

- Individual or group. (15 Responses)**
- Name (7 Responses)**
- Organization (7 Responses)**
- Group Name (8 Responses)**
- Lead Contact (8 Responses)**
- Question 1 (14 Responses)**
- Question 1 Comments (15 Responses)**
- Question 2 (15 Responses)**
- Question 2 Comments (15 Responses)**
- Question 3 (14 Responses)**
- Question 3 Comments (15 Responses)**
- Question 4 (2 Responses)**
- Question 4 Comments (15 Responses)**
- Question 5 (4 Responses)**
- Question 5 Comments (15 Responses)**
- Question 6 (14 Responses)**
- Question 6 Comments (15 Responses)**
- Question 7 (14 Responses)**
- Question 7 Comments (15 Responses)**
- Question 8 (15 Responses)**
- Question 8 Comments (15 Responses)**
- Question 9 (13 Responses)**
- Question 1 Comments (15 Responses)**
- Question 10 (14 Responses)**
- Question 10 Comments (15 Responses)**
- Question 11 (11 Responses)**
- Question 11 Comments (15 Responses)**
- Question 12 (9 Responses)**
- Question 12 Comments (15 Responses)**
- Question 13 (6 Responses)**
- Question 13 Comments (15 Responses)**

Group
Northeast Power Coordinating Council
Guy Zito
Yes
Yes
Yes
No
We do not see the need for defining the term Planning Transfer Capability (PTC). The current term Transfer Capability and its definition have been in use for a long period of time. The industry is familiar with this definition, and has an understanding that it is the attainable level of power transfer from one point to another or on a specific transmission path (similarly, TTC is the maximum level of power transfer). The proposed definition is not

compatible with either the definition of Transfer Capability or the definition of Total Transfer Capability in the NERC Glossary, as follows: Transfer Capability: The measure of the ability of interconnected electric systems to move or transfer power in a reliable manner from one area to another over all transmission lines (or paths) between those areas under specified system conditions. The units of transfer capability are in terms of electric power, generally expressed in megawatts (MW). The transfer capability from "Area A" to "Area B" is not generally equal to the transfer capability from "Area B" to "Area A." Total Transfer Capability: The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions. If this definition was created to emphasize that this is the term used for planning assessment in the context of this standard, then this could be achieved simply by adding the phrase "in the planning horizon" to the term Transfer Capability. We accept the creation of the term "Transfer Capability Implementation Document". "Planning" should be removed.

No

We do not support the word "Planning" before "Transfer Capabilities" for reasons as indicated in Question 6 preceding. Words such as "Planning Coordinators" and "reliable planning" suffice to put the Transfer Capabilities in the proper time horizon perspective.

Yes

No

(1) We suggest R2 and R3 be combined by "Each Planning Coordinator shall make available its current TCID to all of the following entities, and notify these entities before implementing a new or revised TCID: ... (2) Transmission Planner should be added to Part 2.1. (3) R5 as written may prohibit some entities that have a reliability-related need to obtain the calculated Transfer Capabilities, for example, the Reliability Coordinators. Also, the TCID need-to-know entities in R2 and the TC need-to-know entities in R5 are not consistent. We suggest to make them the same, and include RC in the list.

No

(1) M4 conveys different evidence requirements than what R4 requires. R4 asks for annual verification of each of the four seasons' Transfer Capabilities. M4 asks for evidence of verification of the Summer and Winter TCs only, but once every 3 months. They are very different from what's stipulated in the requirement. We suggest M4 be revised to: "Each Planning Coordinator have evidence that it verified, and if necessary recalculated, its TCs consistent with its TCID for each season (Spring, Summer, Fall, and Winter) for years two through five at least once each calendar year. (2) Some Measures may need to be revised depending on the SDT's response to our comments to Question 9.

No

(1) The retention period for R2 and R3 (or combined as suggested in Question 9) may not provide the evidence needed if there has not been a change to the TCID in the past 24 months. Suggest to change the retention period to be the same as R1. (2) R2: The wording for Lower can be interpreted to mean that the responsible entity did not comply with the requirement even if it notified all entities before implementing a new TCID. We suggest to reword it to: "The Planning Coordinator notified one or more of the parties specified in R2 of a new or modified TCID, but was late by up to 30 calendar days after its implementation." (3) R5: Unlike its R2 counterpart, timing is not factored into the VSLs. We suggest to add a second condition under each VSL as follows: Lower: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.2, but was late by up to 30 calendar days after the 10 calendar day target. Moderate: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.2, but was

late more than 30 calendar days after the 10 calendar day target. High: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late by up to 30 calendar days after the 10 calendar day target. Severe: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late more than 30 calendar days after the 10 calendar day target. If the above suggestions are not adopted, then we suggest to add the condition "within 10 calendar days" at the end of each VSL. For example, the Lower VSL will read: "The Planning Coordinator made the TCs available to some, but not all, of the entities described in R5, Part 5.2 within 10 calendar days." (4) Some of the VSLs may need to be revised depending on the SDT's response to our comments to Question 9.

Individual

Ross Kovacs

Georgia Transmission Corporation

Yes

Yes

Yes

No

The definition of Planning Transfer Capability is inconsistent with the definitions of ATC in MOD-001-1 and TTC in MOD-028-1, MOD-029-1, and MOD-030-2. ATC and TTC in the MOD standards are calculated for each ATC Path. A more consistent definition would be "A forecast of the transfer capability for each ATC Path that is used in the Planning Horizon when performing planning analyses". GTC notes that Order 729, paragraph 279 states, "The Commission also expressed concern that the criteria used to calculate transfer capabilities for use in determining available transfer capability must be identical to those used in planning and operating the system. The Commission directed the ERO to modify FAC-012-1 to provide a framework for the transfer capability calculation methodology that takes account of the need for consistency in the criteria used to calculate transfer capabilities."

Yes

Yes

While GTC agrees that the draft standard should merge FAC-012 and FAC-013, the SAR's Detailed Description says "This SAR proposes to retire FAC-012-1, and modify FAC-013-1." How will this inconsistency be explained?

Yes

No

Requirement 4 of the draft standard states, "Each Planning Coordinator shall verify, and if necessary recalculate, PTCs consistent with its PTCID for each season (Spring, Summer, Fall, and Winter) for years two through five at least once each calendar year." However, Measurement 4 states, "Each Planning Coordinator have evidence that it verified, and if

necessary recalculated, its PTCs consistent with its PTCID for each winter and summer season for years two through five at least once every three months." Why is the measurement for each winter and summer season when Requirement 4 specified PTCs for spring, summer, fall, and winter?

No

R1 and R4 are listed as having Medium Violation Risk Factors. R1 is a documentation requirement; R4 requires calculations 13 months before real time. These requirements should have Lower Violation Risk Factors.

No

Requirement 1.1.1 of the draft standard states, "A list of the interfaces for which the Planning Coordinator determines a Planning Transfer Capability". GTC believes this should be "A list of ATC Paths for which the Planning Coordinator determines a Planning Transfer Capability." This would be consistent with the definitions of ATC in MOD-001-1 and TTC in MOD-028-1, MOD-029-1, and MOD-030-2. ATC and TTC in the MOD standards are calculated for each ATC Path. Order 729, paragraph 291 states, "In making these revisions, the ERO should consider the development of a methodology for calculation of inter-regional and intra-regional transfer capabilities". Will this FERC request be considered? If so, please identify the part of the draft standard that addresses it.

Individual

Kirit Shah

Ameren

No

Draft Standard does not appear to provide details on the data input and modeling assumptions from Order 693.

Yes

No

We believe that, in R4, PC should coordinate verification of PTC with TP(within PC's planning coordinator area).

No

What is the need for PTC? We believe that well established NERC terms like ATC, TTC, FCITC should be used. The proposed definition of PTC is not consistent these terms. Furter, we have several questions with regard to PTC : Is PTC simultaneous or non-simultaneous? How is PTC will be used? Is PC going to decide how it would be used?

No

Please see our comments to question 6.

Yes

No

Please see our response to question 1.

No

Measure 4 is not consistent with the requirement. The requirement requires recalculation once a calendar year and the measure attempts to require recalculation once a quarter. Do we need spring and fall PTC (R4) when the vales more appropriate for planning would be

summer and winter as included in M4.
(1) In R5, PTC should be available to all the entities in R2 without being asked. TOP will be more interested in changes in PTC than changes in PTCID. (2) It is unclear if PTC to be calculated between TOP areas, or from BA to BA, region to region, or sub-region to sub-region? The document should require PC to work with TP and TOP to identify necessary interfaces to calculate transfer capabilities for Planning horizon. (3) PTC should be referred to as an acronym in R1.1 when it is used first time as the acronym was used then in R4.
Individual
Dan Rochester
Independent Electricity System Operator
Yes
Yes
Yes
No
We do not see the need for defining the term Planning Transfer Capability (PTC). The current term Transfer Capability and its definition have been adopted for a long period of time. The industry is familiar with this definition, and have a deep and unambiguous understanding that in general term, it is the attainable level of power transfer from one point to another or on a specific transmission path (similarly, TTC is the maximum level of power transfer). We view the proposed definition as redundant since it is similar to the definitions of Transfer Capability and Total Transfer Capability already in the NERC Glossary, viz.: Transfer Capability: The measure of the ability of interconnected electric systems to move or transfer power in a reliable manner from one area to another over all transmission lines (or paths) between those areas under specified system conditions. The units of transfer capability are in terms of electric power, generally expressed in megawatts (MW). The transfer capability from "Area A" to "Area B" is not generally equal to the transfer capability from "Area B" to "Area A." Total Transfer Capability: The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions. If the reason to create this definition is to make a distinction that this is the term used for planning assessment in the context of this standard, then we believe that this can be achieved simply by adding the phrase "in the planning horizon" to the term Transfer Capability. We do not have a difficulty with the creation of the term "Transfer Capability Implementation Document for so long as the word "Planning" is removed.
No
We do not support the word "Planning" before "Transfer Capabilities" for reasons as indicated under Q6, above. Words such as "Planning Coordinators and "reliable planning" already suffice to put the Transfer Capabilities in the proper time horizon perspective.
Yes

No

(1) We suggest R2 and R3 be combined by "Each Planning Coordinator shall make available its current PTCID to all of the following entities, and notify these entities before implementing a new or revised TCID: (2) We believe the Transmission Planner should be added to Part 2.1. (3) R5 as written may preclude some entities that have a reliability-related need to obtain the calculated Transfer Capabilities from receiving them, for example, the Reliability Coordinators. Also, the TCID need-to-know entities in R2 and the TC need-to-know entities in R5 are not consistent. We suggest to make them the same, with consideration of including the RCs in the list.

No

(1) M4 conveys different evidence requirements than what R4 requires. R4 asks for annual verification of each of the four seasons' Transfer Capabilities. M4 asks for evidence of verification of the Summer and Winter TCs only, but for once every 3 months. They are very different that what's stipulated in the requirement. We suggest M4 be revised to: "Each Planning Coordinator shall have evidence that it verified, and if necessary recalculated, its TCs consistent with its TCID for each season (Spring, Summer, Fall, and Winter) for years two through five at least once each calendar year. (2) Some Measure may need to be revised depending on the SDT's response to our comments under Q9.

No

(1) The retention period for R2 and R3 (or to be combined as we suggest) may not provide the evidence needed if there has not been a change to the TCID in the past 24 months. Suggest to change the retention period to be the same as R1. (2) R2: For the Lower VSL we suggest the following alternative wording to avoid any possible misinterpretation: "The Planning Coordinator notified one or more of the parties specified in R2 of a new or modified PTCID, but was late by up to 30 calendar days after its implementation. (3) R5: Unlike its R2 counterpart, timing is not factored into the VSLs. We suggest to add a second condition under each VSL as follows: Lower: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.2, but was late by up to 30 calendar days after the 10 calendar day target. Moderate: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.2, but was late more than 30 calendar days after the 10 calendar day target. High: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late by up to 30 calendar days after the 10 calendar day target. Moderate: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late more than 30 calendar days after the 10 calendar day target. If the above suggestions are not adopted, then we suggest to add the condition "within 10 calendar days" at the end of each of the VSL. For example, the Lower VSL will read: "The Planning Coordinator made the TCs available to some, but not all, of the entities described in R5, Part 5.2 within 10 calendar days." (4) Some of the VSLs may need to be revised depending on the SDT's response to our comments under Q9.

Individual

Kasia Mihalchuk

Manitoba Hydro

No

Manitoba Hydro does not believe FERC should mandate changes to international standards. Order 729 required elimination of redundancies between FAC-012 and the new MOD standards (1, 28-30). This can easily be accomplished by removing reference to the Reliability Coordinator in R1 through R4. Order 693 required a more detailed framework of

the data inputs and modeling assumptions. This could be added as an additional requirement R1.4 in the existing FAC-012 standard. There is no strong reliability need to have a consistent methodology between the operating and planning horizons. However, there should be a need to ensure the methodologies used by adjacent Planning Coordinators for the same interface are consistent. Requirement R4 is a step in this direction in the existing standard but is completely missing in the revised standard. The proposed changes make the Transfer Capability calculations in the 2-5 year period too close to a full operational study. This is not consistent with the direction given by Order 729 and 693 where the numbers are not intended to grant transmission service.

No

The SAR requires the PC to complete many detailed studies and verifications. This is unnecessary work in determining planning horizon PTCs. The SAR assumes TOs have a large interest in Planning Horizon PTCs. This is not always the case.

Yes

The SAR requires that the PTCID line up with the ATC methodology in the operating horizon (the ATCID). This implies full blown operating studies in the planning horizon (spring, Summer, fall winter years 2 to 5). The accuracy and uncertainty of planning horizon PTCs mean these PTCs will not necessarily allow for transmission service. So why is it necessary for PCs to do the detailed work required to ensure the PTCID line up with the ATC methodology in the operating horizon (the ATCID)?

No

The PTC definition should refer to 'interfaces', not 'areas'. It should align with R1.1.1 which refers to interfaces. The PTC is a transfer capability not a forecast of a transfer capability. Proposed PTC definition: Planning Transfer Capability: The measure of the ability of interconnected electric systems to move or transfer power in a reliable manner from one area to another over all transmission lines (or paths) between those areas under specified system conditions in the planning horizon of one year or longer. The group of lines or paths between adjacent areas comprise an interface. Why is it necessary to have a new definition instead of using the definition of Transfer Capability in the NERC Glossary: The measure of the ability of interconnected electric systems to move or transfer power in a reliable manner from one area to another over all transmission lines (or paths) between those areas under specified system conditions. The units of transfer capability are in terms of electric power, generally expressed in megawatts (MW). The transfer capability from "Area A" to "Area B" is not generally equal to the transfer capability from "Area B" to "Area A." The standard could just refer to "Transfer Capability in the planning horizon. Planning horizon should be defined. The PTCID definition is unnecessarily wordy. Also, the PTCID should describe a method not an 'implementation of a method'. Proposed PTCID definition: PTCID: A document that describes the method for calculating PTC.

No

The proposed purpose is unclear. What does 'used effectively in the reliable planning of the Bulk Electric System (BES)' mean? The purpose statement should simply be: To ensure that Planning Coordinators calculate Planning Transfer Capabilities using an established method. Also, if FAC-012-1 and FAC-013-1 are combined, the purpose should include a statement such as "and distribute the PTCs to the entities that have a reliability related requirement for them".

No

Manitoba Hydro strongly suggests that the Standard Drafting Team revert back to FAC-012. With some minor modifications to the current FAC-012, a clear and adequate standard

could be established. By dropping the reference to the RC in R1 & R4 & M1 & M4 & D, R2 and M2 the current FAC-012 would be applicable only to the PA (not the PA and the RC). Requirement R1 in FAC-012 lists some important items that should be included in a transfer capability methodology. These items are not included in the proposed FAC-013-2 standard. There is nothing in the proposed FAC-013-2 standard that makes it superior to the current FAC-012 standard.

No

In order 729 point 279 the following is stated: 'The Commission expressed concern the FAC-012-1 merely required the documentation of a transfer capability methodology without providing a framework for that methodology including data inputs and modeling assumptions.' Where in the draft standard is it required that the PTCID provide data inputs and modeling assumptions?

No

M4: This measure should only require the PC have evidence that it verified , and if necessary recalculated, its PTCs consistent with its PTCID for each winter and summer season for years two through five at least once a year. In R4 is it stated '...at least once each calendar year.'. M5: PTCID should be changed to PTCs. Also, since the PC's PTCs are in the Planning Horizon, there is no need to make them available within a time frame as short as ten calendar days. One month would be a more appropriate time frame.

No

The Violation Risk Factors should all be Lower. The Time Horizons are all Planning and as such violating any of the Requirements in this proposed standard will not result in anything more than a low level of risk. Violation Severity Levels: R1: The VSLs refer to times of three months/six months/not more than one year/a year or more whereas Requirement R1 does not refer to any time periods. R2: The VSLs refer to times of 30 calendar days/31-60 calendar days/61-90 calendar days/more than 90 calendar days whereas Requirement R2 does not refer to any time periods. R3: The VSLs are not properly allocated for a binary VSL Requirement. R5: The VSLs do not mention any time periods whereas Requirement R5 states '...no later than ten calendar days...'

No

Manitoba Hydro strongly suggests that the Standard Drafting Team refer back to FAC-012. With some minor modifications to the current FAC-012, a clear and adequate standard could be established. By dropping 4.1, the reference to the RC in R1 & R4 & M1 & M4 & D, R2 and M2 the current FAC-012 would be applicable only to the PA (not the PA and the RC). Requirement R1 in FAC-012 lists some important items that should be included in a transfer capability methodology. These items are not included in the proposed FAC-013-2 standard. There is nothing in the proposed FAC-013-2 standard that makes it superior to the current FAC-012 standard. Referring to the proposed FAC-013-2 Standard, R4 requires the PC to complete many detailed studies and verifications. This is unnecessary work in determining planning horizon PTCs. R4 should be changed to 'Each Planning Coordinator shall verify, and if necessary recalculate, PTCs consistent with its PTCID for the Summer and Winter seasons for years two and five at least once each calendar year.' Spring and Fall models are not currently created in the Planning Horizon. Requiring the PC to model and analyze Spring and Fall models in the Planning Horizon seems to be market driven, rather than reliability driven. There are is no requirement that the PCs on either side of an 'interface' coordinate when determining PTCs for the 'interface'. The Effective Date cannot be dependent on another standards' effective date (ie. cannot be dependent are the date that MOD-001-1, MOD-028-1, MOD-029-1 and MOD-030-2 are effective).

Individual

Jon Kapitz
Xcel Energy
Yes
The SAR appears to fully address the directives; however, it is not clear if the draft standard provides sufficient details on the data inputs and modeling assumptions as directed from originally in Order 693.
Yes
Yes
We agree, however the mapping of entities to Planning Coordinators is an ongoing gap in the registration process. Many entities (primarily non-RTO) are unable to point to who their PC is and similarly, entities who are PCs self define the entities they cover. To our knowledge, there is no source to identify the mapping of these relationships. Therefore, prior to implementation of standards that propose very prescriptive requirements on the PC and their interactions with subordinate entities it is important that the relationships are clearly established as a point of reference.
Business Practice
Business Practice: WECC Planning Coordination Committee (PCC) Handbook Comments: Entities within WECC may be using this to establish path ratings
No
No
There is no need to create the term Planning Transfer Capability (PTC). Transfer Capability is a well understood long standing NERC defined term and should be used in its place. Furthermore, the proposed definition is not consistent with the Transfer Capability or Total Transfer Capability definitions.
No
Planning Transfer Capability should be replaced with Transfer Capabilities. As an option, the purpose statement could refer to the Transfer Capabilities in the planning horizon.
Yes
No
The draft standard does not provide much detail around the data inputs and modeling assumptions requirements that Order 693 directed.
No
We believe it is premature to establish and review measures until the refinement of requirements is closer to completion
Yes
It is not clear why the document focuses on Transmission Operators and not the traditional way in calculating transfer capabilities such as from BA to BA, region to region, sub-region to sub-region. The document should simply require the PC to identify what necessary interfaces it will calculate transfer capabilities on.
Individual
Darcy O'Connell
California ISO

Yes
No
In support of the SRC comments related to question 9, we suggest the SDT to review both the draft FAC-013-2 and the approved MOD Standards (i.e., MOD-028 or MOD-029) to ascertain that FERC's concerns regarding data input and modeling assumptions are fully addressed. We also support the SRC comment to include the RC in R5.
No
M4 conveys different evidence requirements compared to what R4 requires. We suggest that R4 and M4 provide some flexibility to the Planning Coordinator to study and verify the conditions that are appropriate for the study area, rather than to require for all four seasons. For example, a peak and off-peak study in R4 may be appropriate for a study area. Similar flexibility in the language should be included in M4. Suggested wording for M4 would be: "Each Planning Coordinator have evidence that it verified, and if necessary recalculated, its PTCs consistent with its PTCID for relevant study scenarios as appropriate for the study area."
No
We request consideration be given to extend the "no later than 10 calendar days" time allowed in R5 and the VSLs for R5 to "no later than 15 calendar days." We suggest the following for R5 VSLs: Lower VSL: The Planning Coordinator made the PTCs available to one or more of the entities described in R5, Part 5.2, after 15 calendar days. Moderate VSL: The Planning Coordinator made the PTCs available to none of the entities described in R5, Part 5.2, within 15 calendar days. High VSL: The Planning Coordinator made the PTCs available to one or more of the entities described in R5, Part 5.1, after 15 calendar days. Severe VSL: The Planning Coordinator made the PTCs available to none of the entities described in R5, Part 5.1 within 15 calendar days.
No
We suggest that R4 and M4 provide some flexibility to the Planning Coordinator to evaluate the conditions that are appropriate for the study area, rather than to require all four seasons be evaluated. For example, a peak and off-peak study in R4 may be appropriate for a study area. For R4, where it specifies for years two through five, we request that the SDT consider years two and five, similar to the proposed Requirement 2.1.1 in Draft 5 of the TPL-001-1 Standard that is under development in NERC Project 2006-02. For R5, we ask the SDT to give consideration to extending the timeframe allowed beyond 10 calendar days to 15 calendar days.

Group
Southern Company Transmission
Stephen Mizelle
Yes
Southern believes the description of the SAR fully addresses the applicable directives from FERC Order 693 and FERC Order 729. Southern interprets the main directives from these respective orders as: 1) modify FAC-12-1 and FAC-13-1 to address calculation and communication of Transfer Capabilities for the timeframe beyond 13 months, 2) modifications to these FAC standards should not address the timeframe from 1 hour through 13 months, 3) modify FAC-13 to be applicable to the Planning Coordinator only and not the Reliability Coordinator, and 4) remove redundant provisions for the calculation of Transfer Capabilities addressed elsewhere in the MOD Reliability Standards. Southern agrees with NERC's interpretation that the revised FAC standards must not conflict with the ATC-related MOD standards as long as NERC's interpretation is that the revised FAC standards do not prescribe additional requirements for the calculation of Transfer Capabilities in the operating horizon. However, Southern would disagree if NERC's interpretation is that the methodologies described in the MOD Reliability Standards (MOD-28-1, MOD-29-1, and MOD-30-2) must be utilized to calculate Transfer Capabilities for the timeframe beyond 13 months. Southern does not believe that there are existing standards that provide the framework for calculation of Transfer Capabilities beyond 13 months.
Yes
Yes
No
No
In general, Southern agrees with the proposed definitions of PTC and PTCID; however, Southern would like to propose a revision to the definition of PTC to capture that PTC is the forecast of Transfer Capabilities beyond the 13 month timeframe. The calculations of Transfer Capabilities within the timeframes from 1 hour up to 13 months have been adequately covered by the MOD Reliability Standards approved within FERC's Order 729. Additionally, the term "Planning Horizon" is not a term currently defined in the NERC Glossary. Although FERC implied in Order 729 that the planning horizon is years one through five, Southern recommends that NERC either define the term Planning Horizon or rephrase the definition of PTC to capture the applicable timeframe as specified in FERC Order 729 without referencing the term Planning Horizon.
Yes
Southern agrees with NERC's proposed purpose statement in that Transfer Capabilities should be calculated using an established method and used effectively for the reliable planning of the Bulk Electric System. However, Southern does not believe that NERC's proposed FAC-13-2 addresses this purpose statement. Southern does not believe there are currently any established methods for which Transfer Capabilities are calculated beyond the 13 month timeframe. The existing MOD Reliability Standards (MOD-28-1, MOD-29-1, and MOD-30-2) provide for the calculation of Transfer Capabilities in the operating horizon only (i.e. up to 13 months). FERC's directive in Order 729 was to develop modifications to FAC-12-1 and FAC-13-1 to comply with the relevant directives of Order No. 693, in which, NERC was directed to modify FAC-12-1 to provide a framework for calculating transfer capability.

Southern believes NERC has fully addressed this framework in regards to the operating horizon with the MOD Reliability Standards approved within FERC Order 729. As such, Southern recommends that existing reliability standards (i.e. FAC-12-1) be modified or new reliability standards be created to provide a framework for the calculation of Transfer Capabilities beyond 13 months.

No

Southern does not support merging FAC-12 and FAC-13 unless a single method for calculating Transfer Capabilities beyond 13 months is approved. FAC-13-1 is a FERC approved standard that requires either the reliability coordinator or the planning authority to calculate transfer capabilities based on an established methodology and provide those transfer capabilities to its transmission operators, transmission service providers and planning authorities within the reliability coordinator's area. In FERC's Order 729, the commission stated that the responsibilities of FAC-12 and FAC-13 would be appropriately assigned to the Planning Coordinator and not the reliability coordinator. FAC-13 is simply a standard by which Transfer Capabilities calculated by a Planning Coordinator should be communicated to the Transmission Operator and Transmission Service Provider. FAC-13 does not prescribe how to calculate these Transfer Capabilities. As previously stated, Southern does not believe that there are established methodologies that provide the framework for calculating Transfer Capabilities beyond 13 months. Southern recommends that either FAC-12 be modified to provide the framework for a single methodology used for calculating Transfer Capabilities beyond 13 months or additional standards be created to provide such frameworks similar to those prescribed in the MOD Reliability Standards (MOD-28-1, MOD-29-1, and MOD-30-2). Additionally, Southern would not support the modification of MOD-28-1, MOD-29-1, or MOD-30-2 in order to provide this framework beyond 13 months.

No

In FERC Order 693, the commission directed NERC to modify FAC-12 to, at a minimum, provide a framework for the transfer capability calculation methodology, including data inputs and modeling assumptions. Southern believes that this directive has been fully addressed for the timeframe of 1 hour through 13 months with the MOD Reliability Standards approved within FERC Order 729. The commission stated in FERC Order 729 that calculation of transfer capabilities for the planning horizon (years one through five) had not been addressed by the MOD Reliability Standards and gave additional directives that FAC-12 and FAC-13 be modified to comply with the original directives of FERC Order 693. The primary requirements of the draft standard require the Planning Coordinator to: 1) define the interfaces in which Transfer Capabilities are calculated, 2) explain why the method used to calculate these Transfer Capabilities differ from the method selected by the Transmission Operator in Transmission Service Provider's ATCID, and 3) share the calculated Transfer Capabilities with specified entities. However, the draft standard does not provide the framework for how the Transfer Capabilities should be calculated; and, as previously stated, Southern does not believe that there are established methodologies that provide the framework for calculating Transfer Capabilities beyond 13 months. Therefore, Southern contends that the draft standard does not meet the directive of providing the framework for calculating Transfer Capabilities beyond 13 months.

No

Southern disagrees with measure M4 in that verification, or possible recalculation of PTCs, should be performed any more frequent than once a year. Southern does not believe that there is a reliability need to calculate PTCs on a quarterly basis for PTCs to be utilized beyond the 13 month horizon. Additionally, Southern does not believe there is a reliability need to calculate seasonal PTCs; and therefore, disagrees that each winter and summer season for years two through five should be verified, or recalculated at least once every

three months.
Yes
No
Yes
<p>Southern disagrees with requirement R1.1.2 in that a Planning Coordinator should have to provide a detailed explanation as to why the methods used to calculate PTCs are or are not different from those methods selected by the Transmission Operator as described in the Transmission Service Providers ATCID. The methods selected by the Transmission Operator in the ATCID do not provide the framework to calculate Transfer Capabilities beyond 13 months. Additionally, Southern disagrees with requirement R.1.1.3 to provide a justification as to why a method identified in a Planning Coordinator's PTCID is inconsistent with the Transmission Service Provider's ATCID. The existing, FERC approved MOD-001-1 allows for a path of which ATC is calculated to utilize different methodologies for different timeframes. For example, a Transmission Service Provider could select MOD-28-1 (Area Interchange) to utilize when calculating Transfer Capabilities for use in Hourly ATC calculations and select MOD-29-1 (Rated System Path) to utilize when calculating Transfer Capabilities for use in Monthly ATC calculations without requiring any justification for why the Transmission Service Provider chose to select different methods for the different timeframes. As such, Southern does not agree with any requirement to justify why a Planning Coordinator chose a different method for calculating Transfer Capabilities beyond 13 months. Southern disagrees with requirement R4 in that the calculation of seasonal transfer capabilities should be calculated for years two through five. Southern does not believe that there is a reliability need for Planning Coordinators to calculate seasonal PTCs. Each Planning Coordinator determines the most critical system condition for their respective area and performs reliability evaluations on these critical system conditions when creating their reliability expansion plan. Therefore, each Planning Coordinator should not be required to calculate seasonal PTCs for a timeframes that haven't been defined as a critical system condition for their area. Southern recommends that yearly Transfer Capabilities should be the only Transfer Capabilities calculated beyond 13 months through five years and that these Transfer Capabilities be calculated no more than annually.</p>
Group
Midwest ISO Stakeholder Standards Collaborators
Jason L. Marshall
No
The SAR appears to fully address the directives; however, it is not clear if the draft standard provides sufficient details on the data inputs and modeling assumptions as directed in Order 693.
Yes
No
The drafting team should review if there are any requirements needed to compel registered entities such as TP, TO, TOP, GO, GOP, and BA to provide any data that the PC needs to complete its function. If the data is already required through other requirements in other standards, then additional requirements are not needed.
No

There is no need to create the term Planning Transfer Capability (PTC). Transfer Capability is a well understood long standing NERC defined term and should be used in its place. Furthermore, the proposed definition is not consistent with the Transfer Capability or Total Transfer Capability definitions.

No

Planning Transfer Capabilities should be replaced with Transfer Capabilities. As an option, the purpose statement could refer to the Transfer Capabilities in the planning horizon.

Yes

No

The draft standard does not provide much detail around the data inputs and modeling assumptions requirements that Order 693 directed.

No

Measure 4 is not consistent with the requirement. The requirement requires recalculation once a calendar year and the measure attempts to require recalculation once a quarter.

Yes

It is not clear why the document focuses on Transmission Operators and not the traditional way in calculating transfer capabilities such as from BA to BA, region to region, sub-region to sub-region. The document should simply require the PC to identify what necessary interfaces it will calculate transfer capabilities on. R2 and R3 should be combined into a single requirement. R2 in essence requires pre-notification of coming changes to the PTCID but there is no need to specify what the changes are. Then R3 requires notification again to the same entities with an actual copy of the changes. R2 as written is an administrative requirement that provides no reliability benefit. Resource Planners should receive copies of the Transfer Capabilities in R5 as well. They need to know their import capabilities in order to determine if they have access to sufficient generation to cover their load.

Group

Bonneville Power Administration

Denise Koehn

No

BPA would like clarification regarding the relationship between FAC-010-2 and FAC-014-2 and the proposed FAC-013-2, specifically regarding the difference between establishing a System Operating Limit in the Planning Horizon and establishing Planning Transfer Capabilities.

No

The definition of Planning Transfer Capability is vague. It is unclear if Planning Transfer Capability is meant to be different than Total Transfer Capability in the Planning Horizon. Is Planning Transfer Capability the same as Total Transfer Capability in the Planning Horizon? If not, how are they different? How does PTC relate to the requirements in FAC-010-2 regarding determination of the System Operating Limit for the Planning Horizon? BPA disagrees with the proposed definition of PTC and does not see the need for this new term.

No

It is unclear what the difference is between the purpose statement of the proposed FAC-013-2 and the purpose statements of FAC-010-2 and FAC-014-2. The purpose statements seem to be identical. BPA asks for clarification regarding the need for this proposed standard. For reference the purpose statement of FAC-010-2 reads as follows: "To ensure that System Operating Limits (SOLs) used in the reliable planning of the Bulk Electric System (BES) are determined based on an established methodology or methodologies." The purpose statement of FAC-014-2 reads as follows: "To ensure that System Operation Limits (SOLs) used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies."

No

BPA proposes to retire FAC-012 and FAC-013 and instead modify FAC-010-2, and FAC-014-2 to respond to FERC's directives in Order 693 and Order 729. This will avoid the appearance of duplication and provide consistency between these standards.

No

Comment #1: R4 does not line up with M4. R4 requires PTCs for spring, summer, fall, and winter while M4 only requires PTCs for each winter and summer. Also R4 requires PTCs to be verified and recalculated, if necessary, at least once each calendar year while M4 requires verification and recalculation of PTCs, if necessary, every three months. These are inconsistent. o BPA proposes the following modification to R4: "Each Planning Coordinator shall verify, and if necessary, recalculate PTCs consistent with its PTCID at least once a year for at least the most limiting season (spring, summer, fall, or winter) for years two through five." o BPA proposes the following language for M4: "Each Planning Coordinator have evidence that it verified, and if necessary, recalculated, its PTCs consistent with its PTCID at least once a year for the most limiting season (spring, summer, fall, or winter) for years two through five." Comment #2: R5 does not line up with M5. R5 requires the Planning Coordinator to make available PTC values to the entities listed, while M4 requires Planning Coordinators to make available the PTCID to those entities. The VSL indicates the Planning Coordinator makes available the PTCs. Is this correct?

No

Comment #1: The 1.4 Data Retention requirement mandates that the Planning Coordinator maintain its current ATCID. Was the intent for the Planning Coordinator to maintain its current PTCID? Comment #2: The risk to reliability from not complying with this standard is very low as it addresses the Planning horizon. A severe Violation Severity Level is too high for these standards. Comment #3: BPA proposes the following changes for the VSL's for R1: o Lower VSL: The Planning Coordinator has a PTCID that does not incorporate changes made up to six months ago. o The wording used for High VSL should replace the wording for Moderate VSL. o The wording used for Severe VSL should replace the wording for High VSL. Comment #4: BPA proposes the following changes to R2: o Lower VSL: The Planning Coordinator failed to notify one or more parties specified in R2 of a new or modified PTCID after, but no more than 45 days after its implementation. o Moderate VSL: The Planning Coordinator failed to notify one or more parties specified in R2 of a new or modified PTCID more than 45, but no more than 90 calendar days after its implementation. o High VSL: The Planning Coordinator failed to notify one or more of the parties specified in R2 of a new or modified PTCID more than 90 calendar days following its implementation. Comment #5: BPA proposes that there should be only one VSL for R3 and it should read as follows: o High VSL: The Planning Coordinator failed to make its PTCID available to one of more of the entities described in R3. Comment #6: BPA proposes that there should be only one VSL for R5 and it should read as follows: o High VSL: The Planning Coordinator failed to make the PTCs available to one or more of the entities described in R5, Part 5.2.

Individual
Greg Rowland
Duke Energy
Yes
However, we don't believe that it's possible to maintain a strict adherence to the FERC directive that the methodology and criteria used to determine Planning Transfer Capability (PTC) in the planning timeframe be identical to, or even consistent with, those used in determining ATC in the operating timeframe. The methodologies and criteria need to be different in some instances because the objectives are different. In the operating timeframe, realistic assumptions and data reflecting the expected operating conditions of the system must be used for determining ATC. In the planning timeframe, different assumptions for operating conditions and contingencies are used to determine how robust the system is in response to more extreme events. For example, a study might examine the impacts of significantly reduced generation from unscrubbed coal plants. Furthermore, analyses in the planning timeframe may use different tools (and thus treat inputs differently) such as PSSE, versus an ATC tool such as MUST.
No
The granularity of the proposed standards action is too great. And there is too much linkage between PTCID and ATCID that is not achievable, or even desirable, since the ATCID addresses transfer capability to support reliable operation of the system, while PTCID addresses planning of the system for reliability under a potentially wide range of future conditions.
Yes
none
No
Yes
No
The Purpose should be reworded to clearly state that the objective of this standard is not to simply determine transfer capabilities in the planning timeframe, but to assess the future reliability of the system. Suggested rewording: "To ensure that Planning Coordinators use an established methodology to assess whether sufficient transmission system capacity is available to support reliable operation of the Bulk Power System in the planning horizon."
Yes
Yes
No
Requirement R4 is much too prescriptive and we propose changes to it in our response to Question # 13 below. Measure M4 should be revised to match the revised requirement. Likewise Requirement R5 has far too tight a timeframe to communicate verified or recalculated transfer capabilities. Since these transfer capabilities are years in the future, 45 days should be allowed to communicate them instead of 10 days.
No
Requirement R1 should be a Lower VRF, since it's a documentation requirement. Also, VSLs

should be revised consistent with proposed changes to the requirements.
No
Yes
<ul style="list-style-type: none"> • Delete Requirements R2.2 and R2.3 because TSPs and TOPs really have no need of the PTCID. • Requirement R4 specifies a frequency that is overly prescriptive/granular and unnecessary for assessments in the planning timeframe. Suggested rewording: "Consistent with its PTCID, each Planning Coordinator shall assess PTCs in the near-term planning horizon and the long-term planning horizon at least once every two years." • Change the time in Requirement R5 from 10 days to 45 days, since this is a planning timeframe requirement. • Reword Requirement R5.2 to indicate that any other registered entities (not just those specified in R2) that have a reliability-related need can make a written request and receive the PTCs. • Add a new Requirement R5.3 as follows: "Each Planning Coordinator adjacent to the Planning Coordinator's planning coordinator area." • Under Data Retention, there is a typo in the second bullet: ATCID should be PTCID.
Group
PJM Interconnection
Patrick Brown
Yes
Yes
Yes
Business Practice
<p>PJM does not believe that a transfer capability methodology is the only valid option for the planning horizon. PJM's current, FERC approved, integrated queue study process (part of the PJM Regional Transmission Expansion Planning Process) requires that PJM study the base system and resolve any reliability criteria violations by implementing system upgrades. PJM then studies the integrated queue in the order in which the queued projects were received and resolves any reliability criteria violations by implementing system upgrades. This method ensures that the system as planned does not have any reliability violations. Requiring PJM to use a transfer capability analysis in the planning horizon would require PJM to unwind our current FERC approved integrated queue study process for transmission service, merchant transmission, and generation interconnection.</p>
Yes
<p>The ATC Methodology used in the operations horizon is fundamentally different than how PJM designs the transmission system to accommodate new requests for transmission service and generation interconnection. Specifically, the long-term Firm transmission service evaluation doesn't start with a Transfer Capability analysis; the AFC/ATC methodology used in planning for operations does.</p>
No
<p>Revised purpose statement: To ensure that Planning Coordinators use an established method for effective, reliable planning of the Bulk Electric System (BES). Note: This methodology does not need to involve the calculation of transfer capability in the planning horizon</p>
Yes

Yes
See answers to questions 4 and 5
Group
SERC Planning Standards Subcommittee
Philip R. Kleckley
No
Order 729 expresses FERC's "concerns" that the criteria used for the calculation of transfer capability be consistent in the Operations and Planning horizons. The SAR as drafted requires Planning Coordinators to document their methods and document the extent to which those methods differ between the operating and planning horizons. The SAR as drafted appears to go beyond the intent of FERC's language in 729 in that it requires methods to be consistent as opposed to criteria. If methods differ, but use the same criteria (i.e. 100% of normal facility ratings), then compliance should be achievable as many entities use different methods in the operating and planning horizons. We agree with the MISO comment that it is not clear if the draft standard provides sufficient details on the data inputs and modeling assumptions as directed from originally in Order 693.
No
We are concerned that more transfer capability studies than are needed will be required.
Yes
No
While we agree with the PTC definition we recommend that the phrase "implementation of a method" in the PTCID definition be replaced with the term "methodology" and the name of the document be changed to "Planning Transfer Capability Methodology Document (PTCMD)."
Yes
No
The SAR goes beyond what was identified as "concerns" by FERC, see response to Question 1.
No
We agree with the MISO comment that Measure 4 is not consistent with the requirement. The requirement requires recalculation once a calendar year and the measure attempts to require recalculation once a quarter.
No
R1 and R4 should have a VRF of "Lower". Calculation of PTCs will not directly lead to BES risk. The second alternative for High VSL for R1 should be graduated from Lower to Severe.
No

Yes
We recommend that part 5.2 under R5 be restated as: "Any other entities that demonstrate that they have a reliability-related need for such PTCs and make a written request for such PTCs." We recommend that part 1.1 under R1 be restated as: "A list of all Transmission Operators for which the Planning Coordinator determines Planning Transfer Capabilities. Include the following for each of these Transmission Operators." In the first bullet under D.1.4, change "ATCID" to "PTCID." We agree with the MISO comments that: 1) It is not clear why the document focuses on Transmission Operators and not the traditional way in calculating transfer capabilities such as from BA to BA, region to region, sub-region to sub-region. The document should simply require the PC to identify what necessary interfaces it will calculate transfer capabilities on. 2) R2 and R3 should be combined into a single requirement. R2 in essence requires pre-notification of coming changes to the PTCID but there is no need to specify what the changes are. Then R3 requires notification again to the same entities with an actual copy of the changes. R2 as written is an administrative requirement that provides no reliability benefit. The comments expressed herein represent a consensus of the views of the above named members of the SERC Planning Standards Subcommittee only and should not be construed as the position of SERC Reliability Corporation, its board or its officers.
Group
FirstEnergy
Doug Hohlbaugh
Yes
The purpose statement of the SAR states "Address FERC directives from Order 729 Related to FAC-012-1 and FAC-013-1." By extension, Order 729 in paragraph 291 also requires NERC to address its Order 693 directives as well as those explicitly stated in Order 729. The SAR clearly contains excerpted directives from FERC Order 693 and 729 and to the best of our knowledge captures the Commission directives.
Yes
No
The SAR should allow sufficient flexibility for the drafting team to consider other responsible entities that may be required to support and provide information to the Planning Coordinator in this effort. While we agree that most and possibly all requirements will fall to the PC, the SAR should not be so narrowly written to preclude other entities if needed.
No
FE believes that the Planning Transfer Capability definition is not needed as the existing terms for Total Transfer Capability and Transfer Capability should suffice and that it should be well understood that the timeframe for this standard is the planning horizon. We support the PTCID definition with the following conforming change: "A document that describes the implementation of a method for calculating Total Transfer Capability (TTC) for a Planning Horizon and provides information related to a Planning Coordinator's calculation of TTC."
Yes
Yes
No

The draft standard does not appear to include a requirement "that the criteria used to calculate planning capabilities for use in planning be identical to the criteria used to calculate available transfer capability and to operate the system."
No
The measures will need to be adjusted for the suggested changes in our response to item 9 above.
Yes
No
Yes
Each requirement shows a time horizon of "Planning", however, this is not a defined horizon. There are two types of planning horizons defined by NERC, "Long-Term Planning" and "Operations Planning". The SDT should clarify the intent is Long-Term Planning.
Group
IRC Standards Review Committee
Ben Li
Yes
Yes
Yes
No
We do not see the need for defining the term Planning Transfer Capability (PTC). The current term Transfer Capability and its definition have been adopted for a long period of time. The industry is familiar with this definition, and have a deep and unambiguous understanding that in general term, it is the attainable level of power transfer from one point to another or on a specific transmission path (similarly, TTC is the maximum level of power transfer). The proposed definition is not needed since it quotes transfer capability which is already a defined term in the NERC Glossary, as follows: Transfer Capability: The measure of the ability of interconnected electric systems to move or transfer power in a reliable manner from one area to another over all transmission lines (or paths) between those areas under specified system conditions. The units of transfer capability are in terms of electric power, generally expressed in megawatts (MW). The transfer capability from "Area A" to "Area B" is not generally equal to the transfer capability from "Area B" to "Area A." If the reason to create this definition is to make a distinction that this is the term used for planning assessment in the context of this standard, then we believe that this can be achieved simply by adding the phrase "in the planning horizon" to the term Transfer Capability. We do not have a difficulty with the creation of the term "Transfer Capability Implementation Document for so long as the word "Planning" is removed. Note that CAISO does not sign on to this specific comment.
No
We do not support the word "Planning" before "Transfer Capabilities" for reasons as indicated under Q6, above. Words such as "Planning Coordinators and "reliable planning" already suffice to put the Transfer Capabilities in the proper time horizon perspective. Note

that CAISO does not sign on to this specific comment.
Yes
No
(1) Requirement R1 stipulates the information that must be provided in the TCID for planning, and identifies the need to explain and justify any differences in the method used that are not consistent with the method selected by the Transmission Operator and described in the associated Transmission Service Provider's Available Transfer Capability Implementation Document (ATCID). We support this requirement but do not think that the requirement as written is sufficient to address the FERC's concerns that: "...FAC-012-1 merely required the documentation of a transfer capability methodology without providing a framework for that methodology including data inputs and modeling assumptions". We understand the Requirement R1 is written to achieve consistency with the pertinent MOD standard (MOD-028 or MOD-029), but it is not clear to us that in the two related standards, the conditions stipulated in the FERC Order in terms of data input and modeling assumption are fully met. We suggest the SDT to review both the draft FAC-013 and the approved MOD standards to ascertain that the FERC's concerns are fully addressed. (2) We suggest R2 and R3 be combined by "Each Planning Coordinator shall make available its current [P]TCID to all of the following entities, and notify these entities before implementing a new or revised [P]TCID. (The [P] indicates our proposal to remove the word "Planning" for the two terms.) (3) We believe the Transmission Planner should be added to Part 2.1. (4) R5 as written may prohibit some entities that have a reliability-related need to obtain the calculated Transfer Capabilities, for example, the Reliability Coordinators. Also, the TCID need-to-know entities in R2 and the TC need-to-know entities in R5 are not consistent. We suggest to make them the same, with consideration of including the RCs in the list.
No
(1) M4 conveys different evidence requirements than the what R4 requires. R4 asks for annual verification of each of the four seasons' Transfer Capabilities. M4 asks for evidence of verification of the Summer and Winter TCs only, but for once every 3 months. They are very different that what's stipulated in the requirement. We suggest M4 be revised to: "Each Planning Coordinator have evidence that it verified, and if necessary recalculated, its TCs consistent with its TCID for each season (Spring, Summer, Fall, and Winter) for years two through five at least once each calendar year. Note that CAISO does not sign on to this specific comment. CAISO is concerned that the Requirement R4 is excessive. Requiring the PC to conduct planning assessments for the Summer and Winter seasons for each calendar year from years two through five, as in current practice across the continent, would suffice. Regardless, there is an inconsistency between Requirement R4 and Measure M4. (2) Some Measure may need to be revised depending on the SDT's response to our comments under Q9.
No
(1) The retention period for R2 and R3 (or to be combined as we suggest) may not provide the evidence needed if there has not been a change to the TCID in the past 24 months. Suggest to change the retention period to be the same as R1. (2) R2: The wording for Lower can be interpreted to mean that the responsible entity did not comply with the requirement even if it notified all entities before implementing a new TCID. We suggest to reword it to: "The Planning Coordinator notified one or more of the parties specified in R2 of a new or modified PTCID, but was late by up to 30 calendar days after its implementation. (3) R5: Unlike its R2 counterpart, timing is not factored into the VSLs. We suggest to add a second condition under each VSL as follows: Lower: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.2, but was late by up to 30 calendar days after the 10 calendar day target. Moderate: The Planning Coordinator

made the TCs available to one or more of the entities described in R5, Part 5.2, but was late more than 30 calendar days after the 10 calendar day target. High: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late by up to 30 calendar days after the 10 calendar day target. Moderate: The Planning Coordinator made the TCs available to one or more of the entities described in R5, Part 5.1, but was late more than 30 calendar days after the 10 calendar day target. If the above suggestions are not adopted, then we suggest to add the condition "within 10 calendar days" at the end of each of the VSL. For example, the Lower VSL will read: "The Planning Coordinator made the TCs available to some, but not all, of the entities described in R5, Part 5.2 within 10 calendar days." (4) Some of the VSLs may need to be revised depending on the SDT's response to our comments under Q9.

No