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Individual
James A Maenner
James A Maenner
Yes
No
<p>BAs that neither own nor operate transmission should not issue reliability directives for transmission-related limits. Without the tools and knowledge of a Transmission Operator, the BA could issue conflicting orders to the TOP's operating plans. Certainly, the BA should relay a TOP directive but not be the initiator.</p>
Yes
Group
Northeast Power Coordinating Council
Guy Zito
No
<p>(1) In R1, reliability directive is capitalized in indicating (or implying) it is a defined term. But this term has not yet been defined despite our understanding that there are currently three SDTs that are reviewing and/or attempting to define this term and the term (Directive). We suggest to make this term lower case until it is defined. (2) R2: the revised wording seems a bit odd as the phrase "expected to be affected" could be interpreted to be describing the actual or anticipated Emergency conditions. We suggest R2 to be revised to: "Each Transmission Operator shall inform its Reliability Coordinator and known or expected to be affected Transmission Operators of actual Emergency and anticipated Emergency conditions" to enhance clarity. Alternatively, we propose inserting a comma after "expected to be affected". (3) R3: Add a comma after "...comparable emergency procedures". (4) Similar to their IROL counterparts, operating within all SOLs and mitigating their exceedances within some predetermined time period is fundamental to reliable operations. (5) As pointed out in our previous comments, we did not agree that VSLs should be determined based on the number of times a requirement was violated. While it is appropriate to determine the VSLs for R6 based on the number of SOLs that support local area reliability not reported to the RC since these numbers</p>

represent the extent of missing the total set, the same approach should not be applied to the determination of R7 since the progressive VSLs appear to make a difference between IROL and SOL (Note: the former has a Severe VSL for failing to notify one exceedance whereas for the latter the VSLs are graded based on the number of SOLs whose exceedances a TOP failed to notify its RC). Note that R7 requires that the TOP inform its Reliability Coordinator of actions being taken to return the system to within limits when an IROL, or SOL as identified in Requirement R6, has been exceeded. The requirement does not make any distinction between IROL and SOL, and requires that there shall not be even a single incident that the TOP does not inform its RC of actions being taken to mitigate an IROL or SOL exceedance. Hence, missing even one SOL would violate the bulk of the intent of R7. We suggest the VSLs for Low, Moderate and High be removed, and revise the VSL for Severe to: The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limit when an IROL or SOL has been exceeded.

No

(1) We continue to disagree with the way R2 is worded. R1 requires a TOP to conduct next day analysis to assess if any of the SOLs will be exceeded. R2 requires that the TOP develop plans to preclude operating in excess of only the IROLs identified as a result of the assessment performed in R1. Given our stance on this issue and understanding that IROLs represent a subset of SOLs, we believe R2 should be changed to SOL. In our view, a TOP needs to conduct next day analysis to assess if any of the established limits will be exceeded, develop plans to preclude operating in excess of the IROLs and SOLs, and make resources and actions available for mitigating exceedances if and when they occur. Like operating within SOLs and IROLs, this is fundamental to reliable operation. We suggest R2 be revised to include all SOLs. Remove "single" from R1.

Yes

Regarding R4, M4, it does not appear to be warranted that a Generator Owner, Generator Operator, Interchange Authority, or Load-Serving Entity provide evidence that there are no outstanding requests for data. As the originator of the request, the evidence that there are no outstanding requests for data should be provided by the Balancing Authority or Transmission Operator, as applicable.

Yes

No

The BA's role is to balance load-generation-interchange and does not have any direct role in monitoring and operating system conditions within transmission-related limits.

No

We continue to strongly disagree with removing the requirements for a TOP to plan and make day ahead arrangement for operating with all SOLs, and during day at hand and real time operate the system within established SOLs (and IROLs) and mitigate SOL exceedances within a predetermined time period. These are the most critical tasks for the TOPs, and are fundamental to ensuring reliability. We are unable to support these standards if the necessary requirements are not reinstated/revised (as suggested in Q1 to change R5 of TOP-001 and in Q2 to change R1 and R2 of TOP-002). R6 should be reworded to read "Each Transmission Operator shall inform its Reliability Coordinator of all System Operating Limits (SOLs) which, while not IROLs, support its Transmission Operator area reliability.

Individual

Kasia Mihalchuk

Manitoba Hydro

No

R.4 - The changes suggested to R. 4 are too vague to result in effective coordination. What is meant by "expected relay failures"? How is an expected relay failure assessed? What criteria is used to determine what we consider a risk of an expected relay failure - what conditions? R.6 - is again too vague for making consistent operating decisions. What criteria is applied for identifying SOL's that support "local area reliability"? What is a local area, how large is it, what reliability criteria is violated on the violation of an SOL? R.7 - SOL's identified in R6 are vague.

Yes

Yes
Yes
No
The BA is responsible to operate its generation assets within the reliability constraints established by the Transmission Operator and Reliability Coordinator.
No
Changes are still required to TOP-001-2
Group
WECC RC
Michael Davis
No
What is definition for when an SOL supports or does not support Local Area Reliability? Is this for 100kV and above? What are the timing requirements for returning elements to a level below their SOL?
No
R2 should include SOLs. In R3 the plan should be shared with the RC.
No
Is mutually agreeable a formal process? Should it be in writing? The RC should be involved because of the numerous formats it has to deal with.
Yes
No
In WECC, the RC deals mainly with the BAs. The BAs with their responsibility to maintain load and resources, ACE, and frequency places them in a position to direct and control all other activities on the interconnection. The RC expects the BAs to accomplish and direct actions to restore or mitigate contingencies in the interconnection.
No
See previous comments.
Individual
Ed Stein
self
No
I do agree with most every thing However I do not understand what is meant by the phrase "expected to affect" a TO. How does the TO experiencing the emergency know if his emergency affect every TO. Granted he should know of the main ones but can he be sure that a remote line is affected that has a 2-5% response factor.
Yes
No
Due to my earlier response
Individual

Michael Ayotte
ITC Holdings
No
In R2, strike the words "known or". In R4, remove the added words "by the Transmission Operator" from the second sentence . The addition of this phrase implies that the Generator Operator does have the obligation to initiate the coordination of changes in generation with the transmission operator. The requirement is clearer without this phrase. In R4, change the wording to "Such operations MAY include..." We believe the intent of the sentence was only to provide a list of examples. R6 requires the TOP to identify a sub-set of SOLs that is larger than IROLS and "support its local area reliability". It is unclear what criteria a TOP would use to identify this subset, which will lead to inconsistent implementation and confusion. The TOP should inform the RC of all SOLs and the actions being taken to address any SOL exceedance which can be accomplished via SCADA or other means of action and communication when necessary. The measures for R5 and R8 need to be clear that these are event driven requirements and only evidence is required if an "event" has occurred.
Yes
Yes
Yes
No
Balancing Authorities do not operate transmission. They would only issue requirements with regard to capacity and energy emergencies.
No
The comments on TOP-001-2, particularly in regard to R6, need to be resolved before balloting.
Individual
Mike Gentry
Salt River Project
Yes
No
Yes
Yes
Yes
Individual
Ed Davis
Entergy Services, Inc
Yes
This standard seems to conflict with MOD-001, Requirement 7. This standard requires that: When calculating ATC or AFC the Transmission Service Provider shall use assumptions no more limiting than those used in the planning of operations for the corresponding time period studied, providing such planning of operations has been performed for that time period. When applying the requirements from TOP-002-3 along with the MOD-001 standard, it seems that all TSP's will need to calculate ATC or AFC up to the calculated IROL for the time period. When the two standards are looked at independently they are fine. when you look at both. there is some confusion on where NERC wants

the TSP's to go.
Group
Electric Market Policy
Jalal Babik
No
R1 - By capitalizing the term 'Reliability Directive", the SDT introduced a discrepancy as this term does not currently exist in the NERC Glossary of Terms. We are opposed to approving revisions to existing or new standards when they are predicated upon references to other 'draft' terms, standards, requirements, etc. R4 – We have reviewed the various comments made concerning retention of GOP in this requirement, and philosophically agree but find it impossible to determine how GOP can coordinate" its respective operations known or expected by the Transmission Operator to have a reliability impact...." without knowing what constitutes "expected to have a reliability impact". The GOP can only coordinate to the extent the TOP has provided predefined information that is required to be coordinated. This information should be included in the Interconnection Agreement or some other agreement that clearly spells out what the GOP is expected to communicate in order to coordinate. We would prefer inclusion of this requirement in TOP-003 as part of R4 (referencing R2 and R3) or we could support the requirement in TOP-001 if it referenced coordination of data required in TOP-003 @ R2 and R3. Also the statement"operating conditions" is sufficiently vague. The SDT needs to clarify what constitutes an operating condition?
Yes
Yes
Yes
No
No
See comments above
Individual
Larry Watt
Lakeland Electric
Yes
Yes
Requirement R-1 and Measure M-1 require modification for clarity. Replacing the undefined term "assessment" with the NERC defined term "Operational Planning Assessment" throughout the TOP-002-3 standard will help to clarify both line items. Using "Operational Planning Analysis" in measure M-1 clarifies that the power flow study does not have to be performed day-ahead (see the definition of Operational Planning Analysis). This is in-line with the recent interpretation issued by NERC discussed in the appendix of TOP-002-2a. Using "Operational Planning Analysis" in requirement R-1 ensures the planner understands that his or her assessment is meant to be more than just a determination of System Operating Limits. Requirement R-1 would also benefit from clarifying "single Contingency event." Current day-ahead contingency analysis is limited to determining system performance during single transmission line, generator and transformer outages. However, using "single Contingency event" could include lightning struck towers with two or more transmission lines or even bus failures at which multiple transmission lines terminate. Unless it is the intent of the standard team to increase the scope of TOP-002 I recommend finishing requirement R-1 with ". . . involving transmission lines, transformers, and generators."

Yes
Yes
Yes
Yes
Individual
Daniel Herring
The Detroit Edison Company
Yes
Yes
Yes
Yes
No
We believe that the Balancing Authority in its role as a Balancing Authority issues Reliability Directives to balance load and generation and only indirectly affects transmission flows and should not be in the TOP standards.
Yes
Group
Southern Company
Hugh Francis
No
The measure for R2 does not carry forth the definition of which other TOP should be informed. R2 requires informing other TOPs that are expected to be affected. The measurement requires that contact was made with all TOPs that were affected. The list of TOPs that are expected to be affected before the fact may be different than the list of TOPs that actually were affected. Would suggest minor change in R2 from "Transmission Operators known or expected to be affected of actual Emergency and anticipated Emergency conditions" to "Transmission Operators known or expected to be affected of actual Emergency or anticipated Emergency conditions" The second "each" in M1 and M4 should be deleted. Would suggest modifying VSL for M5 to read in the same tense of the Measure. Specifically, instead of "The Transmission Operator did not operate within an identified" to "The Transmission Operator operated outside an identified"
Yes
No
R1 is written for the Operations Planning timeframe. As such, would suggest rewording "shall have a documented specification for data necessary for Real-time monitoring and reliability assessments" to "shall have a documented specification for data necessary for reliability assessments and Real-time monitoring". Having "Real-time monitoring" mentioned first may convey the impression that "Real-time" also applies to the reliability assessments. Also, would suggest rewording "Equipment at voltage levels lower than" to "Outages of equipment at voltage levels lower than."
Yes
No

TOP-001-2 does not mention any entity except for the Transmission Operator as issuing Reliability Directives. Yes, it is appropriate for the Balancing Authority to issue Reliability Directives that are related to his responsibilities (issues regarding balance load and generation), but there should be no confusion that the Reliability Coordinator has ultimate authority and thus could issues overriding Reliability Directives. The definition of a Balancing Authority in the NERC Glossary is, "The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time." This definition gives them no responsibility for transmission limits. However, the Balancing Authority does need to be able to give Reliability Directives in order to aid in the resolution of transmission-related limit problems.

Additional clarification per our previous comments is required. Re-posting may not be required.

Individual

Howard Rulf

We Energies

No

We Energies joined MISO's comments for this project. We have one additional comment for this question. The BA may need to issue Directives to Generator Operators or Distribution Providers in response to a TOP or RC need to resolve a transmission issue. Basically "pass-through" the Directive from the TOP or RC to the entity that will actually carry out the directed action.

Group

SERC OC Standards Review Group

Gerald Beckerle, Vice Chair - SERC Operating Committee

No

Is Reliability Directive a defined term since it is capitalized in R1 and throughout the Standard, but not currently found in the NERC Glossary of Terms. R2 – We suggest that "other transmission operators" should be changed to "adjacent transmission operators". R3 – What is specifically meant by the words, "emergency assistance"? For example, do the words as written require a utility to provide line crews to assist in storm restoration? We suggest that the language be tightened up to focus emergency assistance on those things that were intended by the language. R4 – we suggest removing "and Generator Operator" and the term "by the Transmission Operator" from the first sentence. It appears that the original wording implies that the Generator Operator would have knowledge of conditions on the transmission system. We also suggest removing the last sentence – listing some but not all items that may have operating impacts and in which communications is necessary, concerns the SERC OC Standards Review Group. R6 – We suggest revising R6 to read: Each Transmission Operator shall inform its Reliability Coordinator of any System Operating Limits (SOLs) which, while not IROLs, will require mitigating actions if exceeded. The current word "all" seems to indicate that every SOL would be in this list. R8 – Why is R8 needed – it appears to be a duplication of R5 and the two could be combined. General comment on measures: Measures that are event driven need to be clear that evidence would only be required if an event occurred. That is, the entity should not have to prove a negative.

Yes

No

R1 – Does "specification for data" mean a complete listing of data points or a listing of types of data required for different types of facilities such as "generation, transmission, etc." Also, does this standard apply solely to internal requirements of a BA and its TOP? The concern is the multiple types of formats that may be required in order to exchange data with an expanded list of entities external to the BA or TOP. M5 measurements should be modeled similar to the measurement in M4, in particular, that last sentence of M4. Is TOP-003-2 a new standard utilizing an existing number? If so,

does the previous TOP-003-1, Planned Outage Coordination have to be retired? The migration from the current TOP-003-1 to the new TOP-003-2 seems like it could cause confusion. Would it be better to just retire TOP-003-1 and form a new standard number like TOP-011-1? R4 and R5: Should there be a time requirement for complying with a data request?

Yes

We are unsure how to respond to this question as it pertains to TOP-001-2, R1.

No

See the above comments. Note: The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review Group only and should not be construed as the position of SERC Reliability Corporation, its board or its officers.

Group

IRC Standards Review Committee

Ben Li

No

Requirement 1: Reliability Directive, as a defined term has been introduced and the definition has not been provided in this posting. If the intent is to use this as a defined term anticipating that it will be defined and approved soon under a different project, then we suggest these standards not be put up for balloting until the term is approved.

No

Requirement #1: It is not clear why we introduce 'single' Contingency event since a TOP may be required to study multiple contingencies identified by its RC (See FAC-011-2, Requirement R3). A better term may be "Contingency events identified in FAC-011."

Yes

Yes

No

The BA's role is to balance load-generation-interchange only; it does not have any direct role in monitoring and operating system conditions within transmission-related limits.

No

(1) The SRC is concerned that the absence of an explicit requirement for operating within SOLs may be problematic. Operating within SOLs is an important operating practice that will position the system to be stable within the acceptable reliability criteria included in the definition of SOLs and the requirements to be included in the methodology that is used to determine SOLs. The SRC recognizes that SOLs cover the full range from minor localized limits through Interconnection Operating Reliability Limits (IROLs), and that SOLs are defined to respect the facility and equipment ratings that are included in the determination of the values of SOLs. The suggested requirement R6 in TOP-001-2 for a TOP to identify SOLs, for which the TOP is to notify the RC when the SOLs are exceeded, is intended to address those SOLs that, while not meeting the definition of IROLs, may have potential impact that is important from a local viewpoint. Although these SOLs may not cause an impact equivalent to or greater than that in the definition of Adverse Reliability Impact, they deserve additional attention, including monitoring and notifications between TOPs and RCs. If the SDT holds the view that operating within the identified SOLs and correcting their exceedances are implicit and precursory to R7 and R8, then we would suggest to make it explicit by revising R5, by saying, for example: R5. Each Transmission Operator shall operate within each identified Interconnection Reliability Operating Limit (IROL) and its associated IROL Tv, and each System Operating Limit (SOL) as identified in R6 and its associated time period as determined by the TOP. Similar to their IROL counterparts, operating within SOLs and mitigating their exceedances within some predetermined time period is fundamental to reliable operations, although for IROLs the interconnected system impact is readily obvious compared to the SOLs. The same principle holds true for day-ahead operational planning so that the needed control measures can be identified and made available in advance to prevent operating in excess of SOLs and to mitigate exceedances if and when they occur during day at hand and real-time operations. To this end, we suggest the SDT consider revising R2 of

TOP-002-3 to: "Each Transmission Operator shall plan to preclude operating in excess of those System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs) identified as a result of the assessment performed in Requirement R1." (2) Also there is concern that a definition for Reliability Directive has not been determined and agreed upon through the standards development process. Until such time that the definition of Reliability Directive can be developed and agreed to, the references to Reliability Directives or these standards should not go to ballot.

Group

FirstEnergy

Sam Ciccone

No

R3 – This requirement requires "comparable emergency procedures" be implemented which is appropriate and consistent with the previous standards, but it lacks, and the previous standards lacked, the concept of mitigation. An entity should not be required to shed load for the sake of requiring a neighboring entity to shed load to mitigate the emergency condition. As currently written, in order for an entity to require its neighbor to shed load that will mitigate the emergency condition, the requesting entity is required to shed load first. We suggest this be revised to say, "comparable emergency procedures that mitigate (lessen or eliminate) the impact of the emergency." R6 – This requirement is ambiguous. By definition a System Operating Limit is "The value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. System Operating Limits are based upon certain operating criteria. These include, but are not limited to: (a) ♣ Facility Ratings (Applicable pre- and post-Contingency equipment or facility ratings) ♣ Transient Stability Ratings (Applicable pre- and post-Contingency Stability Limits) ♣ Voltage Stability Ratings (Applicable pre- and post-Contingency Voltage Stability) ♣ System Voltage Limits (Applicable pre- and post-Contingency Voltage Limits)" As written, the TOP will be required to inform the RC of all equipment ratings that "support local area reliability." This could be interpreted as requiring an entity to report equipment ratings for facilities operated at 100 kV or less which we believe is not the intent of the SDT. These facilities certainly support local area reliability on some level but are not monitored by the RC and serve little or no value to the RC. FAC-014-2 requires the TOP in Req. R2 to "establish SOLs (as directed by its Reliability Coordinator) for its portion of the Reliability Coordinator Area that are consistent with its Reliability Coordinator's SOL Methodology." Therefore, it appears that TOP-001-2 Req. R6 may not be necessary. However, if the intent of FAC-014-2 Req. R2 is to establish SOLs from an Operations PLANNING horizon (not sure since FAC-014-2 does not include time horizons with the requirements), and the intent of TOP-001-2 Req. R6 is to inform the RC from a REAL-TIME operations horizon, then Req. R6 of TOP-001-2 should be consistent with FAC-014 and written as follows: "R6. Each Transmission Operator shall inform its Reliability Coordinator of all System Operating Limits (SOLs) which are consistent with its Reliability Coordinator's SOL methodology."

Yes

Yes

We agree with the changes to TOP-003-1. However, we feel that R3 should be re-written to be consistent with the wording in R2. We suggest a change as follows: "R3. Each Balancing Authority shall distribute its data specification to entities that have Facilities monitored by the Balancing Authority and to entities that provide Facility status to the Balancing Authority."

Yes

Yes

The question as written is confusing based on the present wording of TOP-001-2 R1. Nevertheless, we believe that the Balancing Authority (BA) should be applicable in the TOP-001-2 standard and that their role as stated in R1 is correct. The BA receives direction from the TOP when redispatch solutions are needed to alleviate transmission-related limits (i.e. voltage, thermal, etc).

No

We feel that the current draft still has issues to be addressed before balloting begins (see our comments on Questions 1 through 5). Also, we provide the following additional comments: 1. The mapping of all the requirements and standards associated with this project provided within the

Implementation Plan during the first posting is a valuable tool for industry personnel in charge of tracking compliance. However, this mapping matrix now appears to be removed from the implementation plan. We feel that the team and/or NERC should provide a revised mapping document during the next posting of documents for this project so that industry can review it. Then it should be retained as a reference tool for industry when transitioning their compliance documentation from the current standards to the new standards. 2. The implementation plan currently states: "The assumption used by the SDT in establishing this Implementation Plan is that the project mentioned in the prerequisites: Project 2006-06, Reliability Coordination; has been approved prior to the implementation of this Project 2007-03, Real-Time Operations." It should be clear that the implementation clock for these Real-Time Operations standards starts only after "applicable regulatory approval" of the standards associated with Project 2006-06.

Individual

James H. Sorrels, Jr.

American Electric Power

No

It's our understanding that a definition of the term for a Reliability Directive (RD) may be currently under development/review/approval. However, since RD is not currently found in the NERC glossary, we request that it be added to the definition section of this standard. For example, are base points issued by the market area of an RTO considered an RD? Is there a method to distinguish such base points as constituting an RD from those that are not RDs? The team correctly capitalizes "Transmission" and "Load" since they are terms included in the NERC dictionary and does not capitalize "generation" since it is not included. It would seem that adding the term to NERC glossary would be the best resolution, but, in the interim, it should be well defined within the context that it is being used in any requirement (refer to R4). We are concerned that R5 is a duplication of a requirement in FAC-009 and perhaps others as well. Correspondingly, M5 would also be duplicative. Again, it appears that R6 may be duplicative of FAC-014, R5.2. If not, the phrase "support its local area reliability" should be clarified. While we appreciate the team's efforts to better distinguish IROLs from SOLs in R7., more work is necessary to better define the difference. (e.g., exceeding limits vs. n-1)

Yes

Yes

AEP would appreciate that the reference to "Long term outages" in R1.1.1. be specified in terms of the time elapsed.

Yes

Yes

Even in conditions where the BA is providing RDs to balance load and generation, the changes may still impact the BES. Under such circumstances, there remains a need for the BA to be aware of loadings on the BES.

No

AEP believes that one more draft is needed to verify that key edits provided by stakeholders during this round are included before proceeding to ballot.

Individual

Greg Rowland

Duke Energy

No

- The definition of "Reliability Directive" drafted by the Reliability Coordination SDT should also be commented on in this TOP effort. We are concerned that the definition is too broad and would encompass what we consider normal communications. A key point of the definition should be that each communication of a Reliability Directive is required to be identified as such to the receiving entity.
- R2 should say that the TOP shall inform its RC and direct interconnected TOPs. The phrase "known or expected to be affected" opens the TOP to non-compliance if they don't expect someone to be affected, and it turns out that they are affected.
- R3 – strike the phrase "provided that the

requesting entity has implemented its comparable emergency procedures". In this situation we should not be wasting time getting proof that the requester has implemented their procedures before rendering assistance. • R4 is confusing. Relay and equipment failures are not operations; they are operating events. Also, what is meant by the phrase "unless conditions do not permit such coordination"? • R5 is confusing and appears to duplicate R8. Delete R8 and reword R5 as follows: "Each Transmission Operator shall operate or direct others to operate within IROL Tv for each identified Interconnection Reliability Operating Limit (IROL)." • R6 should include identified IROLs in the communication to the RC. Reword R6 as follows: "Each Transmission Operator shall inform its Reliability Coordinator of all identified IROLs and those System Operating Limits (SOLs) which support its local area reliability." • Revise Measures and VSLs to reflect these changes to TOP-001-2

No

• R1 , M1 and Data Retention could be interpreted to require that daily assessments (which could include a dated Power Flow) will have to be kept for 6 months. This could take up a lot of space. • R2 as worded gives the impression that an IROL will be identified during a daily assessment respecting an SOL per R1. First, if you respect the SOL there will be no IROL. Second, simple day-ahead studies with an online Power Flow looking for contingencies might not identify an IROL. It might, but you would probably need to examine some multiple contingencies before something would cascade. R2 could be revised to read that each TOP shall plan to preclude operating in excess of any identified IROL's during the day-ahead assessment per R1. Also, maybe this requirement should be an RC requirement.

No

• The data specification in R1 is broad and could force a company to name every breaker, voltage point, MW point, etc. on their system. Perhaps an ICCP document or something similar could be used, but it's not clear as the requirement is currently written. • Also, this standard goes into a lot of detail in R1 through R4. This standard could be simply one requirement, R5.

Yes

Yes

The BA is involved in generation dispatch, which directly affects transmission flows.

No

We believe that more clarity is needed on the requirements in these standards before going to ballot.

Individual

Alice Murdock

Xcel Energy

No

R1- There is not an associated definition for the term Reliability Directive (nor is there one in the documents associated with Project 2006-06). The term "directive" is the subject of much debate as evidenced by the recent attempt at clarification by the NERC advisory on communications. This term needs to be defined and an opportunity for stakeholder comment, prior to moving this standard to ballot. R1- We feel that GOP should be removed from this requirement. The TOP should coordinate with any entity it necessary. Alternatively, it could be reworded to read: "The TOP shall coordinate operations with the GOP...". R2- Should be redrafted to read: "Each Transmission Operator shall inform its Reliability Coordinator and other impacted Transmission Operators of actual or anticipated Emergency conditions." Alternatively, this requirement could be abbreviated to have the TOP notify the RC, as the sharing of that condition by the RC to other impacted entities is covered by the proposed project 2006-06, IRO-001-2 R4: "Each Reliability Coordinator that identifies an expected or actual threat with Adverse Reliability Impacts, within its Reliability Coordinator Area shall notify all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area." R3- Though addressed in the previous draft version, we continue to disagree with retaining this requirement. Determining if the other entity has implemented a comparable emergency procedure places the burden upon the entity providing assistance to verify completion of internal processes by the requesting entity. This is not reasonable or practical in an emergency situation, and requires the operator to make a subjective decision. Additionally, assuming the requesting entity is compliant with the NERC standards (e.g. EOP-002), there is no reason for the assisting entity to confirm that the deficient entity has properly implemented their comparable procedure. R4- The term 'reliability

impact' is vague. In reality, every change on the system has a reliability impact, whether it be positive or negative. We recommend instead using the phrase "adverse reliability impact". To what degree must operations be coordinated? The proposed requirement indicates that changes in generation and Load must be coordinated. Does this mean changes in dispatch levels of every generator must be coordinated? How are changes in Load coordinated and what would constitute a significant change worthy of coordination? We recommend striking the last sentence that indicates examples. R5- This implies that the "Interconnection" will specify the IROL Tv. The NERC Glossary defines this at <= 30 minutes. Are there IROL Tvs <= 30 minutes? If not, why not just eliminate the hassle of trying to define and keep up with the IROL Tv and just state < 30 minutes in this requirement (and remove the IROL Tv definition)? R8- The phrase "...within the IROL's Tv" should be deleted. The TOP should be directing others to act regardless of whether or not the elapsed time is within or exceeded the IROL Tv. 1.4. Data Retention The data retention section implies that compliance is to the Measure as well as the Requirement. We believe that compliance is measured to the Requirement only.

Yes

R1- Is there a need to specify IROLs as well?

No

R5- We are concerned that this may be liberally applied to require entities to provide data to other entities with no clear reliability need. We feel this requirement could place extreme and unnecessary burden on entities to provide data in a specified format and time interval.

Yes

No

No

We feel several modifications are needed before this is ready to ballot, as detailed in our previous responses. Also, the SDT indicates that changes in this project are dependent upon changes in Project 2006-06. Final drafts of those standards are not complete and it is not clear from a mapping perspective as to how some of the requirements originally in TOP are now covered under those standards.

Individual

Martin Bauer

US Bureau of Reclamation

No

The proposed addition of the term "by the Transmission Operator" makes the Transmission Operator the reliability entity the exclusive source for determining when operations are expected to have a known or expected reliability impact on other reliability entities. This would eliminate the Generator Operator's ability to determine which operations can have an impact on other reliability entities such as Transmission Operators. The response from the SDT clearly indicated that "further the SDT recognizes that the scope and number of individual agreements, which may be needed to ensure that all operations are fully coordinated for all operations known or expected to have a reliability impact upon other Reliability Entities is highly likely to vary greatly from region to region or organizational arrangement to organizational arrangement." If the Transmission Operator is to be the exclusive source for the determination of those operations have or are expected to have a reliability impact on other reliability entities, then a separate requirement and measure is needed to ensure that such a determination is properly conveyed to the Generator Operator. Prior to this addition, the Generator Operator was able to make the operational impact assessment. The SDT should either create a new requirement for the TOP to provide to the Generator Operators the operations that have or are expected to have impacts on reliability entities or alter the language that the reliability entities determine when their respective operations impact other reliability entities.

Yes

No

The modification of the language related to data specifications creates a potential for compliance

violation for the reliability entities other than the Transmission Operator. The specifications for data " necessary for Real-time monitoring and reliability assessments" needs to be more explicit. The language allows it to be below the BES voltage threshold. This is coupled with the requirement that no outstanding requests for data from the transmission operator are unfilled. This double negative is easier to restate that all data requests from the transmission operator must be filled. This is very open ended. Should the data request is unreasonable, the other reliability entities would be non-compliant. The data specification need to be subject to review and approval by the Reliability Coordinator in the case of conflict brought by the reliability entity. The requirement, in case of conflict, would not be invoked until the data specifications are approved. This opportunity for appeal of the specifications ensures transmission operators apply technical reasoning in developing the specifications.

Yes

No

The term "Reliability Directive is not a defined term. The question is poorly worded since the TOP-001-2 R1 specifically reserves the reliability directive to Transmission Operator for this standard. The Balancing Authority does not issue directives. It works within its capacity and emergency plan to alleviate imbalances. After implementing all of its remedies the Balancing authority works through the reliability coordinator. The Reliability Coordinator may declare an emergency and take specific actions. See the references below: EOP 002 - R2. Each Balancing Authority shall implement its capacity and energy emergency plan, when required and as appropriate, to reduce risks to the interconnected system. R5. The Balancing Authority shall not unilaterally adjust generation in an attempt to return Interconnection frequency to normal beyond that supplied through frequency bias action and Interchange Schedule changes. Such unilateral adjustment may overload transmission facilities. R6 If the Balancing Authority cannot comply with the Control Performance and Disturbance Control Standards, then it shall immediately implement remedies to do so. These remedies include, but are not limited to: R6.1. Loading all available generating capacity. R6.2. Deploying all available operating reserve. R6.3. Interrupting interruptible load and exports. R6.4. Requesting emergency assistance from other Balancing Authorities. R6.5. Declaring an Energy Emergency through its Reliability Coordinator; and R6.6. Reducing load, through procedures such as public appeals, voltage reductions, curtailing interruptible loads and firm loads. R7. Once the Balancing Authority has exhausted the steps listed in Requirement 6, or if these steps cannot be completed in sufficient time to resolve the emergency condition, the Balancing Authority shall: R7.1. Manually shed firm load without delay to return its ACE to zero; and R7.2. Request the Reliability Coordinator to declare an Energy Emergency Alert in accordance with Attachment 1-EOP-002-0 "Energy Emergency Alert Levels." R8. A Reliability Coordinator that has any Balancing Authority within its Reliability Coordinator area experiencing a potential or actual Energy Emergency shall initiate an Energy Emergency Alert as detailed in Attachment 1-EOP-002-0 "Energy Emergency Alert Levels." The Reliability Coordinator shall act to mitigate the emergency condition, including a request for emergency assistance if required.

No

The two outstanding issues related to the new language proposed by the SDT need to be resolved first. TOP 001 needs to be modified to either recognize that the GOP can determine which operations can impact other reliability entities or insert a new requirement that the TOP must develop and provide to the GOP the operations that may impact other reliability entities. TOP 003 needs to be modified to either place specific limitations on the data specifications developed by the TOP or that the Reliability Coordinator must approve data specification developed by the TOP when they are disputed by the reliability entity which must satisfy the obligations such data specifications impose on them.

Individual

Jason Shaver

American Transmission Organization

No

No requirement to define IROL TV. R6 is already covered in the MOD standards.

Yes

Yes
Yes
No
Because the team is use the term Reliability Directive our answer may depend on what how this term is finally defined. We believe that the term needs to be defined and approved by skateholders prior to this standard being posted for balloting.
No
Changes needed to remove R6 from draft TOP-001-2 and to include a requirement to establish TV for all IROL's.
Group
Platte River Power Authority Operations Group
Deb Schaneman
Yes
In R1 Reliability Directive is capitalized as a defined term but isn't in the NERC Glossary of Terms or Definitions or the Terms Used in Standard section of version 2 of the standard. Where is this term defined?
No
Is "an assessment" consistent with the interpretation of TOP-002-2 R11 by Orlando Utilities Commission or are you requiring a real-time contingency analysis tool? We believe there should be no requirements for the TOP to have a real-time contingency analysis tool if the BA and RC have the tool and model the TOP's system.
No
it isn't clear in R1 and R5 what is required for "Real-time...reliability assessments." Is a Real-time...reliability assessment" consistent with the interpretation of TOP-002-2 R11 by Orlando Utilities Commission or are you requiring a real-time contingency analysis tool? We believe there should be no requirement for the TOP to have a real-time contingency analysis tool if the BA and RC have the tool and model the TOP's system.
Yes
No
The Transmission Operator issues the "Transmission" reliability directive and the Balancing Authority issues directives to balance the generation to load.
No
Terms need to be defined and clarificaiton needs to be added.
Individual
Dan Rochester
Independent Electricity System Operator
No
(1) In R1, reliability directive is capitalized in indicating (or implying) it is a defined term. But this term has not yet been defined despite our understanding that there are currently three SDTs that are reviewing and/or attempting to define this term and the term (Directive). We suggest to make this term lower case until it is defined. (2) R2: the revised wording seems a bit odd as the phrase "expected to be affected" could be interpreted to be describing the actual or anticipated Emergency conditions. We suggest R2 to be revised to: "Each Transmission Operator shall inform its Reliability Coordinator and known or expected to be affected Transmission Operators of actual Emergency and anticipated Emergency conditions" to enhance clarity. Alternatively, we propose inserting a comma after "expected to be affected". (3) R3: We suggestion to add a comma after "...comparable emergency procedures". (4) R5 to R8: The very issue that we brought up during the last 2 postings came under the spot light with the changes made at this posting. The SDT in response to industry

comments made changes to qualify the SOLs whose exceedances are to be reported (in R7) based on a list of SOLs identified in R6 (the SDT added this requirement for this reason). While we don't think such identification is necessary, and in fact may expose the system to unreliability since such a list would be selective and hence bound to miss some SOLs that affect reliability, we nevertheless are encouraged by the changes and the addition since it is a step in the right direction. In our view though, it did not go far enough. However, without an explicit requirement that the TOP shall operate within all SOLs (as in the case for IROL in R5) and to act or direct others to act to mitigate the magnitude and duration of exceeding all SOL within some time frame (as in the case for IROL in R8), the requirements to identify a list of SOLs (in R6) and informing its Reliability Coordinator of actions being taken to return the system to within limits when one of these SOLs has been exceeded (in R7), appear inconsistent. We therefore recommend that R5 be altered as follows: R5. Each Transmission Operator shall operate within each identified Interconnection Reliability Operating Limit (IROL) and its associated IROL Tv, and each other System Operating Limit (SOL) and its associated time period as determined by the TOP. Similar to their IROL counterparts, operating within all SOLs and mitigating their exceedances within some predetermined time period is fundamental to reliable operations, although for IROLs the interconnected system impact is readily obvious than for SOLs. The same principle holds true for day-ahead operational planning so that the needed control measures can be identified and made available in advance to prevent operating in excess of SOLs and to mitigate exceedances if and when they occur during day at hand and real-time operations. (5) As pointed out in our previous comments, we did not agree that VSLs should be determined based on the number of times a requirement was violated. While it is appropriate to determine the VSLs for R6 based on the number of SOLs that support local area reliability not reported to the RC since these numbers represent the extent of missing the total set, the same approach should not be applied to the determination of R7 since the progressive VSLs appear to make a difference between IROL and SOL (Note: the former has a Severe VSL for failing to notify one exceedance whereas for the latter the VSLs are graded based on the number of SOLs whose exceedances a TOP failed to notify its RC). Note that R7 requires that the TOP inform its Reliability Coordinator of actions being taken to return the system to within limits when an IROL, or SOL as identified in Requirement R6, has been exceeded. The requirement does not make any distinction between IROL and SOL, and requires that there shall not be even a single incident that the TOP does not inform its RC of actions being taken to mitigate an IROL or SOL exceedance. Hence, missing even one SOL would violate the bulk of the intent of R7. We suggest the VSLs for Low, Moderate and High be removed, and revise the VSL for Severe to: The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limit when an IROL or SOL has been exceeded.

No

(1) We continue to disagree with the way R2 is worded. R1 requires a TOP to conduct next day analysis to assess if any of the SOLs will be exceeded. R2 requires that the TOP develop plans to preclude operating in excess of only the IROLs identified as a result of the assessment performed in R1. Given our stance on this issue and understanding that IROLs represent a subset of SOLs, we believe R2 should be changed to refer to SOLs. In our view, a TOP needs to conduct next day analysis to assess if any of the established limits will be exceeded, develop plans to preclude operating in excess of the IROLs and SOLs, and make resources and actions available for mitigating exceedances if and when they occur. Like operating within SOL sand IROLs, this is fundamental to reliable operation. We suggest R2 be revised to include all SOLs.

Yes

Yes

No

The BA's role is to balance load-generation-interchange and does not have any direct role in monitoring and operating system conditions within transmission-related limits.

No

We continue to strongly disagree with removing the requirements for a TOP to plan and make day ahead arrangement for operating with all SOLs, and during day at hand and real time operate the system within established SOLs (and IROLs) and mitigate SOL exceedances within a predetermined time period. These are the most critical tasks for the TOPs. and are fundamental to ensuring

reliability. We are unable to support these standards if the necessary requirements are not reinstated/revised (as suggested in Q1 to change R5 of TOP-001 and in Q2 to change R2 of TOP-002). Finally, we recommend changing "local" in R6 to "Transmission Operator" to avoid creating ambiguity regarding what is referred to in the requirement.

Group

Bonneville Power Administration

Denise Koehn

No

Comments: The term "Reliability Directive" needs to be added to the NERC Glossary of Terms (it was not in the April 2009 version).

No

Comments: Change R1 wording. "R1: The wording is still incorrect in our interpretation. The wording needs to be changed to state that an assessment of the next days planned study conditions SOL'S is still valid with the expected next day's conditions. The previous wording isn't realistic because many days the assessment could determine a contingency response would cause the in place SOL to be exceeded. Some contingencies require the SOL to be lowered to prepare for the next condition which would cause real-time system readjustment. And the next contingency and the next contingency Some days the assessment would say the SOL could be exceeded for HLH. The key to those SOL'S is that the SOL'S are set at a level where the worst contingency for that path would not cause the interconnection to go unstable, i.e. cascading outages.. Suggest clarifying what is meant by "their" in R3: "Each Transmission Operator shall notify all reliability entities identified in the plan(s) cited in Requirement R2 as to their role in the plan(s)." Perhaps state "their role in the TOP's Plans".

No

Regarding M4 (last sentence): "The evidence shall be that there are no Transmission Operators as identified in Requirement R2 or Balancing Authorities as identified in Requirement R3 with outstanding requests for data to the subject entity that have been unfilled". This doesn't mention the "TIMEFRAME" response time to provide data after a request is made. (i.e. 30 days, 60 days or whatever the reasonable "TIMEFRAME" is to modify databases or communication channels.) The VSL should be adjusted accordingly. If an entity has just received a request and is being audited the next week before fulfilling the request that would be a SEVERE VSL, which seems inappropriate.

Yes

No

Transmission-related issues are the responsibility of the TOP not the BA.

No

Correct R1 to assess the SOL is proper, not that the SOL could be exceeded. Where does the seasonal planning operations coordination described in TOP-002-2 R3 go? Re: the MOD-001-1 proposal.

Group

NERC Standards Review Subcommittee

Carol Gerou

No

A. In R4, states that the TOP and GOP shall coordinate operations "known or expected" by the TOP that have a reliability impact on other reliability entities. Is the TOP used twice in this requirement the same TOP or neighboring TOPs? Please clarify. B. In R4, the GOP will not know of "known or expected" operations of the TOP. Please clarify. C. In R4, as stated the GOP is required to notify the TOP of "relay and equipment failure and changes to generation", does this include all relays and all equipment associated with a generator? D. In R4, the reference to the term "Load", a TOP and GOP don't have loads. Therefore, how can they be required to coordinate something they don't have? Or E. In R4, the reference to the term "operating conditions", the GOP may not know of a severe or changing "operating condition" that is taking place on the transmission system. F. In R2 and R4, "expected to be affected" would include known. Please strike known. G. Both R5 and R6 require the TOP to identify a sub-set of SOLs that may be larger than the IROL subset ahead of time and notify the RC of what actions it is taking to return the system to within operating limits when they are exceeded. Why is there not a requirement to also operate within those SOLs and return within the

SOL if exceeded? H. The VSLs for R7 appear to assume that the sample set of SOLs that would be reported to the RC is a small number by using one, two, three and four in each successive VSL. What if the sample set is large (i.e. 1000 SOLs)? Should the VSLs be based on percentages? I. The measures for R5 and R8 need to be clear that these are event driven requirements and only data is required if an "event" has occurred.

Yes

N/A

No

The term "Long term outages" in the first sub bullet is not clear, please clarify.

Yes

N/A

No

The MRO NSRS believes any directives that a BA may issue should be in the BAL standards. R1, states that a BA, DP, LSE, and GOP shall comply with a Reliability Directive issued by a TOP. Reliability Directive is not defined by NERC. A definition has not been proposed.

No

A. A Reliability Directive must be defined and there must be an opportunity to comment before balloting can begin. B. Our responses to the previous questions are additional reasons why this standard should not go to ballot and that this standard needs another comment period.

Group

Midwest ISO Standards Collaborators

Jason L Marshall

No

We largely agree with the requirements but have a few suggestions. In R2 and R4, "expected to be affected" would include known. Please strike known. R5 and R6 require the TOP to identify a sub-set of SOLs that may be larger than the IROL subset ahead of time and to notify the RC of what actions it is taking to return the system to within operating limits when they are exceeded. Why is there not a requirement to also operate within those SOLs and return within the SOL if exceeded? The VSLs for R7 appear to assume that the sample set of SOLs that would be reported to the RC is a small number by using one, two, three and four in each successive VSL. What if the sample set is large (i.e. 1000 SOLs)? Should the VSLs be based on percentages? The measures for R5 and R8 need to be clear that these are event driven requirements and only evidence is required if an "event" has occurred.

Yes

Yes

Yes

No

Balancing Authorities do not operate transmission. They would only issue requirements with regard to capacity and energy emergencies.

Yes