

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Summary Consideration: Some stakeholders identified typographical errors in the standard, and these have been corrected as noted below. The announcement for the recirculation ballot will include a notice of these corrections.

- Applicability 4.1.1, - added a space between "(AFCs)" and "on"
- R1 - replaced the "period" with a "colon" following "(ATCID)"
- R2.1.2 - changed "analyses" to "analysis"
- Added "R"s to all "fourth-tier" requirements (changing 2.1.1.1 to R2.1.1.1 for example)

While some stakeholders suggested modifications to the standard, the Drafting Team has decided to address these changes in the next version of the standard, which is currently under development and will be posted for comment at the same time as the recirculation ballot. The drafting team did not make any changes, other than correcting typographical errors, to the standard.

Entity	Segment	Vote	Comment
Ameren Services Company	1	Negative	<p>Ameren would like to thank the SDT for the considerable effort invested in drafting this standard. However, Ameren cannot support this version of MOD-030-1.</p> <p>(1) AFC is a market parameter and as such is applicable to the Transmission Service Provider.</p> <p>(2) Definition of an adequate flowgate population is required to adequately constrain the sale of transmission service, as such this would appear to be a market not a reliability issue.</p> <p>(3) Under R2 the calculation of TFC is applicable to the Transmission Operator. This is not consistent with the current version of the Functional Model. The Transmission Planner is responsible for supporting the development of TTC (TFC).</p> <p>(3) Under R3 the Transmission Service Provider not the Transmission Operator should be responsible for the calculation of ATC/AFC and any modeling data. This is especially true when the Transmission Service Provider determines ATC for the transmission systems of several Transmission Operators as would occur in an RTO/ISO such as the MISO.</p> <p>(4) That said we are aware that the oversubscription of transmission service can lead to reliability problems.</p> <p>(5) AFC issues affect long term planning as well as planning in the Operating Time Horizon.</p>

Response: The SDT has assigned the portions of the flowgate methodology related to AFC to the Transmission Service Provider.

The SDT believes the determination of flowgate is a reliability consideration, and defines how the transmission system is to be analyzed for reliability reasons with regard to determining the impacts of forecast usage of that system.

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<p>The Functional Model does not attribute the determination of TTC or TFC to any entity. As such, the SDT was required to interpret the model to determine the appropriate entity for determining TTC or TFC. Since the ratings of facilities are established by the Transmission Operator, the SDT felt it appropriate to assign the responsibility for TFC to the Transmission Operator.</p> <p>Under R3, the Transmission Operator is not responsible for calculating AFC – only providing the Transmission Service Provider with a model to use in that calculation. While many entities may have delegated this task to Transmission Service Providers through implementation of regional transmission service, the SDT does not believe this alone changes the responsibilities established. NERC has attempted to address this through allowing the use of Joint Registration Organizations, where a MISO/Ameren collaboration would be sanctioned as a single entity, and then the JRO would be responsible for determining how to allocate those sanctions among participants in the JRO.</p> <p>The SDT concurs that oversubscription can lead to reliability problems.</p> <p>With regard to the Time Horizons used in compliance, the SDT believes the correct horizon is Operations Planning.</p>			
<p>American Transmission Company, LLC</p>	<p>1</p>	<p>Negative</p>	<p>R2.1.3: Midwest ISO believes that this requirement is too onerous and leaves no allowance for an Interconnection-wide congestion management process to be enacted due to a forced outage or any other system condition unforeseen by forecasted system conditions. Also, the SDT did not respond to Midwest ISO comment concerning temporary flowgates in TLR. Midwest ISO questions the reliability benefit gained by calculating AFCs for a flowgate which was only created for a temporary system condition. Midwest ISO also believes that a flowgate referenced by R3.5 should be added by process established in R2.1.4. Otherwise, as the requirement is written, if a forced outage causes an Interconnection-wide congestion management procedure to be enacted in on a limiting element/contingency in PJM, then Midwest ISO would be required to add that facility as a flowgate despite the opinion of PJM or even if a transfer from Midwest ISO to PJM does not have an impact greater than the 5% threshold.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2: Midwest ISO continues to believe that the text of this requirement is not clear. Midwest ISO asks the drafting team to consider the following language. At a minimum, establish the list of internal flowgates to create, modify, or delete at least once per calendar year.</p>

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			<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3: Midwest ISO continues to believe that the text of this requirement is not clear. Midwest ISO asks the drafting team to consider the following language. At a minimum, establish the list of external flowgates to create, modify, or delete that have been requested as part of R2.1.4 within thirty calendar days from the request.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4: Both sub bullets instruct the entity to use the SOL for the flowgate. If this were to be the case, then R2.4 could be revised to just require the use of the SOL of the flowgate. Otherwise, the requirement should be revised to precisely capture the intention of the SDT.</p> <p>Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R5.3: How can this requirement be enforceable for entities that are non-FERC jurisdictional? We are concerned of the situation where a non-FERC jurisdictional neighboring entity doesn’t provide such data to the Midwest ISO. We request clarification.</p> <p>Response: Entities are only required to use AFCs they have been provided; if the information has not been provided, entities are not expected to use it. All entities within the continental United States are subject to mandatory and enforceable standards developed by the ERO. Entities outside the United States may be responsible for providing this information based on the regulatory agencies under which they operate.</p>

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			<p>R6.2/R6.4/R6.6/R7.2/R7.4/R7.6: Midwest ISO is not convinced that similar seams coordination requirements exist for the other two standards, especially for MOD-029. This continues to demonstrate that more stringent requirements are placed on MOD-030 than the other methodologies. We request to remove these requirements from MOD-030 to achieve more unbiased standards.</p> <p>Response: MOD-029 is not a simulation-based methodology. As such, it is inappropriate to require the same kind of coordination as is described in MOD-028 and MOD-030. The SDT reiterates that MOD-028 does require similar coordination in R3 (generation dispatch and load for neighboring areas) and R4.3 (firm reservations from neighboring areas).</p> <p>R11: Midwest ISO continues to question the language of this requirement for three reasons.</p> <p>First, the response from the SDT to our previous round of comments indicates that the TTC would remain constant because the flowgate with the lowest TFC would generally remain constant relative to each path. However, the SDT ignored the fact that the distribution factor for that same flowgate changes due to system topology changes. Hence, the TTC value will almost always change each time the model is updated, which is currently once per day as stated in R3.</p> <p>Second, the TTC value back calculated for the Flowgate methodology is not as valuable as it is in the Rated System Path methodology or the Area Interchange Methodology. If a flowgate will never limit an ATC, why would anyone be interested to know a TTC calculated by this flowgate? As the requirement is written, the Transmission Service Provider will be expected to incur additional cost, with no benefit to either the reliability or transmission customers, to separately account for the flowgate with the smallest TFC value in order to back calculate a TTC value.</p> <p>Third, when you use the same flowgate for all value conversions, the formula "ATC=TTC-CBMpath-TRMpath-ETCpath" still holds if you simply divide everything in formula "ATC=TTC-CBMflowgate-TRMflowgate-ETCflowgate" by the flowgate distribution factor. However, using different flowgates would make the formula "ATC=TTC-CBM-TRM-ETC" invalid. This result eliminates the usefulness of the TTC value for the Flowgate methodology. Therefore, we request this requirement to be rewritten if the SDT believes a formula to calculate TTC must be included in the standard.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision</p>

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			for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.
Response: Please see in-line responses.			
Avista Corp.	1	Negative	The standard needs some flexibility due to regional differences. Support comments submitted by the Bonneville Power Administration.
Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address concerns raised by BPA (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.			
Bonneville Power Administration	1	Negative	<p>BPA believes this forces undue complication for our utility that could, in fact, lessen attention to reliability by adding extensive additional work without any gain in reliability. Our comments:</p> <p>1. R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the eastern interconnection with its commensurate characteristics. However, practices that are in place in BPA’s part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions.</p> <p>MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of: load, generation, configuration of extensive special protection schemes (SPS), and WECC’s more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate.</p> <p>While being made up of different named elements, BPA’s existing flowgates do not always include the first three limiting Elements and their worst associated Contingency combinations, yet they still protect the area of transmission constraint.</p> <p>An example of a basis for an ATC capacity that does not fit the proposed standard’s language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA’s North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a</p>

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			<p>limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate.</p> <p>In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference:</p> <p>RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate.</p> <p>If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows ("red/underlined" language indicates additions): R2.4. Establish the TFC of each of the defined Flowgates as equal to: For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p> <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between "(AFCs)" and "on"; R1, where a colon is missing following the "(ATCID)"; R2.1.2, where "analyses" should not be plural; and "R"s appear to be missing from all "fourth-tier" requirements (2.1.1.1 for example).</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>			

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Brazos Electric Power Cooperative, Inc.	1	Negative	A NEGATIVE vote is cast for this standard as written as it imposes obligations on entities in the ERCOT region that do not utilize ATC paths and calculation methodologies to manage congestion or for reliability operations. Our previous submitted comments suggested that applicability language be included in the requirements to recognize that such market difference exists.
<p>Response: If ERCOT does not choose to implement this methodology, then this standard would not apply to ERCOT. If ERCOT does not have ATC Paths, or ERCOT has an associated variance, MOD-001 would not require them to select a methodology.</p>			
Central Lincoln PUD	1	Negative	<p>The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the “Hub and Spoke” nature of the Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Public Power Council’s members and other transmission customers will ultimately have to fund. Because the standard would unnecessarily impose these burdens without any incremental improvement in reliability, Central Lincoln PUD respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. Central Lincoln PUD supports Bonneville’s proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-</p>			

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030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.			
City of Tacoma, Department of Public Utilities, Light Division, dba Tacoma Power	1	Negative	<p>The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the “Hub and Spoke” nature of the Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Tacoma Power and other transmission customers will ultimately have to fund. Because the standard would unnecessarily these burdens without any incremental improvement in reliability, Tacoma Power respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. Tacoma Power supports Bonneville’s proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Exelon Energy	1	Affirmative	<p>General comment These standards bring the industry closer to a unified ATC calculation methodology by requiring that one of three calculation methodologies be utilized and documented. This is an improvement from where the industry is today but falls short of FERC Order No. 890. The standards still lack a requirement for ATC or AFC calculations to be consistent with criteria used in operating and planning studies</p>

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			<p>for corresponding time periods. Exelon's comments reflect these deficiencies and Exelon will be making these same points to FERC if these standards are approved, requesting that the FERC direct NERC to approve the standards but modify the standards to be consistent with Order No. 890. Suggested modifications to the standards to achieve this consistency are included in our comments. MOD-030-1 Flowgate Methodology - Requirement 2.1.1.1. and 2.1.2.1. need to be revised as follows:</p> <p>Use first Contingency criteria consistent with those first Contingency used in operations studies and planning studies for the applicable time periods, including use of Special Protection Systems.</p> <p>A requirement that the Available Transfer Capability Implementation Document specify the following: o PTFD and OTDF cutoff values used</p>
<p>Response: The SDT notes MOD-001 R6 and R7 are intended to address the contingency concerns described in Exelon's comments, as well as R2.1.2.1 of MOD-030. The SDT notes that the "planning of operations" language has intentionally been taken directly from Order 890 to ensure consistency with the Commission's intent.</p>			
<p>The SDT notes that MOD-001 R3.1 already indirectly requires the PTFD and OTDF information suggested.</p>			
FirstEnergy Energy Delivery	1	Negative	<p>FirstEnergy Corp. (FE) appreciates the hard work put forth by the NERC ATC/CBM/TRM standard drafting team (SDT). However, based on difficulties of efficiently and effectively implementing the proposed MOD-030 standard within the Midwest ISO (MISO) footprint, FE is voting NEGATIVE to the standard as written.</p> <p>In prior comment periods, FE has indicated its concerns with requirements assigned to NERC registered entity classifications that apply to FE, but in actuality are performed by the MISO. The SDT has not changed its position and has indicated that FE could delegate responsibility to MISO. However, as previously stated, FE believes a standard should not be written in a way that would knowingly require delegation agreements for a large number of responsible entities. Therefore, in order for FE to support this standard, we request that the SDT work with MISO and its member companies to complete a regional variance for the MISO regional transmission organization and include it within the standard as a Regional Difference. A variance is needed to explain the MOD-030 requirements that describe tasks which have been transferred by the MISO member transmission companies to the MISO organization. This transfer of responsibility is described in the MISO Transmission Owners Agreement and Attachment C of the MISO Open Access Transmission and Energy Market Tariff. It is FE's opinion that an Entity Variance as described in the NERC Reliability Standards Development Procedure is the appropriate mitigation measure and that including the variance with the initial development of the standard is appropriate per the NERC</p>

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			<p>standard development procedure. As described in the procedure, “Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that might require a variance.” FE believes it is important to complete and include the MISO variance in conjunction with the drafting of the MOD-030 standard. FE requests the variance to cover TOP tasks as described in the following requirements: - R2: Flowgate determination and calculation of TFC on flowgates. The variance would not be applicable to the TOP assignment in requirement R3, which requires the TOP to provide transmission modeling data to the TSP for the calculation of AFC.</p> <p>Additional Comments: In response to FE’s most recent MOD-030 comments, the drafting team indicated that it felt the TOP is the appropriate entity for Requirement R2 since they are responsible for keeping the system within its operating limits. While it is true that TOPs identify SOLs and are required to maintain SOLs, the use of flowgates is primarily a market function used in evaluating interchange transactions. Per FAC-014 requirement R5.2, TOPs are required to submit SOL information to TSPs and therefore the TSP would have the information available for the determination of Total Flow Capacity (TFC) for a given flowgate. Therefore, it is FE’s position that R2 is better assigned to the TSP, but if the SDT elects not to change the standard, the above request for a MISO variance will satisfy our needs.</p>
<p>Response: The SDT believes that the assignment to the Transmission Operator is correct. However, if MISO or its members wish to pursue an entity variance, they may submit a SAR requesting such a variance as defined in the NERC Reliability Standards Development Procedure.</p>			
Great River Energy	1	Negative	<p>GRE is concerned with the Transmission Operator being the responsible entity for MOD-030_R2 and R3. GRE believes that the responsible entity for these requirements should be the Transmission Service Provider. It is GRE’s opinion that a standard should not knowingly be written in a manner that requires delegation agreements to be created for a large number of responsible entities, doing so is an inefficient use of resources.</p>
<p>Response: The SDT acknowledges that some entities stated that their Transmission Service Provider performed the tasks associated with R2 and R3, and that it may be easier for a regional entity to perform these tasks, but no entity has provided support (through the Functional Model or any other means) for why the responsibility should be shifted to the Transmission Service Provider. The SDT also notes that in previous comments, some entities supported the assignment to the Transmission Operator.</p>			
Manitoba Hydro	1	Negative	<p>R2.1.3 - This requirement seems onerous. Having to calculate AFCs for a flowgate that was created for a temporary system configuration, once that system configuration has resolved, seems like work for little/no benefit.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to</p>

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			<p>MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of internal flowgates to create, modify or delete at least once per calendar year. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of external flowgates to create, modify or delete that have been requested as part of R2.1.4 within thirty calendar days from the request. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4 - It is unclear why the SDT differentiated between thermal and voltage/stability limits, when the instructions were to use the SOL regardless. Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R11 - Manitoba Hydro is not convinced that conversion from AFC to ATC can be easily calculated in a formula when different assumptions are used for calculating transmission capability. Manitoba Hydro also questions why is it only MOD 30 that requires a conversion formula? If standards are to be fair, shouldn't all three standards (MOD 28, MOD 29 and MOD 30) have as a requirement to convert transmission</p>

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			<p>capability from one method to the other? Manitoba Hydro re-iterates that there shouldn't be 3 ways to calculate transmission capability. The standards should specify one methodology with consistent assumptions to preserve reliability.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>
<p>Response: Please see in-line responses.</p>			
PacifiCorp	1	Negative	<p>PacifiCorp agrees with Bonneville Power's comments, listed below:</p> <p>1. R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the Eastern interconnection with its commensurate characteristics. However, practices that are in place in BPA's part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of: Load Generation Configuration of extensive special protection schemes (SPS) and WECC's more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate. While being made up of different named elements, BPA's existing flowgates do not always include the first three limiting Elements and their worst associated contingency combinations, yet they still protect the area of transmission constraint. An example of a basis for an ATC capacity that does not fit the proposed standard's language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA's North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity</p>

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			<p>compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference:</p> <p style="padding-left: 40px;">RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability.</p> <p style="padding-left: 40px;">RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate.</p> <p>If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows ("red/underlined" language indicates additions):</p> <p style="padding-left: 40px;">R2.4. Establish the TFC of each of the defined Flowgates as equal to: " For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. " For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
PP&L, Inc.	1	Negative	<p>The R2.1.1 thru R2.1.2.2 requirements are inconsistent with western interconnection practices and may complicate the understanding of operational constraints which may negatively impact reliability. Therefore, PPL EU is in agreement with the comments posted by the Bonneville Power Administration, WECC and MISO and the recommendation to vote NO for this standard.</p>
<p>Response: Please see responses to BPA, other WECC entities and MISO.</p>			
Seattle City Light	1	Abstain	<p>The draft standard, in R2.1, proposes requirements for defining flowgates that appear to be inconsistent with approaches currently used in parts of the Western Interconnection to designate flowgate elements. The linear analysis method proposed will not sufficiently consider other System Operating Limits (SOLs) that may factor into flowgate designations.</p> <p>Specifically, the 5% Outage Transfer Distribution Factor (OTDF) threshold proposed for identifying flowgate elements does not reflect the methods currently used in WECC</p>

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			to designate flowgates. While application of OTDF methods is straight-forward, and provides a simple screening tool, it may be excessively burdensome to Transmission Operators to designate and redesignate flowgates using the proposed criteria. Furthermore, it may be impractical for Transmission Service Providers to manage requests for transmission services under pro forma OATT service provisions if the proposed criteria results in a large number of flowgates subject to simultaneous limits. SCL is in agreement with the apparent purpose of the R2.1 - establishing objective criteria with distinct metrics for flowgate designation. However, the requirement R2.1 proposed in the draft should be replaced, perhaps using a WECC variance, to ensure that it results in a manageable number of flowgates that promote reliable operation of the Bulk Electric System. In standards FAC-010-1 and FAC-011-1 NERC has granted Regional Differences for establishing SOLs in the Western Interconnection. A similar Regional Difference should be developed and granted with respect to the establishment and designation of flowgates in the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Southwest Transmission Cooperative, Inc.	1	Abstain	SWTC does not use this methodology.
<p>Response: Thank you for your comment.</p>			
Western Area Power Administration	1	Negative	As written, complying with the standard would add substantial burden to "Flowgate" entities within the WECC while adding no additional reliability value.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
California ISO	2	Negative	Implementation is incompatible with current operating practices in the Western Interconnection
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Independent Electricity System Operator	2	Affirmative	R2.5 does not require a recalculation of TFC if the TOP becomes aware of a change to the transmission configuration such as an outage to a transmission facility. This should be required in addition to having to recalculating TFC upon being notified of a facility rating change.

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<p>Response: The SDT believes that the modeling and outage requirements contained in R3 would result in an update to the AFC, which would reflect the changing conditions described.</p>			
Midwest ISO, Inc.	2	Abstain	<p>R2.1.3: Midwest ISO believes that this requirement is too onerous and leaves no allowance for an Interconnection-wide congestion management process to be enacted due to a forced outage or any other system condition unforeseen by forecasted system conditions. Also, the SDT did not respond to Midwest ISO comment concerning temporary flowgates in TLR. Midwest ISO questions the reliability benefit gained by calculating AFCs for a flowgate which was only created for a temporary system condition. Midwest ISO also believes that a flowgate referenced by R3.5 should be added by process established in R2.1.4. Otherwise, as the requirement is written, if a forced outage causes an Interconnection-wide congestion management procedure to be enacted in on a limiting element/contingency in PJM, then Midwest ISO would be required to add that facility as a flowgate despite the opinion of PJM or even if a transfer from Midwest ISO to PJM does not have an impact greater than the 5% threshold.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2: Midwest ISO continues to believe that the text of this requirement is not clear. Midwest ISO asks the drafting team to consider the following language. At a minimum, establish the list of internal flowgates to create, modify, or delete at least once per calendar year.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3: Midwest ISO continues to believe that the text of this requirement is not clear. Midwest ISO asks the drafting team to consider the following language. At a minimum, establish the list of external flowgates to create, modify, or delete that have been requested as part of R2.1.4 within thirty calendar days from the request.</p>

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			<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4: Both sub bullets instruct the entity to use the SOL for the flowgate. If this were to be the case, then R2.4 could be revised to just require the use of the SOL of the flowgate. Otherwise, the requirement should be revised to precisely capture the intention of the SDT.</p> <p>Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R5.3: How can this requirement be enforceable for entities that are non-FERC jurisdictional? We are concerned of the situation where a non-FERC jurisdictional neighboring entity doesn’t provide such data to the Midwest ISO. We request clarification.</p> <p>Response: Entities are only required to use AFCs they have been provided; if the information has not been provided, entities are not expected to use it. All entities within the continental United States are subject to mandatory and enforceable standards developed by the ERO. Entities outside the United States may be responsible for providing this information based on the regulatory agencies under which they operate.</p> <p>R6.2/R6.4/R6.6/R7.2/R7.4/R7.6: Midwest ISO is not convinced that similar seams coordination requirements exist for the other two standards, especially for MOD-029. This continues to demonstrate that more stringent requirements are placed on MOD-030 than the other methodologies. We request to remove these requirements from MOD-030 to achieve more unbiased standards.</p> <p>Response: MOD-029 is not a simulation-based methodology. As such, it is inappropriate to require the same kind of coordination as is described in MOD-028 and MOD-030. The SDT reiterates that MOD-028 does require similar coordination in R3 (generation dispatch and load for neighboring areas) and R4.3 (firm reservations from neighboring areas).</p>

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			<p>R11: Midwest ISO continues to question the language of this requirement for three reasons. First, the response from the SDT to our previous round of comments indicates that the TTC would remain constant because the flowgate with the lowest TFC would generally remain constant relative to each path. However, the SDT ignored the fact that the distribution factor for that same flowgate changes due to system topology changes. Hence, the TTC value will almost always change each time the model is updated, which is currently once per day as stated in R3.</p> <p>Second, the TTC value back calculated for the Flowgate methodology is not as valuable as it is in the Rated System Path methodology or the Area Interchange Methodology. If a flowgate will never limit an ATC, why would anyone be interested to know a TTC calculated by this flowgate? As the requirement is written, the Transmission Service Provider will be expected to incur additional cost, with no benefit to either the reliability or transmission customers, to separately account for the flowgate with the smallest TFC value in order to back calculate a TTC value.</p> <p>Third, when you use the same flowgate for all value conversions, the formula "ATC=TTC-CBM_{path}-TRM_{path}-ETC_{path}" still holds if you simply divide everything in formula "AFC=TFC-CBM_{flowgate}-TRM_{flowgate}-ETC_{flowgate}" by the flowgate distribution factor. However, using different flowgates would make the formula "ATC=TTC-CBM-TRM-ETC" invalid. This result eliminates the usefulness of the TTC value for the Flowgate methodology. Therefore, we request this requirement to be rewritten if the SDT believes a formula to calculate TTC must be included in the standard.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>The Midwest ISO acknowledges the fact that there can be three methodologies for calculating ATC values. The Midwest ISO continues to believe that a single standard that qualitatively judges the reliability of all three methodologies is the right form to ensure reliability of the interconnected bulk power systems rather than the current approach of having a separate standard for each methodology. The Midwest ISO believes that three different standards for three different methodologies have created requirements and measures to ensure that each entity is executing its methodology per the guidelines prescribed by the standards and do not necessarily ensure reliability of the interconnected system. For example, while the MOD-030 includes several</p>

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			<p>requirements for Constraints (Flowgates) used in that methodology, the other standards do not include similar requirements with the premise that those methodologies do not use flowgates. For the system to be reliable, the constraints that impact an energy transfer should be the same irrespective of the methodology. The Midwest ISO sees these standards as guidelines to ensure documentation of the methodologies being executed as opposed to consistency amongst the methodologies to ensure system reliability. Midwest ISO also believes that the Flow based methodology is an advanced technique with a high level of detail and alignment with congestion management procedures such as the NERC IDC. The Midwest ISO continues to observe a significantly higher number of compliance requirements under MOD-030 than entities using a methodology that is subject to either MOD-028 or MOD-029. The Midwest ISO believes that a single ATC standard and the termination of the three previously mentioned standards would eliminate any compliance concerns related to improperly aligned standards. Flow based methodology entities under MOD 030 are held to a higher degree of compliance for volunteering to use the Flow based methodology; when regardless of methodology the highest degree of compliance must be required for all three methodologies. Therefore, the Midwest ISO believes it is imperative to draft a single ATC standard that would apply to all entities regardless of the methodology selected.</p> <p>Response: The SDT believes that the standards are an appropriate set of requirements that support reliability. While the SDT applauds the Midwest ISO's decision to implement an advanced technique with a high level of detail and alignment with congestion management procedures such as the NERC IDC, it notes that not all entities agree that this technique is appropriate for use by all entities. If the Midwest ISO is advocating a single methodology, the SDT suggests the Midwest ISO request this for inclusion in NERC's annual work plan.</p>
Response: Please see in-line responses.			
Ameren Services Company	3	Negative	<p>Ameren would like to thank the SDT for the considerable effort invested in drafting this standard. However, Ameren cannot support this version of MOD-030-1. AFC is a market parameter and as such is applicable to the Transmission Service Provider.</p> <p>Definition of an adequate flowgate population is required to adequately constrain the sale of transmission service, as such this would appear to be a market not a reliability issue.</p> <p>Under R2 the calculation of TFC is applicable to the Transmission Operator. This is not consistent with the current version of the Functional Model. The Transmission Planner is responsible for supporting the development of TTC (TFC).</p> <p>Under R3 the Transmission Service Provider not the Transmission Operator should be responsible for the calculation of ATC/AFC and any modeling data. This is especially</p>

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			<p>true when the Transmission Service Provider determines ATC for the transmission systems of several Transmission Operators as would occur in an RTO/ISO such as the MISO. That said we are aware that the oversubscription of transmission service can lead to reliability problems. AFC issues affect long term planning as well as planning in the Operating Time Horizon.</p>
<p>Response: The SDT has assigned the portions of the flowgate methodology related to AFC to the Transmission Service Provider.</p> <p>The SDT believes the determination of flowgate is a reliability consideration, and defines how the transmission system is to be analyzed for reliability reasons with regard to determining the impacts of forecast usage of that system.</p> <p>The Functional Model does not attribute the determination of TTC or TFC to any entity. As such, the SDT was required to interpret the model to determine the appropriate entity for determining TTC or TFC. Since the ratings of facilities are established by the Transmission Operator, the SDT felt it appropriate to assign the responsibility for TFC to the Transmission Operator.</p> <p>Under R3, the Transmission Operator is not responsible for calculating AFC – only providing the Transmission Service Provider with a model to use in that calculation. While many entities may have delegated this task to Transmission Service Providers through implementation of regional transmission service, the SDT does not believe this alone changes the responsibilities established. NERC has attempted to address this through allowing the use of Joint Registration Organizations, where a MISO/Ameren collaboration would be sanctioned as a single entity, and then the JRO would be responsible for determining how to allocate those sanctions among participants in the JRO.</p> <p>The SDT concurs that oversubscription can lead to reliability problems.</p> <p>With regard to the Time Horizons used in compliance, the SDT believes the correct horizon is Operations Planning.</p>			
Avista Corp.	3	Negative	<p>The standard needs some flexibility due to regional differences. Support comments submitted by the Bonneville Power Administration.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Blachly-Lane Electric Co-op	3	Negative	<p>We suggest a rewrite of requirement 2 that will work for the Western Interconnection.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Bonneville Power Administration	3	Negative	<p>1. R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the eastern interconnection with its commensurate characteristics. However, practices that are in place in BPA’s part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a</p>

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			<p>set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of: load, generation, configuration of extensive special protection schemes (SPS), and WECC's more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate. While being made up of different named elements, BPA's existing flowgates do not always include the first three limiting Elements and their worst associated Contingency combinations, yet they still protect the area of transmission constraint. An example of a basis for an ATC capacity that does not fit the proposed standard's language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA's North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference: RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate. If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows: R2.4. Establish the TFC of each of the defined Flowgates as equal to: For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p> <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between "(AFCs)" and "on"; R1, where a colon is missing following</p>

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			the "(ATCID)"; R2.1.2, where "analyses" should not be plural; and "R"s appear to be missing from all "fourth-tier" requirements (2.1.1.1 for example).
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version. The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>			
City of McMinnville	3	Negative	Inappropriate methodology for WECC specific entities
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
City Public Service of San Antonio	3	Negative	I cannot vote for this standard as written. It needs to acknowledge definitive alternatives to ATC for regions or markets such as ERCOT where transmission service markets are not used.
<p>Response: If ERCOT does not choose to implement this methodology, then this standard would not apply to ERCOT. If ERCOT does not have ATC Paths, or ERCOT has an associated variance, MOD-001 would not require them to select a methodology.</p>			
Clatskanie People's Utility District	3	Negative	The requirement of substantial additional flowgate analysis does not add reliability and instead offers the possibility of a lower standard of understanding of system operation.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Clearwater Power Co.	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Coos-Curry Electric Cooperative, Inc	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			

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Cowlitz County PUD	3	Negative	<p>Cowlitz County PUD No.1 (District) Comments on MOD-030-1 Adapted from PPC Recommendations 7/29/08 The Northwest uses a flow-based ATC determination consistent with the main concepts of the proposed MOD-030 standard. However, Northwest flowgates are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition, these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology is specifically designed to the “Hub and Spoke” nature of the Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration.</p> <p>The District disagrees with current language in R2.1.1 and R2.1.2 of MOD-030 which will require the creation of many additional “flowgates” in the Northwest with no added reliability benefits. The current proven methodology used by the Bonneville Power Administration is sufficient. Adopting R2.1.1 and R2.1.2 of MOD-030 as it now stands will unnecessarily increase workload and cost. The District is not willing to help fund complicated reliability measures where there is no benefit.</p> <p>The District respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current methodology used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. The District supports Bonneville’s proposed changes to R2.1 of this proposed standard.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Duke Energy Carolina	3	Affirmative	<p>While we support approval of this standard, bulk electric system facilities 161kV and below may have significant network response. Since these facilities may have significant impact on TTC/AFC, documentation should be required by the standard for those facilities 161kV and below which are equivalized. This will provide transparency for impacted stakeholders.</p>

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Entity	Segment	Vote	Comment
<p>Response: The standard does not require, but also does not forbid, such documentation. If a region believes that facilities 161 kV and below should not be equivalenced or more transparency is required, then that region can write a regional standard that is more stringent.</p>			
<p>FirstEnergy Solutions</p>	<p>3</p>	<p>Negative</p>	<p>FirstEnergy Corp. (FE) appreciates the hard work put forth by the NERC ATC/CBM/TRM standard drafting team (SDT). However, based on difficulties of efficiently and effectively implementing the proposed MOD-030 standard within the Midwest ISO (MISO) footprint, FE is voting NEGATIVE to the standard as written. In prior comment periods, FE has indicated its concerns with requirements assigned to NERC registered entity classifications that apply to FE, but in actuality are performed by the MISO. The SDT has not changed its position and has indicated that FE could delegate responsibility to MISO. However, as previously stated, FE believes a standard should not be written in a way that would knowingly require delegation agreements for a large number of responsible entities. Therefore, in order for FE to support this standard, we request that the SDT work with MISO and its member companies to complete a regional variance for the MISO regional transmission organization and include it within the standard as a Regional Difference. A variance is needed to explain the MOD-030 requirements that describe tasks which have been transferred by the MISO member transmission companies to the MISO organization. This transfer of responsibility is described in the MISO Transmission Owners Agreement and Attachment C of the MISO Open Access Transmission and Energy Market Tariff. It is FE's opinion that an Entity Variance as described in the NERC Reliability Standards Development Procedure is the appropriate mitigation measure and that including the variance with the initial development of the standard is appropriate per the NERC standard development procedure. As described in the procedure, "Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that might require a variance." FE believes it is important to complete and include the MISO variance in conjunction with the drafting of the MOD-030 standard. FE requests the variance to cover TOP tasks as described in the following requirements: - R2: Flowgate determination and calculation of TFC on flowgates. The variance would not be applicable to the TOP assignment in requirement R3, which requires the TOP to provide transmission modeling data to the TSP for the calculation of AFC. Additional Comments: In response to FE's most recent MOD-030 comments, the drafting team indicated that it felt the TOP is the appropriate entity for Requirement R2 since they are responsible for keeping the system within its operating limits. While it is true that TOPs identify SOLs and are required to maintain SOLs, the use of flowgates is primarily a market function used in evaluating interchange transactions. Per FAC-014 requirement R5.2, TOPs are required to submit SOL information to TSPs and therefore</p>

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Entity	Segment	Vote	Comment
			<p>the TSP would have the information available for the determination of Total Flow Capacity (TFC) for a given flowgate. Therefore, it is FE's position that R2 is better assigned to the TSP, but if the SDT elects not to change the standard, the above request for a MISO variance will satisfy our needs.</p>
<p>Response: The SDT believes that the assignment to the Transmission Operator is correct. However, if MISO or its members wish to pursue an entity variance, they may submit a SAR requesting such a variance as defined in the NERC Reliability Standards Development procedure.</p>			
Lost River Electric Cooperative	3	Negative	<p>We suggest a rewrite of requirement 2 that will work for the Western Interconnection.</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Manitoba Hydro	3	Negative	<p>R2.1.3 - This requirement seems onerous. Having to calculate AFCs for a flowgate that was created for a temporary system configuration, once that system configuration has resolved, seems like work for little/no benefit.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of internal flowgates to create, modify or delete at least once per calendar year.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of external flowgates to create, modify or delete that have been requested as part of R2.1.4 within thirty calendar days from the request.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making</p>

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Entity	Segment	Vote	Comment
			<p>changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4 - It is unclear why the SDT differentiated between thermal and voltage/stability limits, when the instructions were to use the SOL regardless. Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R11 - Manitoba Hydro is not convinced that conversion from AFC to ATC can be easily calculated in a formula when different assumptions are used for calculating transmission capability. Manitoba Hydro also questions why is it only MOD 30 that requires a conversion formula? If standards are to be fair, shouldn't all three standards (MOD 28, MOD 29 and MOD 30) have as a requirement to convert transmission capability from one method to the other? Manitoba Hydro re-iterates that there shouldn't be 3 ways to calculate transmission capability. The standards should specify one methodology with consistent assumptions to preserve reliability. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>
Response: Please see in-line responses.			
MidAmerican Energy Co.	3	Negative	<p>I am concerned that R2.1 requires the Transmission Operator to set up a certain number of flowgates at a minimum. With smaller Transmission Service Providers, I believe this will result unnecessarily in additional flow gates in the interconnection. I believe R2.1. should be greatly simplified, deleted, or else changes should be made to R2.1.3. Add at the end of R2.1.3 an exclusion from the requirement of adding flowgates for situations that resulted in congestion management "unless the need for Interconnection-wide congestion management was a result of unusual operating conditions that are not reasonably expected to frequently occur again (such as multiple prior outages of transmission facilities and/or critical generators)."</p>
Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline,			

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Entity	Segment	Vote	Comment
<p>the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Northern Lights Inc.	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Northern Wasco County People's Utility District (PUD)	3	Negative	<p>The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the "Hub and Spoke" nature of the Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional "flowgates" in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Northern Wasco County PUD and other transmission customers will ultimately have to fund. Because the standard would unnecessarily impose these burdens without any incremental improvement in reliability, Northern Wasco County PUD respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. Northern Wasco County PUD supports Bonneville's proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline,</p>			

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Entity	Segment	Vote	Comment
<p>the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Okanogan County Electric Cooperative, Inc.	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Public Utility District No. 1 of Benton County	3	Negative	<p>The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the “Hub and Spoke” nature of the Western Interconnection system. Large generation resources are located long distances from large loads verses the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Public Utility District No. 1 of Benton County (Benton PUD) and other transmission customers will ultimately have to fund. Because the standard would unnecessarily impose these burdens without any incremental improvement in reliability, Benton PUD respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. Benton PUD supports Bonneville’s proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>

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Entity	Segment	Vote	Comment
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Public Utility District No. 2 of Grant County	3	Negative	The additional requirements add no reliability to the system in the western interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Raft River Rural Electric Cooperative	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Salmon River Electric Cooperative	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Seattle City Light	3	Abstain	The draft standard, in R2.1, proposes requirements for defining flowgates that appear to be inconsistent with approaches currently used in parts of the Western Interconnection to designate flowgate elements. The linear analysis method proposed will not sufficiently consider other System Operating Limits (SOLs) that may factor into flowgate designations. Specifically, the 5% Outage Transfer Distribution Factor (OTDF) threshold proposed for identifying flowgate elements does not reflect the methods currently used in WECC to designate flowgates. While application of OTDF methods is straight-forward, and provides a simple screening tool, it may be excessively burdensome to Transmission Operators to designate and redesignate flowgates using the proposed criteria. Furthermore, it may be impractical for Transmission Service Providers to manage requests for transmission services under pro forma OATT service provisions if the proposed criteria results in a large number of flowgates subject to simultaneous limits. SCL is in agreement with the apparent purpose of the R2.1 - establishing objective criteria with distinct metrics for flowgate designation. However,

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Entity	Segment	Vote	Comment
			the requirement R2.1 proposed in the draft should be replaced, perhaps using a WECC variance, to ensure that it results in a manageable number of flowgates that promote reliable operation of the Bulk Electric System. In standards FAC-010-1 and FAC-011-1 NERC has granted Regional Differences for establishing SOLs in the Western Interconnection. A similar Regional Difference should be developed and granted with respect to the establishment and designation of flowgates in the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Umatilla Electric Cooperative	3	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Wisconsin Public Service Corp.	3	Negative	R2 needs to be simplified.
<p>Response: The SDT believes that the level of detail in R2 is required to ensure reliable analysis of the transmission system.</p>			
Alliant Energy Corp. Services, Inc.	4	Negative	We believe that R2.1 requires the Transmission Operator to set up a certain number of flowgates. We believe this will require that many flowgates will be needlessly set up.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Eugene Water & Electric Board	4	Negative	The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the "Hub and Spoke" nature of the Western Interconnection system. Large generation resources are located

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Entity	Segment	Vote	Comment
			<p>long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Eugene Water & Electric Board (EWEB) and other transmission customers will ultimately have to fund. Because the standard would unnecessarily these burdens without any incremental improvement in reliability, EWEB respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. EWEB supports Bonneville’s proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Pacific Northwest Generating Cooperative	4	Negative	We suggest a rewrite of requirement 2 that will work for the Western Interconnection.
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Public Power Council	4	Negative	<p>The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. Northwest flowgates, however, are defined with adequate granularity to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures, loads and ratings, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider or operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the “Hub and Spoke”</p>

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Entity	Segment	Vote	Comment
			<p>nature of the Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 without further revision would unnecessarily introduce significant workload, cost, and complications that Public Power Council’s members and other transmission customers will ultimately have to fund. Because the standard would unnecessarily impose these burdens without any incremental improvement in reliability, Public Power Council respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The current method used by the Bonneville Power Administration is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection. Public Power Council supports Bonneville’s proposed approach and proposed revisions to R2.1 to address the needs of the Western Interconnection in this proposed standard.</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Public Utility District No. 1 of Douglas County	4	Negative	We have not had sufficient time to adequately review and coordinate the issue within our region.
<p>Response: The SDT believes that significant time has been allowed for entities to review and comment on the standard.</p>			
Public Utility District No. 1 of Snohomish County	4	Negative	<p>The District Intends To Vote As Follows: MOD-001: votes Abstain, with no comments MOD-030 comments: The Northwest uses a flow-based ATC determination consistent with the concepts of the proposed MOD-030 standard. However northwest flowgates are defined to provide adequate granularity needed to identify varying sets of critical contingencies and impacted lines under changing system conditions. Seasonal operating nomograms are developed using varying temperatures/loads/rating, generation dispatch, and contingency analysis (that meeting greater than n-1 performance requirements) to determine reliable operating capabilities. These operating nomograms allow the transmission provider/operator to maximize capacity based on specific operating conditions. In addition these seasonal operating nomograms are reviewed by the region and posted in advance of the operating season, addressing both transparency and coordinating requirements. This methodology accommodates and is tailored to the “Hub and Spoke” nature of the</p>

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Entity	Segment	Vote	Comment
			<p>Western Interconnection system. Large generation resources are located long distances from large loads versus the tightly meshed systems in the Eastern Interconnection where load and generation are located very close together. Due to the remote nature of generation and load in the west, transient and voltage stability considerations must be taken into consideration. If the language in R2.1.1 and R2.1.2 of MOD-030 is adopted, it will require many additional “flowgates” in the Northwest that will result in no added reliability benefits compared to the method our transmission provider has in place today. Adopting R2.1.1 and R2.1.2 of MOD-030 would unnecessarily introduce significant workload, cost, and complications that the District and other transmission customers will ultimately have to fund. For these reasons, the District believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2. The District supports the Bonneville Power Administration proposed “WECC-specific” language to address the hybrid AFC-contract-path calculation used in the Northwest. This hybrid method is ultimately more reliable, given the specific nature of the transmission and generation resources in the Western Interconnection.</p>
<p>Response: The SDT believes no response is necessary regarding MOD-001.</p> <p>The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
Seattle City Light	4	Abstain	<p>The draft standard, in R2.1, proposes requirements for defining flowgates that appear to be inconsistent with approaches currently used in parts of the Western Interconnection to designate flowgate elements. The linear analysis method proposed will not sufficiently consider other System Operating Limits (SOLs) that may factor into flowgate designations. Specifically, the 5% Outage Transfer Distribution Factor (OTDF) threshold proposed for identifying flowgate elements does not reflect the methods currently used in WECC to designate flowgates. While application of OTDF methods is straight-forward, and provides a simple screening tool, it may be excessively burdensome to Transmission Operators to designate and redesignate flowgates using the proposed criteria. Furthermore, it may be impractical for Transmission Service Providers to manage requests for transmission services under pro forma OATT service provisions if the proposed criteria results in a large number of flowgates subject to simultaneous limits. SCL is in agreement with the apparent purpose of the R2.1 - establishing objective criteria with distinct metrics for flowgate designation. However, the requirement R2.1 proposed in the draft should be replaced, perhaps using a WECC variance, to ensure that it results in a manageable number of flowgates that promote</p>

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Entity	Segment	Vote	Comment
			reliable operation of the Bulk Electric System. In standards FAC-010-1 and FAC-011-1 NERC has granted Regional Differences for establishing SOLs in the Western Interconnection. A similar Regional Difference should be developed and granted with respect to the establishment and designation of flowgates in the Western Interconnection.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>			
WPS Resources Corp.	4	Negative	<p>R2.1 requires that the Transmission Operator shall set up a certain number of flowgates at a minimum. This could result in a certain flowgates that are not needed on an on-going basis. This requirement should be simplified, deleted, and/or changed. R2.1.3. presently states that "Any limiting Element/Contingency combination at least within the Transmission model identified in R3.4 and R3.5 that has been subjected to an Interconnection-wide congestion management procedure within the last 12 months, unless the limiting Element/Contingency combination is accounted for using another ATC methodology." This requirement should provide another condition when the requirement is waived by adding the following words at the end of the requirement "or unless the need for Interconnection-wide congestion management was a result of unusual operating conditions that are not reasonably expected to frequently occur again (such as multiple prior outages of transmission facilities and/or critical generators)."</p> <p>Also, the Transmission Operator is the responsible entity for R2 through R3 for MOD-030. The responsible entity for these requirements should be the Transmission Service Provider.</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>Regarding the assignment of R2 and R3 to the Transmission Operator, the Functional Model does not attribute the determination of TTC or TFC to any entity. As such, the SDT was required to interpret the model to determine the appropriate entity for determining TTC or TFC. Since the ratings of facilities are established by the Transmission Operator, the SDT felt it appropriate to assign the responsibility for TFC to the Transmission Operator.</p>			
Avista Corp.	5	Negative	This standard needs to incorporate the need for regional differences. We support the comments submitted by BPA.
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-</p>			

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.			
Bonneville Power Administration	5	Negative	<p>1. R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the eastern interconnection. However, existing practices in BPA's part of the western interconnection use flow based ATC determination which, while consistent with the concepts of this proposed standard, use a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability - where the specific characteristics of load, generation, configuration of extensive special protection schemes (SPS), and WECC's more stringent (greater than n-1) performance requirements - to determine which varying specific lines or equipment determine the capacity of the flowgate. While made up of different named elements, BPA's existing flowgates do not always include the first three limiting elements and their worst associated Contingency combinations, yet they still protect the area of transmission constraint. An example of a basis for an ATC capacity that does not fit the proposed standard's language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA's North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference: RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate. If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows ("red/underlined" language indicates additions): R2.4. Establish the TFC of each of the</p>

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>defined Flowgates as equal to: For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p> <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between "(AFCs)" and "on"; R1, where a colon is missing following the "(ATCID)"; R2.1.2, where "analyses" should not be plural; and "R"s appear to be missing from all "fourth-tier" requirements (2.1.1.1 for example).</p>
<p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version. The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>			
FirstEnergy Solutions	5	Negative	<p>FirstEnergy Corp. (FE) appreciates the hard work put forth by the NERC ATC/CBM/TRM standard drafting team (SDT). However, based on difficulties of efficiently and effectively implementing the proposed MOD-030 standard within the Midwest ISO (MISO) footprint, FE is voting NEGATIVE to the standard as written. In prior comment periods, FE has indicated its concerns with requirements assigned to NERC registered entity classifications that apply to FE, but in actuality are performed by the MISO. The SDT has not changed its position and has indicated that FE could delegate responsibility to MISO. However, as previously stated, FE believes a standard should not be written in a way that would knowingly require delegation agreements for a large number of responsible entities. Therefore, in order for FE to support this standard, we request that the SDT work with MISO and its member companies to complete a regional variance for the MISO regional transmission organization and include it within the standard as a Regional Difference. A variance is needed to explain the MOD-030 requirements that describe tasks which have been transferred by the MISO member transmission companies to the MISO organization. This transfer of responsibility is described in the MISO Transmission Owners Agreement and Attachment C of the MISO Open Access Transmission and Energy Market Tariff. It is FE’s opinion that an Entity Variance as described in the NERC Reliability Standards Development Procedure is the appropriate mitigation measure and that including the variance with the initial development of the standard is appropriate per the NERC standard development procedure. As described in the procedure, “Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that</p>

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Entity	Segment	Vote	Comment
			<p>might require a variance.” FE believes it is important to complete and include the MISO variance in conjunction with the drafting of the MOD-030 standard. FE requests the variance to cover TOP tasks as described in the following requirements: - R2: Flowgate determination and calculation of TFC on flowgates. The variance would not be applicable to the TOP assignment in requirement R3, which requires the TOP to provide transmission modeling data to the TSP for the calculation of AFC. Additional Comments: In response to FE’s most recent MOD-030 comments, the drafting team indicated that it felt the TOP is the appropriate entity for Requirement R2 since they are responsible for keeping the system within its operating limits. While it is true that TOPs identify SOLs and are required to maintain SOLs, the use of flowgates is primarily a market function used in evaluating interchange transactions. Per FAC-014 requirement R5.2, TOPs are required to submit SOL information to TSPs and therefore the TSP would have the information available for the determination of Total Flow Capacity (TFC) for a given flowgate. Therefore, it is FE’s position that R2 is better assigned to the TSP, but if the SDT elects not to change the standard, the above request for a MISO variance will satisfy our needs.</p>
<p>Response: The SDT believes that the assignment to the Transmission Operator is correct. However, if MISO or its members wish to pursue an entity variance, they may submit a SAR requesting such a variance as defined in the NERC Reliability Standards Development procedure.</p>			
IBERDROLA RENEWABLES	5	Negative	<p>R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the Eastern interconnection with its commensurate characteristics. However, practices that are in place in BPA’s part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new “flowgates” based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of: ¢ Load ¢ Generation ¢ Configuration of extensive special protection schemes (SPS) and ¢ WECC’s more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate. While being made up of different named elements, BPA’s existing flowgates do not always include the first three limiting Elements and their worst associated contingency combinations, yet they still protect the area of transmission constraint. An example of a basis for an ATC capacity that does not fit the proposed standard’s language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA’s North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints</p>

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference: RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate. If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows ("red/underlined" language indicates additions): R2.4. Establish the TFC of each of the defined Flowgates as equal to:</p> <ul style="list-style-type: none"> - For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. - For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate. <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between "(AFCs)" and "on"; R1, where a colon is missing following the "(ATCID)"; R2.1.2, where "analyse" should not be plural; and "R"s appear to be missing from all "fourth-tier" requirements (2.1.1.1 for example).</p>
<p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version. The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>			
Manitoba Hydro	5	Negative	<p>R2.1.3 - This requirement seems onerous. Having to calculate AFCs for a flowgate that was created for a temporary system configuration, once that system configuration has resolved, seems like work for little/no benefit.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making</p>

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of internal flowgates to create, modify or delete at least once per calendar year. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of external flowgates to create, modify or delete that have been requested as part of R2.1.4 within thirty calendar days from the request. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4 - It is unclear why the SDT differentiated between thermal and voltage/stability limits, when the instructions were to use the SOL regardless. Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R11 - Manitoba Hydro is not convinced that conversion from AFC to ATC can be easily calculated in a formula when different assumptions are used for calculating transmission capability. Manitoba Hydro also questions why is it only MOD 30 that requires a conversion formula? If standards are to be fair, shouldn't all three standards</p>

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>(MOD 28, MOD 29 and MOD 30) have as a requirement to convert transmission capability from one method to the other? Manitoba Hydro re-iterates that there shouldn't be 3 ways to calculate transmission capability. The standards should specify one methodology with consistent assumptions to preserve reliability.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p>
<p>Response: Please see in-line responses.</p>			
PPL Generation LLC	5	Negative	We are respecting BPA's and MISO's position on this ballot in our decision to vote negative.
<p>Response: Please see responses to BPA and MISO.</p>			
Bonneville Power Administration	6	Negative	<p>1. R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the eastern interconnection with its commensurate characteristics. However, practices that are in place in BPA's part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of: load, generation, configuration of extensive special protection schemes (SPS), and WECC's more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate. While being made up of different named elements, BPA's existing flowgates do not always include the first three limiting Elements and their worst associated Contingency combinations, yet they still protect the area of transmission constraint. An example of a basis for an ATC capacity that does not fit the proposed standard's language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA's North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be</p>

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Entity	Segment	Vote	Comment
			<p>dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference: RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate. If these "RX" requirements are added, to replace R2.1.1-2.1.2.2 for WECC entities, R2.4 would also require modification as follows ("red/underlined" language indicates additions): R2.4. Establish the TFC of each of the defined Flowgates as equal to: For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p> <p>Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between "(AFCs)" and "on"; R1, where a colon is missing following the "(ATCID)"; R2.1.2, where "analyses" should not be plural; and "R"s appear to be missing from all "fourth-tier" requirements (2.1.1.1 for example).</p> <p>Response: The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>
Response: Please see in-line responses.			
FirstEnergy Solutions	6	Negative	FirstEnergy Corp. (FE) appreciates the hard work put forth by the NERC ATC/CBM/TRM standard drafting team (SDT). However, based on difficulties of efficiently and effectively implementing the proposed MOD-030 standard within the Midwest ISO (MISO) footprint, FE is voting NEGATIVE to the standard as written. In prior comment periods, FE has indicated its concerns with requirements assigned to NERC registered

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>entity classifications that apply to FE, but in actuality are performed by the MISO. The SDT has not changed its position and has indicated that FE could delegate responsibility to MISO. However, as previously stated, FE believes a standard should not be written in a way that would knowingly require delegation agreements for a large number of responsible entities. Therefore, in order for FE to support this standard, we request that the SDT work with MISO and its member companies to complete a regional variance for the MISO regional transmission organization and include it within the standard as a Regional Difference. A variance is needed to explain the MOD-030 requirements that describe tasks which have been transferred by the MISO member transmission companies to the MISO organization. This transfer of responsibility is described in the MISO Transmission Owners Agreement and Attachment C of the MISO Open Access Transmission and Energy Market Tariff. It is FE's opinion that an Entity Variance as described in the NERC Reliability Standards Development Procedure is the appropriate mitigation measure and that including the variance with the initial development of the standard is appropriate per the NERC standard development procedure. As described in the procedure, "Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that might require a variance." FE believes it is important to complete and include the MISO variance in conjunction with the drafting of the MOD-030 standard. FE requests the variance to cover TOP tasks as described in the following requirements: - R2: Flowgate determination and calculation of TFC on flowgates. The variance would not be applicable to the TOP assignment in requirement R3, which requires the TOP to provide transmission modeling data to the TSP for the calculation of AFC. Additional Comments: In response to FE's most recent MOD-030 comments, the drafting team indicated that it felt the TOP is the appropriate entity for Requirement R2 since they are responsible for keeping the system within its operating limits. While it is true that TOPs identify SOLs and are required to maintain SOLs, the use of flowgates is primarily a market function used in evaluating interchange transactions. Per FAC-014 requirement R5.2, TOPs are required to submit SOL information to TSPs and therefore the TSP would have the information available for the determination of Total Flow Capacity (TFC) for a given flowgate. Therefore, it is FE's position that R2 is better assigned to the TSP, but if the SDT elects not to change the standard, the above request for a MISO variance will satisfy our needs.</p>
<p>Response: The SDT believes that the assignment to the Transmission Operator is correct. However, if MISO or its members wish to pursue an entity variance, they may submit a SAR requesting such a variance as defined in the NERC Reliability Standards Development procedure.</p>			
IBERDROLA	6	Negative	R2.1.1 thru R2.1.2.2 appear to well reflect existing practices in the Eastern

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
RENEWABLES			<p>interconnection with its commensurate characteristics. However, practices that are in place in BPA's part of the western interconnection use flow based ATC determination consistent with the concepts of this proposed standard, but they are based on using a set of designated flowgates that could have a varying set of critical contingencies and impacted lines depending on the system conditions. MOD-30 as written would require many new "flowgates" based on varying system conditions without providing any increased reliability benefit. This is because BPA determines their capacity based on WECC criteria which test for thermal restrictions, voltage stability, and transient stability where the specific characteristics of:</p> <ul style="list-style-type: none"> - Load – Generation - Configuration of extensive special protection schemes (SPS) and - WECC's more stringent (greater than n-1) performance requirements determine which varying specific lines or equipment determine the capacity of the flowgate. While being made up of different named elements, BPA's existing flowgates do not always include the first three limiting Elements and their worst associated contingency combinations, yet they still protect the area of transmission constraint. <p>An example of a basis for an ATC capacity that does not fit the proposed standard's language is a two Palo Verde nuclear unit outage in Arizona which is often the critical contingency that causes voltage stability limitations on BPA's North of Hanford Path in Washington over 1000 miles away from the Palo Verde units. While the proposed MOD-30 Flowgate Methodology may provide sufficient reliability for (n-1) thermally limited constraints where the impact of an outage is on parallel transmission, the above example describes a limiting outage that is not in the area of the transmission constraint, thus it does not make sense to define it as part of a flowgate. In regards to capacity, BPA's existing flowgates can be dynamically changed to maximize capacity based on specific operating conditions. If the language in R2.1.1 and R2.1.2 of MOD-30 is adopted, it will require defining many additional "flowgates" with no added reliability or capacity compared to the method BPA has in place today. This would unnecessarily introduce significant workload and computation to BPA and many others in the western interconnection that could, in fact, complicate the understanding of operational constraints. For these reasons, BPA believes that implementation of R2.1.1-2.1.2.2 does not make sense within WECC and respectfully requests that alternate WECC-specific requirements be added to replace R2.1.1-2.1.2.2 for WECC entities as a regional difference: RX. WECC: Results of transfer analyses, consistent with those studies required in FAC-010 and FAC-011, or their successors, for ATC Paths up to the path capability. RX.1. Only the most limiting element in a series configuration needs to be included in a Flowgate. If these "RX" requirements are</p>

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Entity	Segment	Vote	Comment
			<p>added, to replace R2.1.1- 2.1.2.2 for WECC entities, R2.4 would also require modification as follows (“red/underline” language indicates additions): R2.4. Establish the TFC of each of the defined Flowgates as equal to: For thermal limits, the lowest System Operating Limit (SOL) included in the definition of the Flowgate. For voltage or stability limits, the flow that will respect the lowest SOL included in the definition of the Flowgate.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>2. Additionally, there are typos at the following locations: Applicability 4.1.1, where a space is missing between “(AFCs)” and “on”; R1, where a colon is missing following the “(ATCID)”; R2.1.2, where “analyses” should not be plural; and “R” appear to be missing from all “fourth-tier” requirements (2.1.1.1 for example).</p> <p>Response: The typographical errors have been corrected and an updated version of the standard has been posted for stakeholders to see – these corrections will be noted in the announcement for the recirculation ballot.</p>
Response: Please see in-line responses.			
Manitoba Hydro	6	Negative	<p>R2.1.3 - This requirement seems onerous. Having to calculate AFCs for a flowgate that was created for a temporary system configuration, once that system configuration has resolved, seems like work for little/no benefit.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.2 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of internal flowgates to create, modify or delete at least once per calendar year.</p> <p>Response: The SDT recognizes the commenter’s concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making</p>

Consideration of Comments on Initial Ballot — MOD-030-1 — Flowgate Methodology

Entity	Segment	Vote	Comment
			<p>changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.3 - Manitoba Hydro agrees with MISO's proposed wording changes of: At a minimum, establish the list of external flowgates to create, modify or delete that have been requested as part of R2.1.4 within thirty calendar days from the request. Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.</p> <p>R2.4 - It is unclear why the SDT differentiated between thermal and voltage/stability limits, when the instructions were to use the SOL regardless. Response: The first bullet requires that for SOLs with a limit based on megawatts, that the megawatt value be used. However, for SOLs with limits based on MVARs or other units, the flowgate limit would need to be specified as a level of flow in megawatts that supports the SOL. This is the intent of bullet two.</p> <p>R11 - Manitoba Hydro is not convinced that conversion from AFC to ATC can be easily calculated in a formula when different assumptions are used for calculating transmission capability. Manitoba Hydro also questions why is it only MOD 30 that requires a conversion formula? If standards are to be fair, shouldn't all three standards (MOD 28, MOD 29 and MOD 30) have as a requirement to convert transmission capability from one method to the other? Manitoba Hydro re-iterates that there shouldn't be 3 ways to calculate transmission capability. The standards should specify one methodology with consistent assumptions to preserve reliability. Response: The SDT is not commenting on whether or not a TTC value has usefulness within the Flowgate methodology, and is not requiring in this standard that the TTC be calculated. However, if TTC is to be calculated, the SDT believes that this is a standardized way to do so that will result in a number that can be presented as a valid TTC. Other entities have not been requested to convert their ATCs or TTCs to AFCs or TFCs because to do so would require information that would only be available if the entities had implemented the Flowgate methodology. If Manitoba Hydro is advocating</p>

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			a single methodology, the SDT suggests the Manitoba Hydro request this for inclusion in NERC's annual work plan.
Response: Please see in-line responses.			
Public Utility District No. 1 of Chelan County	6	Negative	Standard as written complicates transmission service from the Bonneville Power Authority without adding reliability.
Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.			
Electric Reliability Council of Texas, Inc.	10	Abstain	Although stated in the Applicability Section, the Requirements and Measures contain no clear applicability only to those Transmission Operators and Transmission Service providers who utilize the Flowgate methodology in calculating Available Flowgate Capabilities.
Response: The entire standard applies only to those entities who utilize the Flowgate methodology in calculating TFC and AFC.			
Midwest Reliability Organization	10	Negative	The MRO is concerned with the R2.1 that requires that the Transmission Operator shall set up a certain number of flowgates at a minimum. The MRO is concerned that this will require a certain number of flowgates will be needlessly set up by smaller Transmission Service Providers as a result of this requirement. The MRO believes that this will result in a certain number of flowgates be needlessly set up. We believe that this requirement should be greatly simplified, deleted, and/or changes to R2.1.3 should be made. R2.1.3. presently states that "Any limiting Element/Contingency combination at least within the Transmission model identified in R3.4 and R3.5 that has been subjected to an Interconnection-wide congestion management procedure within the last 12 months, unless the limiting Element/Contingency combination is accounted for using another ATC methodology." We believe that this requirement should provide another condition when the requirement is waived by adding the following words at the end of the requirement "or unless the need for Interconnection-wide congestion management was a result of unusual operating conditions that are not reasonably expected to frequently occur again (such as multiple prior outages of transmission facilities and/or critical generators)." Also, the MRO is concerned with the Transmission Operator being the responsible entity for R2 through R3 for MOD-030. We believe that the responsible entity for these requirements should be the Transmission Service Provider.
Response: The SDT recognizes the commenter's concerns. In order to be responsive to FERC Order 890 within the established filing deadline, the SDT is not making changes to the standard at this time. However, the SDT has developed a revision to MOD-030 to address this concern (MOD-030 Version 2) and has posted that revision for a 45-day comment period. It is the intention of the SDT to pursue the approval of MOD-030 Version 2 prior to the effective date of MOD-030 Version 1, such that the new version supersedes the older version.			

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			Regarding the assignment of R2 and R3 to the Transmission Operator, the Functional Model does not attribute the determination of TTC or TFC to any entity. As such, the SDT was required to interpret the model to determine the appropriate entity for determining TTC or TFC. Since the ratings of facilities are established by the Transmission Operator, the SDT felt it appropriate to assign the responsibility for TFC to the Transmission Operator.