is only set aside upon the request of an LSE- the proposed standard does include a requirement that the LSE make a request for CBM at least annually which will result in CBM being updated at least annually
- Each of the three standards that includes one of the methods of calculating ATC identifies how to use CBM in the determination of ATC and requires the use of CBM in calculating ATC over all time horizons.

This shall serve as the summary response to all opinions offered in response to this question.

Question #16	
Commenter	**Comment**
AECI	Operating Horizon - hourly and daily Planning Horizon - weekly and monthly
APPA	In determining ATC for the different time horizons the CBM must match the same time horizon. The definition of ***Capacity Benefit Margin (CBM) is defined as that amount of transmission transfer capability reserved by load serving entities to ensure access to generation from interconnected systems to meet generation reliability requirements***. The primary responsibility of the CBM for the Hourly ATC will be the LSE to meet its responsibility of providing all energy and capacity for load, including operating reserves for the upcoming hours. The Monthly and Daily ATC values are long and short term planning issues where the planners project how much transmission capacity will be needed to ensure access to generation from interconnected systems to meet generation reliability requirements.
APS	The Load Serving Entity should make the CBM calculations for all the time horizons (monthly, daily, weekly and hourly) listed above.
BPA	BPA does not employ CBM and declines to comment.
CAISO	The question is inappropriate for MOD-001, because the standard does not attempt to define the methodology for CBM.
Duke Energy	Resource Planner should make the calculation.
Entergy	There can be different CBM for different time horizons. CBM should be calculated based on the uncertainties of generation available within the Transmission Service Provider area to meet loads. Load Serving Entities should calculate CBM for their loads based on their loads and generation available to serve these loads. In case of Reserve Sharing Groups, loads and generation for the entire group should be included to calculate CBM. Or if CBM calculations are performed on a Balancing Authority Area basis, the entire load and genereation in that area should

Question #16

Commenter	Comment
	be used for these calculations, even if there are more than one LSEs within that area.
ERCOT	ERCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology.

Response: If ERCOT has comments that would assist the drafting team in improving the proposed definition, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

> Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.

As such, we suggest that ERCOT consider this as a possible avenue for further exploration.

Commenter	Comment
Grant County PUD	The Transmission Operator should be continuously be updating all of these values.
HQT	The question is inappropriate, because the standard does not attempt to define the methodology for CBM.
IESO	All time horizons should be used in accordance with the corresponding ATC calculation time frame. The value of CBM should be determined by the TSP based on the need demonstrated by the LSE.
IRC	The question is inappropriate for MOD-001, because the standard does not attempt to define the methodology for CBM.
ISO-NE	The question is inappropriate for MOD-001, because the standard does not attempt to define the methodology for CBM.
KCPL	MOD-004-0 R1.2 already requires that the frequency for CBM updates be identified by the Regional Reliability Organization and its members and it should be left that way. CBM should be used in all time horizons.

Response: If left as is, this would be a 'fill-in-the-blank' requirement and is not enforceable.

Commenter	Comment
Manitoba Hydro	I believe this and other features of CBM should be determined by NAESB.
MEAG Power	Since CBM is a reliability margin, the long term or annual value should be used for the monthly, daily and weekly ATC calculations. It should be calculated by LSE.
MidAmerican	The TSP should calculate the CBM and the timing and methodology should be well documented.
MISO	These parameters are individual transmission providers business practices.
MRO	At least calculate hourly CBM values for applicable entity TSP.
NCMPA	In determining ATC for the different time horizons the CBM must match the same time horizon. The primary responsibility of the CBM for the Hourly ATC will be the LSE to meet its responsibility of providing all energy and capacity for load, including operating reserves for the upcoming hours.
NPCC CP9	The question is inappropriate, because the standard does not attempt to define the methodology for CBM.
NYISO	The question is inappropriate for MOD-001, because the standard does not attempt to define the methodology for CBM.
ODEC	Must be the same time horizon for consistency.

Question #16	
Commenter	**Comment**
Southern	Addressed in CBM standard. In general, CBM is applicable to each time horizon in the context of calculating firm import ATC.
SPP	We don't use CBM, so we don't really have an opinion.
WECC ATC Team	This question is best deferred to the CBM standard. That said, the LSE should be the entity that determines CBM and should also be allowed the authority to call on the CBM when appropriate. In keeping with Order 890, P. 358 and also MOD-05 as currently implemented, the WECC Team suggests that CBM be recalculated no less than annually with allowance to recalculate more frequently as circumstances change. To the extent CBM is not scheduled (remains "unused") CBM must be posted on OASIS on a non-firm basis. Order 890, P. 354.

17. When calculating ATC and monthly, daily, and hourly AFC values, what time horizon(s) for TRM should be used, and which reliability function(s) should make the TRM calculations? Please explain.

Summary Consideration: The drafting team wanted input from all entities BEFORE writing the TRM standard and this was the most convenient place to ask this question. Based on the comments received, and consideration of the FERC Order 890 and 693, the drafting team is adding the following specificity to the standard for TRM (MOD-008)

- The Transmission Planner and Transmission Operator will be assigned responsibility for calculating TRM and providing the TRM value to their TSPs
- TRM will be calculated for each of the following time horizons to align with the time horizons for calculating ATC:
  The TOP will be calculate TRM as follows:
  Same day and real-time.

  Day-ahead and pre-schedule.

  The Transmission Planner will calculate TRM as follows:
  - Time period beyond the day-ahead and pre-schedule

  This shall serve as the summary response to all opinions offered.

Question #17			
Commenter	**Yes**	**No**	**Comment**
AECI			Operating Horizon - hourly and daily Planning Horizon - weekly and monthly
APPA			In determining ATC for the different time horizons the TRM must match the same time horizon. The planners that plan at the different time horizons would be the best. The SDT has come up with a proposal of using a percentage of one of the system values that has been determined by the planners. This would be a very good ~~comprise~~ compromise and promotes a level of consistent calculations.
APS			The Transmission Service Provider should make the TRM calculations for all the time horizons (monthly, daily, weekly and hourly) listed above.
BPA			The issue of time horizons should be determined through development of the TRM standard. The Transmission Service Provider should be reponsible for determining TRM.
CAISO HQT IRC ISO-NE NPCC CP9			The question is inappropriate, because the standard does not attempt to define the methodology for TRM.
NYISO			The question is inappropriate for MOD-001, because the standard does not attempt to define the methodology for TRM.
Duke Energy			TRM should be looked at as a seasonal requirement, and Duke Energy would use the same TRM

Question #17			
Commenter	**Yes**	**No**	**Comment**
			value for monthly, daily and hourly calculations. Transmission Planner makes the TRM calculation.
Entergy			There can be different TRM for different time horizons. Farther in future, less certain are the conditions, therefore, higher TRM. Since TRM is based on combination of uncertainties of different elements, each components will have different contributions to TRM for different time horizons.
ERCOT			RCOT does not use this methodology and has no comment. The standard should provide for ERCOT's non-transaction-based methodology. In addition, ERCOT presently has set TRM and CBM to zero in its operating and market activities.
Response: If ERCOT has comments that would assist the drafting team in improving the proposed standards, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following: Responding to CenterPoint's proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process. As such, we suggest that ERCOT consider this as a possible avenue for further exploration.			
FRCC			The TRM should relate to the time horizon of the product. TRM is indtend to account for uncertainties in the bulk electric system and should be determined by the Transmission Service provider. The degree of uncertainty increases in relationship to the product timeframe. The system conditions for hourly are known with a much greater degree of accuracy than for the 13th month. Additionally, the period of exposure to a risk is much greater on a month product than on an hourly product. The probability of a unit or line tripping during the period of a confirmed transaction is much greater for a monthly product than for a daily product.
Grant County PUD			The Transmission Operator should be continuously be updating all of these values.
IESO			All time horizons should be used in accordance with the corresponding ATC calculation time frame. The value of TRM should be determined by the TOP and RC depending on the reason for the need of interconnection assistance to cover uncertainties that could affect transmission reliability.
KCPL			MOD-008-0 R1.1 already requires that the frequency for TRM updates be identified by the (a) Regional Reliability Organinzation and its members and it should be left that way. TRM should be used in all time horizons.
Manitoba Hydro			This would depend on the need for TRM. IF TRM is required to coordinate interregional stability concerns, it may needed in all horizons. If TRM is used to compensate for uncertainty in Load Forecasts, it should not be used in the operating or day ahead horizon.
MEAG Power			Since TRM is a reliability margin, the long term or annual value should be used for the monthly, daily and weekly ATC calculations. It should be calculated by TP.
MidAmerican			The TSP should calculate the TRM and the timing and methodology should be well documented.
MISO			These parameters are individual transmission providers business practices.

Question #17			
Commenter	**Yes**	**No**	**Comment**
MRO			At least calculate hourly TRM for applicable entity TSP.
NCMPA			In determining ATC for the different time horizons the TRM must match the same time horizon. The planners that plan at the different time horizons would be the best.
ODEC			Must be the same time horizon for consistency.
Southern			Addressed in TRM standard. In general, TRM is applicable to each time horizon in the context of calculating firm import ATC. Discussion is needed to determine whether TRM should be included in determing non-firm ATC and in export ATC calculations.
SPP			TP should calculate the TRM value. TRM should be a seasonal (or yearly value), based on the largest available resources (not scheduled to have maintenance) in that season. If it is a yearly value it should be based on the largest unit. We don't think TRM should be a Monthly value, because maintenance of Resources can change and you might sell service on a lower TRM based on scheduled maintenance of the largest unit. If the scheduled maintenance changes and largest unit moves back in that Month you could potential have oversold system. To play it safe TRM should be seasonal or yearly value. A TP could decide based on a current outage of the unit which was the basis for current TRM value, to lower TRM for the time frame of the outage however we don't think that this type of detail should be incorporated or described in the MOD-001-1.
WECC ATC Team			This question is best deferred to the TRM standard. That said, the Transmission Service Provider in conjunction with its Transmission Planner should determine the TRM. How often TRM should be calculated is dependent upon what elements go into the TRM as will be dictated in the TRM standard. If load forecast error becomes part of TRM, the TRM should be adjusted hourly. By contrast, if the TRM is solely to address seasonal changes that an annual then on/off peak recalculation may be in order.

18. 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 commenters had no concerns, other than to say that the drafting team should be consistent with Order 890 and 693.

Question #18			
Commenter	**Yes**	**No**	**Comment**
Duke Energy			We understand that the drafting team is examining the impacts of FERC Order 890 for conflicts with the proposed standard.
Response: The drafting team has addressed FERC Order 890 and FERC Order 693 with respect to the set of ATC/TTC CBM/TRM standards.			
Entergy			No, however requirements in the proposed standards should be consistent with those included in FERC OATT, Orders 888, 889, and recently issued FERC Order 890.
Response: The drafting team has addressed FERC Order 890 and FERC Order 693 with respect to the set of ATC/TTC CBM/TRM standards.			
IESO			No conflicts. But there are markets that do not provide physical transmission services which require the calculation and posting of ATCs and AFCs. In addition, there are entities that are not under FERC's jurisdiction and hence may not provide any transmission services.
Response: The drafting team acknowledges your comments.			
IRC ISO-NE NYISO			We are not aware of any conflicts between the proposed standard and any regulatory function, rule/order, tariff, rate schedule, legislative requirement or agreement, because the proposed language is broad enough to accommodate the manner in which ISOs/RTOs provide transmission service in a market-based environment. As NERC continues to develop Standards to govern reliability practices surrounding the calculation of ATC/TTC/AFC/etc... (and coordinate with NAESB regarding its development of associated business/commercial practices) in response to the Commission directive in Order No. 890, NERC's Standards must be broad enough so as not to frustrate the market-based manner in which ISOs/RTOs provide transmission service. As the Commission ruled in Order No. 890 with regard to, among other things, the standardization of ATC calculations, "some of the changes adopted in the Final Rule may not be as relevant to ISO/RTO transmission providers as they are to non-independent transmission providers. For example, many ISOs and RTOs use bid-based locational markets and financial rights to address transmission congestion, rather than the first-come, first-served physical rights model set forth in the pro forma OATT. As we indicated in the NOPR, nothing in this rulemaking is intended to upset the market designs used by existing ISOs and RTOs." See Order No. 890 at P158. The proposed MOD-001 Standard appears to be in line with this direction.
Response: The drafting team acknowledges your comments.			
MidAmerican			See General Comments above. FERC Order No. 890 makes the current standard obsolete and it

Question #18			
Commenter	**Yes**	**No**	**Comment**
			must be significantly revised.
Response: The drafting team acknowledges your comments.			
MISO			The FERC order 890 calls for more transparency in the AFC/ATC calculations. This standard did not seem to focus on that aspect, in fact, it gives two different standards for transparency: ATC methods have no transparency, and AFC methods are completely open. In light of the goals expressed in FERC's final rule on this issue, for both transparency and consistency of calculation, the committee should withdraw this proposal and review it carefully in light of FERC's Order 890 While the committee has worked hard to bring the standard to this point, Midwest ISO believes this issue is too important to simply forge ahead without discussing the standard's present definitions and requirements in light of the FERC final rule on this subject, issued the same day this standard was released for comment.
Response: The drafting team acknowledges your comments.			
NPCC CP9			No, As the Commission noted in Order No. 890, "some of the changes adopted in the Final Rule may not be as relevant to ISO/RTO transmission providers as they are to non-independent transmission providers. For example, many ISOs and RTOs use bid-based locational markets and financial rights to address transmission congestion, rather than the first-come, first-served physical rights model set forth in the pro forma OATT. As we indicated in the NOPR, nothing in this rulemaking is intended to upset the market designs used by existing ISOs and RTOs." See Order No. 890 at P158. We find that the language as proposed is broad enough to accommodate the manner in which ISOs/RTOs provide transmission service in a market-based environment and satisfies the Commissions note in Order No 890 on this subject. In short, so long as a TSP is following approved Market and Tariff rules that are part of a Commission-sanctioned market design, such rules should be deemed consistent with this Standard.
Response: The drafting team acknowledges your comments.			
SCE&G and SERC ATCWG			Some TSP's OATT have requirements that components of ATC be provided by third parties. For example, in one case, a TSP is required to use the AFC calculations provided by the Reliability Coordinator in determining its ATC.
Response: The drafting team acknowledges your comments.			
Southern			The drafting team should consider whether particular directives in Order 890 adversely impact reliability and respond appropriately.
Response: The drafting team acknowledges your comments.			
SPP			No, we are not aware of any. Some TP's may find the need to include more detail into MOD-001-1 to address the concerns raised in the FERC Order No. 890.
Response: The drafting team acknowledges your comments.			

19. Do you have other comments that you haven't already provided above on the proposed standard?

Question #19	
Commenter	**Comment**
AECI	The standard does not provide a clear distiction for use of ATC verses AFC. It is our understanding that Requirements R1-R3 do not apply if the AFC methodology is used. For R4 to R6 if the AFC methodology is used then the TSP is not required to post ATC values, however AFC values would be posted.
Response: As originally envisioned, requirements R1-R3 would have applied to all of the methods because ATC is required to be calculated by whichever method is chosen. Note that MOD-001 was significantly revised and no longer contains these requirements.	
APPA	MOD-001 needs to address how the AFC calculations should be converted to the ATC calculations. MOD-001 needs to show that the ATC formulas for Monthly, Daily, and Hourly calculations are for different paths or networks. MOD-001 needs to show the formula to determine $ATC_{nonfirm}$ for Monthly, Weekly, and Daily calculations. The "future development plan must be modified to include the introduction and assistance of the NERC Compliance Staff to assist the team in developing Measurements, VRFs, and suggested terms of the compliance sections of the Standard.
Response: Please see the proposed MOD-030. This new standard addresses ATC developed using the flowgate network response method and includes requirements for converting AFC to ATC. The proposed standards (MOD-028, MOD-029, and MOD-030) do not include the formulas that were included in the first draft of MOD-001. The proposed standards all include much more detail in what is required to calculate ATC. Each of the three new standards has clear requirements to distinguish between 'firm' and 'non-firm' ATC. The drafting team wants to move towards consensus on the requirements in the proposed standards before adding all of the compliance elements,	
BPA	R4. The formula in R4 describing AFC calculations is not accurate in the way it describes the application of distribution factors. Distribution factors are not necessarily applied to all of the components of the AFC calculation. Distribution factors are applied to transactions to allocate the percentage of the transaction that will flow on each applicable flowgate. R14. The requirement to provide the ultimate source and sink on the Transmission Service request, especially when the source or sink is on the other side of an interchange point, is not necessarily required for a Transmission Service Provider to determine the ATC/AFC impacts of a request. Additionally, this requirement may create difficulties for Transmission Customers since the ultimate source and sink may not be known at the time of the request submittal.
Response: R4. The treatment of the flowgate network response method of calculating ATC is now addressed in MOD-030 and does includes much more specificity on the use of distribution factors. R14: The drafting team removed R14. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.	
CAISO	To provide clarity and uniform application in the calculation of AFC and ATC the CAISO offers the following: When

<table>
<tr><th colspan="2">Question #19</th></tr>
<tr><th>Commenter</th><th>Comment</th></tr>
<tr><td></td><td>calculating AFC in the forward markets, this calculation should include counter transmission service requests. In WECC, there is currently no virtual schedules and transmission reservations are expected to provide energy flows real-time (or adjustments are made in real-time to ensure ties are not overscheduled). The formula for AFC would look like: AFC=TFC-(TRM*distribution factor) –(CBM*distribution factor)- the sum of(ETC impacts * respective Distribution Factors) + (counter transmission reservations *respective distribution factions). A similar formula could be provided for calculation of ATC.</td></tr>
<tr><td colspan="2">Response: Counter-flow requests cannot always be considered in the AFC (or ATC) calculation because the transmission created by a requested counter-flow transaction is not “available” until the requested transaction is confirmed, in which case the transaction becomes part of ETC. Please review the proposed MOD-030.</td></tr>
<tr><td>Duke Energy</td><td>We have not factored impacts of FERC Order 890 into these comments.
Editorial comment on R.12 - should read "Each Transmission Service Provider shall identify other Transmission Service Providers with which the data used in the calculation of ATC or AFC is exchanged."</td></tr>
<tr><td colspan="2">Response: The first draft of MOD-001 has been significantly revised to address FERC Order 890 and Order 693. The first draft of MOD-001 was posted before FERC Order 890 was released.
R12: The revised MOD-001 requires the TSP to develop a document called “Available Transfer Capability Implementation Document” and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC.</td></tr>
<tr><td>Entergy</td><td>The Standard Drafting Team has a difficult task of including FERC expectation of making ATC calculations consistent and transparent. Due to different operating practices in different regions of the country, it will be difficult to come up with consistent (one size fits all) method. Regional differences should be recognized keeping in view how these are affecting reliability. Any issues that are commercial in nature should be left to NAESB to include in their Business Practices Standards.</td></tr>
<tr><td colspan="2">Response: The drafting team agrees with all of these comments.</td></tr>
<tr><td>ERCOT</td><td>Yes. No Regional Differences are identified in this draft. However, ERCOT does not use this methodology and therefore this shall not apply to operating activities and market activities in ERCOT. The standard should provide for ERCOT's non-transaction-based methodology.</td></tr>
<tr><td colspan="2">Response: If ERCOT has comments that would assist the drafting team in improving the proposed definition, those comments would be welcome. Within Order 693, the FERC states in paragraph 1007 the following:

<blockquote>Responding to CenterPoint’s proposal to exempt ERCOT from the MOD Reliability Standards that address available transfer capability, the Commission explained (in the NOPR) that it would consider any regional difference at the time NERC submits one for Commission review. Therefore, the Commission stated that if ERCOT wished to request a regional difference, it should do so through the ERO process.</blockquote>As such, we suggest that ERCOT consider this as a possible avenue for further exploration.</td></tr>
<tr><td>Grant County PUD</td><td>Thank you for the opportunity to comment. Other comments will arise after further refinement of this standard, and our further study of it.</td></tr>
<tr><td colspan="2">Response: The drafting team also thanks you for your comments.</td></tr>
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Question #19	
Commenter	**Comment**
HQT	The drafting team must engage in additional drafting to address the concerns raised by Order No 890.
Response: The drafting team agrees that the current standard must be significantly revised. The draft standard was posted before FERC Order 890 was released.	
IESO	Requirement 12 should be R11.6.
Response: R12: The drafting team will reword the requirement and consider moving it to a sub-requirement of R11.	
KCPL	No.
Manitoba Hydro	It is of paramount that a standard is developed that standardizes assumptions and processes. There are many reasonable processes available to develop and study impacts on flowgates. If all transmission providers would be able to contain all the impacts from their operation on their systems, there would not bee the need for this standard. Each transmission provider could use what ever set of assumptions that the wished as long a reliability on their system was maintain. But the very fact that this is not possible to contain impacts requires standardization of assumptions and processes. This is required to insure that when a transmission provider is assessing the impact on a flowgate in a neighbouring system that the assumptions used to assess the impacts are the same assumptions used to develop and study the flowgate. This can only be done if every transmission provider is using one set of assumptions and on set of processes. It appears by what has been presented here that the team is trying to accommodate various processes that are used by the industry today. In my opinion, this can only be done by compromising the reliability. It also appears (and I may be wrong) that the team has not fully come to terms with what is a reliability concern and what is a commercial concern. For example, in my opinion, CBM is mostly a commercial concern. CBM has historically been used to account for shortfalls in adequacy studies. I am the first to admit that this is purely a reliability concern. However once the adequacy study has determined the shortfall, there are many methods of mitigating that shortfall ranging from simply putting a CBM value on the ties with your neighbour who is most likely to have excess capacity when you need it to belong to a capacity reserve sharing pool that will reserve transmission through the use of CBM. The only reliability concern in all of this is the identification of the adequacy concern and need to have a posting value to mitigate the adequacy concern. The commercial concerns of how to mitigate those concerns should be left to NAESB.
Response: The SDT concurs with Manitoba as well as FERC that the fine line between reliability and commercial interests is not easily discernable. The SDT further concurs that business practices should be left to NAESB as is the parallel NAESB process currently underway	
MidAmerican	See General Comments above. FERC Order No. 890 makes the current standard obsolete and it must be significantly revised. In addition, each of the three methodologies should address contract path limitations. Not only should each methodology address physical limitations of the system, but contractual limitations as well.
Response: The first draft of MOD-001 has been significantly revised to address FERC Order 890 and Order 693. The first draft of MOD-001 was posted before FERC Order 890 was released. The drafting team also agrees that contract path limitations must be addressed by all three methodologies, probably more appropriately in the	

Question #19	
Commenter	**Comment**
calculation of TTC.	
MISO	The standard includes formulas. The formulas should be left to the business practices of the provider and the terms.
Response: A standard that is intended to make the calculation of values consistent for the purpose of maintaining a reliable system should include the formulas needed to make the calculations.	
MRO	a. With FAC 010, 011,012, and 013 why is MOD-001-1 needed for reliability? MOD 001-1 seems to be an OATT business practice issue. b. Informational references to the corresponding development of NAESB business are irrelevant in the Canadian context as Canadian jurisdictions are not obligated to follow NAESB business practices.
Response: MOD-001 is not a business practice issue. NERC and NAESB are working together to draft companion standards where NERC requirements address reliability concerns and NAESB addresses business practices.	
NPCC CP9	The drafting team must engage in additional drafting to address the concerns raised by Order No 890.
Response: Agree. The first draft of MOD-001 has been significantly revised to address FERC Order 890 and Order 693. The first draft of MOD-001 was posted before FERC Order 890 was released.	
Progress Energy	PE suggests renaming the Standard "ATC Calculation Methodologies" and restate Purpose. AFC is just one engine type used to calculate ATC.
Response: The drafting team will consider re-titling the standard, in light of the FERC Order 890 requirement to convert AFC to ATC. The standard drafting team does not understand the comment "AFC is just one engine type used to calculate ATC."	
SCE&G and SERC ATCWG	Suggest renaming standard to ATC Calculation Methodologies and restate Purpose. AFC is just one of the engines used to calculate ATC.
Response: The drafting team will consider re-titling the standard, in light of the FERC Order 890 requirement to convert AFC to ATC. The standard drafting team does not understand the comment "AFC is just one engine type used to calculate ATC."	
Southern	R5.1 and R5.2 only cover the aspects of non-firm with dealing with an entity's counter flow rules. This could be resolved by adding equations that outline the firm and non-firm aspects of AFC. Firm and non-firm also differ in the treatment of TRM/CBM and postbacks of unscheduled service. R8 If Firm and Non-firm equations are used for ATC/AFC this requirement would not be necessary. R11.2: There is no "internal expansion planning" during these time frames. The phrase should be deleted. It is unclear what is meant by "use the same criteria and assumptions used to conduct reliability assessments and internal expansion planning for different time frames" Generally, expansion planning considers an N-2 approach as opposed to an N-1 in the operating horizon. Expansion planning also generally considers more robust dispatch assumptions in the local area under review. Also, although transfer analysis is a consideration in expansion planning, generally expansion plans are driven by local load serving constraints (thermal or voltage), not ATC considerations (limits to transfers). It would be inappropriate to utilize the same assumptions for ATC as expansion planning. R11.3: R11.2 states that the same criteria should be used and R11.3 states that the rationale for any differences should be documented. Does this allow of differences in R11.2?

Question #19	
Commenter	**Comment**
	R11.4: This is not a big deal, but contingencies would be considered in the TTC and not the ATC. It is unclear what is meant by "Identify the contingencies considered in ATC". Is this a general statement of N-1 or specific contingencies used in the TTC assessment? R11.5: This is a planning issue, but this requirement could be problematic and difficult to comply with, especially using the same power flow models. The intent was to make sure that the requirements that you use to grant service were no more stringent that those used to plan for system expansion. We might want to consider suggesting a rewording. Generic ATC values calculated beyond 13 months are not used for addressing TSRs. I am not aware of yearly transmission service being evaluated absent a TSR study of the specific transfers, which would be performed under the planning process, so the models would be one in the same. I assume the "for the same timeframe" language indicates that the assumptions for beyond 13 months do not need to match the assumptions within the 13 monthly timeframe. In addition to the differences in expansion planning discussed above, planning models generally include firm commitments for long term service which may be inappropriate to use in operations (such as CT plant modeled on in April). R14 Under the OATT, transmission customers are not required to buy full path transmission service. This would also seem to significantly complicate the redirecting of service, another customer right offered under the OATT.
Response: R5.1 & R5.2 The revised standard requires the TSP to identify how it accounts for counter-flows – and each of the three standards that includes requirements for developing ATC includes additional requirements related to counter-flows. R8. With the revised standards, each of the three standards that addresses one of the methodologies for determining ATC includes its own requirements for calculating 'firm' and 'non-firm' ATC. R11.2-11.5 - R11.2-11.5 do not apply to users of the Rated System Path Methodology for the calculation of ATC. They do apply to the Rated System Path Methodology for the calculation of TTC and have been translated the intent of these requirements into the new MOD-029. R14. The SDT will consider this comment as it develops the next version of the standards.	
WECC ATC Team	Yes. The drafting team should be encouraged to include in the MOD-01 a formula describing how AFC is converted into ATC for the subsequent posting of ATC by those entities utilizing AFC. "The Commission also required each transmission provider using an Available Flowgate Capacity (AFC) methodology to explain its definition of AFC, its calculation methodology and assumptions, and its process for converting AFC into ATC." P. 189. R3. This requirement states that the TSP "…shall, when requested, provide or make available, the following values…" What is the retention period for the TSP such that the data will still be available when requested? The drafting team should modify this requirement such that the TSP is only required to respond to requests for data that are within the time frames established within their filed Tariff. For example, TSP's should not have to provide ATC values that would require a System Impact Study. R3. & R6. This requirement states that the TSP provide certain data when requested and when the requestor "…has a reliability related need for the values." How does the TSP judge whether the requester has a reliability related need or not? The drafting team needs to establish a criterion for the need or strike this phrase from the requirement.

Question #19	
Commenter	**Comment**
	R11.2 & R11.3 This requirement states that TSP's, "Require that the calculation of ATC or AFC use the same criteria and assumptions used to conduct reliability assessment and internal expansion planning for different time frames etc." and that they "Document the criteria used for calculating ATC or AFC values for the different time frames etc. and the rationale for any differences between these." Those TSPs who use the Rated System Path Methodology rely heavily on criteria and assumptions for calculating the TTC for a path but not for the calculation of ATC. Once the TTC for a path is determined the determination of ATC is simple math with little concern for criteria or assumptions. We recommend that the drafting team restrict these two requirements to those TSP's who use the AFC Calculation Methodology and create a parallel requirement for the calculation of TTC for those TSP's who use the Rated System Path Methodology. R11.4 & R11.5 This requirement states that TSP's must "Identify the contingencies considered in the ATC and AFC calculation methodologies." and that they "..use the same power flow models, and the same assumptions regarding load, generation dispatch, special protection systems etc. as those used in the expansion planning for the same time frames." This would be important for those who use the AFC Calculation Methodology and build power flow models to determine if capacity will be available. For those using the Rated System Path Methodology these factors are important for the determination of TTC but not for the determination of ATC. Rated System Path Methodology users do not build power flow cases and study contingencies to determine "ATC"; rather, these case studies are done to determine the TTC rating of paths. Therefore we recommend that the drafting team restrict these two requirements to those TSP's who use the AFC Calculation Methodology and create a parallel requirement for the calculation of TTC for those TSP's who use the Rated System Path Methodology. R12. This requirement states that TSP's must "Identify the Transmission Service Providers with which the data used in the calculation of ATC or AFC is exchanged." Coordination of data is important but for those using the Rated System Path Methodology this coordination takes place when the TTC for the path and not the ATC for the path is calculated. We recommend that the drafting team make this requirement apply only to those using the AFC Methodology in MOD 001 and create a comparable requirement in the TTC calculation standard for those using the Rated System Path Methodology. R14. This requirement states that "The Transmission Service Provider shall require that the Transmission Customer provide both ultimate source and ultimate sink on the Transmission Service Request and shall require that the Transmission Customer use the same source and sink on Interchange Transaction Tags." The WECC Team suggests this Requirement should be applicable only to entities using the AFC methodology.

Question #19	
Commenter	**Comment**
	For entities using the Rated System Path (re: the majority of WECC) the source and sink are already part of the Tagging system. At minimum that makes the Requirement redundant for the Rated System Path participants. Further, since Tagging is a business practice, this requirement would fall into the purview of NEASB. Lastly, unlike those using the AFC methodology, the source and sink of each request and subsequent schedule is not needed to determine ATC as it is for those determining AFC using Flowgates. Since entities calculating AFC need to know the source and sink for Flowgate modeling purposes (whereas those using the Rated System Path method do not), the logical application for this Requirement is to those using the AFC methodology.
Response: Please see the proposed MOD-030 – this standard does include requirements to convert AFC to ATC. Order 693, P. 1031 / issued after the Standard was drafted states, "Accordingly, transmission providers using an AFC methodology must convert flowgate (AFC) values into path (ATC) values for OASIS posting. See also Order 890, P. P. 211 R3. The revised standard does not include R3. R6 The SDT agrees it may need to establish a criterion for the "reliability need for the values" or strike this phrase from the requirement. The next draft of the standard will address this. R11.The revised MOD-001 only includes 'generic' ATC requirements – the requirements for each of the three different methods of calculating ATC have been moved into separate standards, and each of the separate standards includes much more specificity than had been included in MOD-001. Please review MOD-028, MOD-029 and MOD-030. R12: The revised MOD-001 requires the TSP to develop a document called "Available Transfer Capability Implementation Document" and this document must contain the names of the TSPs with which the TSP exchanges data for use in determining ATC. R14: The drafting team removed this requirement. Order 890 requires NERC to develop requirements in MOD-001 that specify "a consistent approach on how to simulate reservations from points of receipt to points of delivery when sources and sinks are unknown" so there will be a requirement that addresses sources and sinks and how they are to be consistently modeled (simulated). The drafting team will consider moving the tagging requirement to a NAESB practice.	