NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Consideration of Comments

Project Name:	Project 2015-09 Establish and Communicate System Operating Limits
Comment Period Start Date:	6/19/2020
Comment Period End Date:	8/26/2020
Associated Ballots:	2015-09 Establish and Communicate System Operating Limits CIP-014-3 AB 2 ST 2015-09 Establish and Communicate System Operating Limits FAC-003-5 AB 2 ST 2015-09 Establish and Communicate System Operating Limits FAC-011-4 AB 3 ST 2015-09 Establish and Communicate System Operating Limits FAC-013-3 AB 2 ST 2015-09 Establish and Communicate System Operating Limits FAC-014-3 AB 3 ST 2015-09 Establish and Communicate System Operating Limits Implementation Plan AB 3 OT 2015-09 Establish and Communicate System Operating Limits IRO-008-3 IN 1 ST 2015-09 Establish and Communicate System Operating Limits PRC-002-3 AB 2 ST 2015-09 Establish and Communicate System Operating Limits PRC-023-5 AB 2 ST 2015-09 Establish and Communicate System Operating Limits PRC-026-2 AB 2 ST 2015-09 Establish and Communicate System Operating Limits TOP-001-6 IN 1 ST

There were 76 sets of responses, including comments from approximately 173 different people from approximately 119 companies representing 10 of the Industry Segments as shown in the table on the following pages.

All comments submitted can be reviewed in their original format on the project page.

For this posting, responses to questions 4 and 5 regarding FAC-014 are provided. The remaining responses will be posted at final ballot.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President of Engineering and Standards, Howard Gugel (via email) or at (404) 446-9693.

Questions

1. Industry response to the SDT's second posting, and specifically the new FAC-011-4, Requirement 6, indicated numerous and significant concerns. Among the concerns were many industry commenters stating that SOL exceedances should be determined using the TOP and IRO standards and not an FAC standard. The SDT has responded by revising FAC-011-4, Requirement 6, removing FAC-014-3, Requirement 6, and adding TOP-001-6, Requirement R25 and IRO-008-3, Requirement R7 to have SOL exceedances determined by TOPs and RCs, respectively, per the RC's SOL methodology and the performance framework now within FAC-011-4, Requirement R6. Do you agree with revisions made by the SDT in FAC-011-4, FAC-014-3, TOP-001-6 and IRO-008-3 with regard to SOL exceedance use and determinations?

2. Industry response to the SDT's second posting included many concerns regarding increased compliance and administrative logging from the SOL exceedance construct in FAC-011-4, Requirement 6. In response to these concerns, the SDT revised Requirement 6, added a new Requirement 7 to document a risk-based approach for determining how SOL exceedances are identified, and how they are communicated, including timeframes. The SDT also revised requirements and measures in TOP-001 (M14, R15, M15) and IRO-008 (R5, M5, R6, M6) to address this concern. Do you agree with revisions made by the SDT in FAC-011-4, TOP-001-6 and IRO-008-3 with regard to increased compliance risk and administrative logging?

3. If you have any other comments regarding FAC-011-4 that you haven't already provided, please provide them here.

4. The SDT has received numerous comments on the new FAC-015-1 since the first posting. Acknowledging these comments, the SDT has withdrawn FAC-015-1 and consolidated its four requirements into three requirements (R6 – R8) in proposed FAC-014-3 that retain the minimum requirements the SDT believes will allow retirement of FAC-010 and maintain limit/criteria coordination between operations and planning. Do you agree with the proposed requirements R6 through R8 in FAC-014-3?

5. If you have any other comments regarding FAC-014-3 that you haven't already provided, please provide them here.

6. If you have any other comments regarding TOP-001-6 or IRO-008-3 that you haven't already provided, please provide them here.

7. With the retirement of FAC-010, and the elimination of Planning-based SOLs and IROLs, do you agree with the changes to CIP-014, FAC-003, FAC-013, PRC-002, PRC-023 and PRC-026?

The Industry Segments are:

1 — Transmission Owners
2 — RTOs, ISOs
3 — Load-serving Entities
4 — Transmission-dependent Utilities
5 — Electric Generators
6 — Electricity Brokers, Aggregators, and Marketers
7 — Large Electricity End Users
8 — Small Electricity End Users
9 — Federal, State, Provincial Regulatory or other Government Entities

10 — Regional Reliability Organizations, Regional Entities

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
BC Hydro and Power Authority	Adrian Andreoiu	1	WECC	BC Hydro	Hootan Jarollahi	BC Hydro and Power Authority	3	WECC
					Helen Hamilton Harding	BC Hydro and Power Authority	5	WECC
					Adrian Andreoiu	BC Hydro and Power Authority	1	WECC
MRO	Dana Klem	1,2,3,4,5,6	MRO	MRO NSRF	Joseph DePoorter	Madison Gas & Electric	3,4,5,6	MRO
					Larry Heckert	Alliant Energy	4	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jodi Jensen	Western Area Power Administration	1,6	MRO
					Andy Crooks	SaskPower Corporation	1	MRO
					Bryan Sherrow	Kansas City Board of Public Utilities	1	MRO
					Bobbi Welch	Omaha Public Power District	1,3,5,6	MRO

					Jeremy Voll	Basin Electric Power Cooperative	1	MRO
					Bobbi Welch	Midcontinent ISO	2	MRO
					Douglas Webb	Kansas City Power & Light	1,3,5,6	MRO
					Fred Meyer	Algonquin Power Co.	1	MRO
					John Chang	Manitoba Hydro	1,3,6	MRO
					James Williams	Southwest Power Pool, Inc.	2	MRO
					Jamie Monette	Minnesota Power / ALLETE	1	MRO
					Jamison Cawley	Nebraska Public Power	1,3,5	MRO
					Sing Tay	Oklahoma Gas & Electric	1,3,5,6	MRO
					Terry Harbour	MidAmerican Energy	1,3	MRO
					Troy Brumfield	American Transmission Company	1	MRO
PPL - Louisville	Devin Shines	1,3,5,6	RF,SERC	PPL NERC Registered Affiliates	Brenda Truhe	PPL Electric Utilities Corporation	1	RF

Gas and Electric Co.					Charles Freibert	PPL - Louisville Gas and Electric Co.	3	SERC
					JULIE HOSTRANDER	PPL - Louisville Gas and Electric Co.	5	SERC
					Linn Oelker	PPL - Louisville Gas and Electric Co.	6	SERC
Douglas Webb	Douglas Webb		MRO,SPP RE	Westar-KCPL	Doug Webb	Westar	1,3,5,6	MRO
					Doug Webb	KCP&L	1,3,5,6	MRO
New York Independent System Operator	Gregory Campoli	2		ISO/RTO Standards Review Committee	Gregory Campoli	NYISO	2	NPCC
					Helen Lainis	IESO	2	NPCC
					Mark Holman	PJM Interconnection, L.L.C.	2	RF
					Charles Yeung	Southwest Power Pool, Inc. (RTO)	2	MRO
					Bobbi Welch	Midcontinent ISO, Inc.	2	RF
					Ali Miremadi	CAISO	2	WECC
					Kahtleen Goodman	ISO-NE	2	NPCC

ACES Power Marketing	Jodirah Green	1,3,4,5,6	MRO,NA - Not Applicable,RF,SERC,Texas RE,WECC	ACES Standard Collaborations	Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	1	SERC
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Bill Hutchison	Southern Illinois Power Cooperative	1	SERC
					David Hartman	Arizona Electric Power Cooperative, Inc.	1	WECC
Lincoln Electric System	Kayleigh Wilkerson	5		Lincoln Electric System	Kayleigh Wilkerson	Lincoln Electric System	5	MRO
					Eric Ruskamp	Lincoln Electric System	6	MRO
					Jason Fortik	Lincoln Electric System	3	MRO
					Danny Pudenz	Lincoln Electric System	1	MRO
Duke Energy	Kim Thomas	1,3,5,6	FRCC,RF,SERC	Duke Energy	Laura Lee	Duke Energy	1	SERC
					Dale Goodwine	Duke Energy	5	SERC
					Greg Cecil	Duke Energy	6	RF

FirstEnergy - FirstEnergy Corporation	Mark Garza	4		FE Voter	Julie Severino	FirstEnergy - FirstEnergy Corporation	1	RF
					Aaron Ghodooshim	FirstEnergy - FirstEnergy Corporation	3	RF
					Robert Loy	FirstEnergy - FirstEnergy Solutions	5	RF
					Ann Carey	FirstEnergy - FirstEnergy Solutions	6	RF
					Mark Garza	FirstEnergy- FirstEnergy	4	RF
Southern Company - Southern Company Services, Inc.	Pamela Hunter	1,3,5,6	SERC	Southern Company	Matt Carden	Southern Company - Southern Company Services, Inc.	1	SERC
					Joel Dembowski	Southern Company - Alabama Power Company	3	SERC
					William D. Shultz	Southern Company Generation	5	SERC

					Ron Carlsen	Southern Company - Southern Company Generation	6	SERC
Eversource Energy	Quintin Lee	1		Eversource Group	Sharon Flannery	Eversource Energy	3	NPCC
					Quintin Lee	Eversource Energy	1	NPCC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	NPCC Regional Standards Committee	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					David Burke	Orange & Rockland Utilities	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Helen Lainis	IESO	2	NPCC
					David Kiguel	Independent	7	NPCC

Paul Malozewski	Hydro One Networks, Inc.	3	NPCC
Nick Kowalczyk	Orange and Rockland	1	NPCC
Joel Charlebois	AESI - Acumen Engineered Solutions International Inc.	5	NPCC
Mike Cooke	Ontario Power Generation, Inc.	4	NPCC
Salvatore Spagnolo	New York Power Authority	1	NPCC
Shivaz Chopra	New York Power Authority	5	NPCC
Deidre Altobell	Con Ed - Consolidated Edison	4	NPCC
Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1	NPCC
Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC

Cristhian Godoy	Con Ed - Consolidated Edison Co. of New York	6	NPCC
Nicolas Turcotte	Hydro-Qu?bec TransEnergie	1	NPCC
Chantal Mazza	Hydro Quebec	2	NPCC
Sean Bodkin	Dominion - Dominion Resources, Inc.	6	NPCC
Nurul Abser	NB Power Corporation	1	NPCC
Randy MacDonald	NB Power Corporation	2	NPCC
Silvia Parada Mitchell	NextEra Energy, LLC	4	NPCC
Michael Ridolfino	Central Hudson Gas and Electric	1	NPCC
Vijay Puran	NYSPS	6	NPCC
ALAN ADAMSON	New York State Reliability Council	10	NPCC
John Hasting	National Grid USA	1	NPCC
Michael Jones	National Grid USA	1	NPCC

					Sean Cavote	PSEG - Public Service Electric and Gas Co.	1	NPCC
					Brian Robinson	Utility Services	5	NPCC
Dominion - Dominion Resources, Inc.	Sean Bodkin	6		Dominion	Connie Lowe	Dominion - Dominion Resources, Inc.	3	NA - Not Applicable
					Lou Oberski	Dominion - Dominion Resources, Inc.	5	NA - Not Applicable
					Larry Nash	Dominion - Dominion Virginia Power	1	NA - Not Applicable
					Rachel Snead	Dominion - Dominion Resources, Inc.	5	NA - Not Applicable
Southwest Power Pool, Inc. (RTO)	Shannon Mickens	2	MRO,SPP RE	SPP Standards Review Group	Shannon Mickens	Southwest Power Pool Inc.	2	MRO
					Jonathan Hayes	Southwest Power Pool Inc	2	MRO
					Tim Miller	Southwest Power Pool Inc.	2	MRO
					Yasser Bahbaz	Southwest Power Pool Inc.	2	MRO
					will Tootle	Southwest Power Pool Inc.	2	MRO

					Charles Cates	Southwest Power Pool Inc.	2	MRO
OGE Energy - Oklahoma Gas and Electric Co.	Sing Tay	6	SPP RE	OKGE	Sing Tay	OGE Energy - Oklahoma	6	MRO
					Terri Pyle	OGE Energy - Oklahoma Gas and Electric Co.	1	MRO
					Donald Hargrove	OGE Energy - Oklahoma Gas and Electric Co.	3	MRO
					Patrick Wells	OGE Energy - Oklahoma Gas and Electric Co.	5	MRO

4. The SDT has received numerous comments on the new FAC-015-1 since the first posting. Acknowledging these comments, the SDT has withdrawn FAC-015-1 and consolidated its four requirements into three requirements (R6 – R8) in proposed FAC-014-3 that retain the minimum requirements the SDT believes will allow retirement of FAC-010 and maintain limit/criteria coordination between operations and planning. Do you agree with the proposed requirements R6 through R8 in FAC-014-3?	
Marco Rios - Pacific Gas and Electric Company - 1	
Answer	No
Document Name	
Comment	
In concept, the proposed requirements for FAC-014-3 R6 to R8 are good, but the details need to be further developed. For instance, for R6, the RC can change their methodology at any time and the Transmission Planner will then be responsible to ensure that any more stringent criteria are then reflected in Planning studies, but the RC is required by FAC-011-4 R9 to provide its SOL methodology to PCs and TPs, so there should be adequate notification which would allow the TP to implement such changes in their next reliability assessment. The greatest concern, then, appears to be possible disconnects between Operating and Planning criteria that make it difficult to ensure compliance with R6 and leave certain aspects up to interpretation, such as differences in Facility Ratings used in Operations vs. Planning. The standard as currently written does not require the RC to accept and respond to feedback from other entities if the methodology is unclear, but R6 will require the PC and TP to correctly interpret the methodology for ratings, limits, and criteria. For R7 and R8, the concept of notification to TOPs/RCs (R7) and TOs/GOs (R8) is sound, but the implementation may not be straightforward. In R7, for instance, “instability” must be communicated – does this include small generators that lose synchronism for P1 events? How does an entity differentiate bad models from instability when compliance directly depends on notifications of such issues? Clear definitions of the terms involved here would be a significant improvement.	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment. The intent of R6 is to provide a mechanism for performance criteria (ratings, voltage/stability limits) to be coordinated between operations and planning in an effort to ensure there is appropriate agreement on these criteria. If there is confusion on the RC's methodology, there is nothing that precludes the PC or TP from seeking this clarity directly from the RC. The PC & TP are also afforded the flexibility to document a technical rationale to describe deviations between criteria used in planning from those prescribed in the RC's SOL methodology. R7 requires information communicated on corrective actions developed to address instability. As such, small generators pulling out of synchronism for P1 events is not applicable to R7.	
Jack Stamper - Clark Public Utilities - 3	
Answer	No
Document Name	
Comment	
FAC-015 seems as an attempt to provide for the PC to TP heirarchy that should exist. However, it appears that there is a lack of coordination between FAC-011, FAC-014, and FAC-015. The goal should be to keep establishment of the Operating and Planning Horizon planning assessment with the closest entity (i.e. the Transmission Planner) and have the results go up the chain (subject to review and approval) from the TP to the PC to the RC and down to the TOP. The existing combination appears to include would that will not be used and is therefore wasting time and not accomplishing reliability.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. FAC-015 is not part of this posting. The SDT embedded the requirements into the current draft of FAC-014 posted in conjunction with this project.	
sean erickson - Western Area Power Administration - 1	
Answer	No

Document Name	
Comment	
WAPA agrees with removing the redundancy of the proposed FAC-015-1 and part of the shift of those requirements to the revised FAC-014-3. However, the proposed FAC-014-3 Requirement R6 remains redundant to existing obligations of MOD-032-1 and TPL-001-4 (soon -5) Requirement R1. The proposed Requirement R6 establishes a significant Compliance risk to planning entities who seek to plan the future transmission System for expansion and load growth, and ignores that Facility Ratings of the moment may not exist in the future planned System. In the proposed Requirement R7, it is unclear what reliability objective is accomplished that is not redundant to the existing IRO-017-1 Requirements R3 and R4. Furthermore, if there is a need to modify TPL-001-4 (soon -5) Requirement R8 to address annual Planning Assessment distribution, it should be revised there. Finally, to reiterate the comment above, FAC-014-3 Requirement R8 is not clear about requiring Planning Coordinators to communicate that "big-3" impacts during a particular planning event (e.g. see Cascading during simulation of a P6 event) were ***observed*** versus that "big-3" impacts ***caused*** a failure to meet System performance requirements. Here, the SDT is making a different interpretation than most planning entities make regarding TPL-001-4 (soon -5). It is not simply that "big-3" impacts were observed; it is that the "big-3" impact required a Corrective Action Plan (CAP) because the Contingency caused a failure to meet System performance requirements of Table 1. In other words, for a P6 event that yields Cascading, the Table 1 performance requirements may allow shedding Non-Consequential Load as part of the allowable mitigations such that System performance requirements are met (and no CAP). WAPA requests that the SDT reconsider the incorporation of the planning entity requirements into FAC-014-3 and, if retained, clearly state the intended reliability objective to retaining them there.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard. R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6	

of TPL-001-4, compared to that reflected in the RC's SOL Methodology. IRO-017-1 deals with outage coordination, not SOLs, and as such, the SDT believes FAC-014 remains the proper place for SOL transmittal and related information between entities. R8 is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners.	
Kenya Streeter - Edison International - Southern California Edison Company - 6	
Answer	No
Document Name	
Comment	
Please see comments submitted by Edison Electric Institute	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
Wayne Guttormson - SaskPower – 1	
Answer	No
Document Name	
Comment	
Understand the good-faith intent of the SDT, but fundamentally the proposed requirements are TPL 001 based (and perhaps even FAC 008 based) and should be placed in the applicable standard if deemed acceptable. The draft standard appears to mandate the Facility Ratings, System steady-state voltage limits and stability criteria to be used by the PC/TP, as set by the RC/TOP methodology. It would probably be	

more effective to rewrite the drafted FAC-014 standard for the RC's/TOP's to provide their associated technical rationales (beyond a methodology) for the defined operating limits to the PC/TP for input into the TPL assessments. In general, having standards placing requirements for other standards (as a standards setting practice) risks creating confusion. Also support the MRO-NSRF comments.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	
Jamie Johnson - California ISO – 2	
Answer	No
Document Name	

Comment

In addtion to comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee the CAISO has the following comments:

CAISO believes the three requirements (R6-R8) proposed for FAC-014-3 are all misplaced and are duplicative of other existing NERC requirements in the following NERC standards: IRO-017, MOD-032 and TPL-001 as described below. Keeping "like" requirements together in one standard will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion, avoid undue regulatory burden and support the efforts of the Standards Efficiency Review project. For these reasons, we believe that FAC-010 can still be retired even if FAC-015 is withdrawn without adding Requirements R6 to R8 in FAC-014-3. Accordingly, we recommend:

- Requirements R6 to R8 be removed from FAC-014-3
- The phrase " and that Planning Assessment performance criteria is coordinated with these methodologies." be removed from the Purpose (Section 3) of FAC-014-3
- The Planning Coordinator and the Transmission Planner be removed from the Applicablity Section.

FAC-014-3

We have an overall concern with the term Facility Rating as applied in these FAC Standards and the confusion with those used in the MOD Standards. Does the SDT really mean Thermal Operation Limits as developed from the Factility Ratings? This set of standards talks about Steady State Voltage Limits, Stability Limits, but is silent on Thermal Operation Limits. We believe it would provide more clarity if the term Applicable Facility Ratings Duration Criteria was used in place of Facility Rating.

FAC-014-3, R6

We believe FAC-014-3, R6, i.e. to implement a documented process for Facility Ratings, voltage limits and stability criteria, is duplicative of existing NERC Standard MOD-032-1 (R2), whose purpose is "To establish consistent modeling data requirements and reporting procedures [for each Transmission Owner, Transmission Service Provider, Generation owner, Resources Planner, and Balancing Authority]. TPL-001-4, R1 requires each Planning Coordinator and Transmission Planner to maintain models that use data consistent with that provided in accordance with the MOD-032 Standard that represent projected System conditions. TPL-001-5 further requires that Applicable Facility Ratings shall not be exceeded and that system adjustments are allowed to mitigate rating exceedances if such adjustments are executable within the time duration applicable to the Facility Ratings. If the SDT believes additional detail, such as a criteria regarding which of the

Facility Ratings (30 min, 4 hour, continuous, etc.) are applicable under normal and emergency conditions is required, we suggest TPL-001-4 be updated to include those details/criteria so that all related requirements are located together. TPL 001-5 also requires the Planning Coordinator and Transmission Planner to establish system steady state voltages, post-Contingency voltage deviation and transient voltage response. Instead of making the RC's SOL methodology, which is typically developed entirely from the operations perspective without involvement of the PC(s) and TPs, binding on PCs and TPs, TPL-001-5 can be modified so that the RC is a party in the development of the criteria, possibly through a process that is led by Regional Reliability Organizations such as WECC.

As we noted above, keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

In addition, reading the proposed Requirement 6.2 of FAC-011-4, it doesn't appear that there is a material risk for the PC and TP to use less restrictive criteria than the RC that makes including Requirement R6 in FAC-014-3 necessary.[1]

[1] The system performance standards FAC-011-4 requires the RC to include in its SOL methodology are:

Ø System performance for no contingencies demonstrates flows and voltages are within normal ratings but emergency limits may be used when System adjustments to return the flow within its Normal Rating could be executed and completed within the specified time duration of those Emergency Ratings.

Ø System performance for single contingencies demonstrates flow through facilities and voltages are within applicable Emergency Ratings and System Voltgae Limits. Steady steate post-Contingency flow through a facility must not be above the Facilitiy's highest Emergency Rating.

If FAC-014-3, requirement R6 is not retired, the IRC SRC requests that it be modified to either: (1) actually include the desired criteria, including the Applicable Facility Ratings Duration Criteria, in FAC-014-3 possibly using similar language as used in Requirement R6 of FAC-011-4 while maintaining consistency with the requirements in TPL-001-5 mentioned above, rather than leaving it to the RC's SOL methodology, or (2) to acknowledge that the determination of Facility Ratings is the responsibility of Generator Owners (GO) and Transmission Owners (TO) under FAC-008-3 as follows:

Proposed Language:

FAC-014-3, R6. Each Planning Coordinator and each Transmission Planner shall implement a documented process to use Facility Ratings criteria, System steady-state voltage limits and stability criteria in its Planning Assessment of Near Term Transmission Planning Horizon that represent projected System Operating Limits that are equally limiting or more limiting than the Facility Ratings, System steady-state Voltage

Limits and stability criteria as determined by the Transmission Owners and Generator Owners in accordance with FAC-008 and provided to the PC via MOD-032, R2 and in accordance with their respective RC's SOL methodology (FAC-011-4, R9).

Likewise, the requirement for the PC to notify impacted entities and provide a technical rationale for the use of a less limiting Facility Rating in its Planning Assessment (under FAC-014-3, R6) is misplaced. Instead, the IRC SRC recommends FAC-008-3 be revised (*see* requirement R8) and expanded to require GOs and TOs notify applicable entities, including the PC, of planned upgrades that will increase a Facility Rating and modify FAC-014-3 to recognize this.

- The Planning Coordinator may use less limiting Facility Ratings as provided by the GO or TO (in accordance with FAC-008-3, R8), to recognize planned upgrades in the Near Term Transmisison Planning Horizon, System steady-state voltage limits and stability criteria if it provides a technical rationale to each affected Transmission Planner, Transmission Operator and Reliability Coordinator

Alternatively, MOD-032, R3 could be updated to reflect this detail as MOD-032-1, R3, Part 3.1 already requires Balancing Authorities, Generator Owners, Load Serving Entities, Resource Planners, Transmission Owners and Transmission Service Providers to provide an explanation with a technical basis for the data.

If on the other hand it can be assumed that the SDT is referring to Applicable Facility Ratings Duration Criteria rather than individual Facility Ratings, System voltage limits rather than Facility specific voltage limits and system stability limits then the provision of technical rationale be limited to the Regional Reliability Organization (RRO) as part of the established compliance monitoring process rather than to multiple entities to avoid putting additional regulatory burden on PCs and TPs.

FAC-014-3, R7

We believe FAC-014-3, R7 is duplicative of existing NERC Standard IRO-017-1, R3 which obligates each Planning Coordinator and Transmission Planner to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need need to request this information. If the SDT believes additional detail is required, we suggest IRO-017-1, R3 or Requirement R8 of TPL-001-5 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the overall context of the requirements, increase effiiciency, minimize opportunities for confusion, avoid undue regulatory burden, and support the efforts of the Standards Efficiency Review project.

We believe FAC-014-3, R8 is duplicative of existing NERC Standard TPL-001-4, requirements R6 and R8 and IRO-017-1, R3 which collectively include the obligation for the Planning Coordinator and Transmission Planner to define and document when the Planning Assessment

indicates the inability of the system to meet the performance requirements, including System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding and to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need to request this information. If the SDT believes additional detail is required, we suggest that IRO-017-1, R3 or TPL-001-5, R8 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion, avoid placing undue regulatory burden on entities and support the efforts of the Standards Efficiency Review project. We strongly oppose the requirement to inform multiple entities including generator owners because, that could take planning engineers away from their core job. The existing FAC-014 limits such communication to the affected RC. We recommend that arrangement remain unchanged.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

Facility Ratings, as referenced in the current draft of FAC-014, is consistent with the NERC glossary term as it is in all NERC Reliability Standards. Further, the SDT recognizes the owner's responsibility in determining Facility Ratings per FAC-008 and this is supported in the current proposal for FAC-014. Thermal Operation Limits is not defined in the NERC Glossary and is therefore not an appropriate reference for a NERC Reliability Standard as different entities may or may not use this terminology the same way if they use it at all.

R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6 of TPL-001-4, compared to that reflected in the RC's SOL Methodology.

IRO-017-1 deals with outage coordination, not SOLs, and as such, the SDT believes FAC-014 remains the proper place for SOL transmittal and related information between entities. The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability.

FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirements in TPL-001-4 and IRO-017-1 only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2	
Answer	No
Document Name	
Comment	

With respect to Requirement R6, ERCOT believes the language contained in the prior draft of FAC-015 should be utilized. The current draft of FAC-014 seems to suggest that responsible entities must provide a technical rationale to each Transmission Planner, Transmission Operator, and Reliability Coordinator in the event of the utilization of a higher rating than was provided for an upgraded circuit. Accordingly, ERCOT suggests replacing the proposed language of Requirement R6 with the language previously utilized in Requirements R1, R2, and R3 of FAC-015.

With respect to Requirement R8, ERCOT believes the Planning Coordinator (PC) and Transmission Planner should communicate only the limited information each Transmission Owner and Generator Owner (GO) needs to know, not necessarily the full details regarding the nature of the instability, Cascading, or uncontrolled separation. ERCOT suggest the use of the following language in Requirement R8:

Each Planning Coordinator and each Transmission Planner shall provide an annual communication to Transmission Owners and Generation Owners that own Facilities that meet the following conditions: 1. The Facility is part of a planning event contingency that the Planning Coordinator or Transmission Planner has identified in its annual Planning Assessment would cause instability, uncontrolled separation or Cascading outages that adversely impact the reliability of the BES if a limit is exceeded; or 2. The Facility is part of a contingency associated with an established IROL or stability limit, which was provided to the Planning Coordinator or Transmission Planner under Requirement R5, Part 5.2.4. ERCOT also suggests modifying the standards that utilize such information, which are part of this ballot/comment period, to include "Facilities identified in FAC-014" or "FAC-014-3, Requirement R8" as appropriate so that the facilities that must meet those requirements include part 2 suggested above. ERCOT further notes that it intends to vote in favor of FAC-014-3, provided the foregoing suggested modifications are incorporated.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. Requirement R6 in the current draft of FAC-014 is a simplification of the R1 – R3 language in the previous posting of FAC-015. The SDT believes the intent of the previous FAC-015 requirements is preserved in R6 of FAC-014. The SDT took your comment regarding FAC-014-3, R8 under consideration and modified the language accordingly. This change will be reflected in our next posting of FAC-014-3.	

Bobbi Welch - Midcontinent ISO, Inc. - 2	
Answer	No
Document Name	
Comment	

MISO supports the comments filed by the IRC SRC.

The IRC SRC believes the three requirements (R6-R8) proposed for FAC-014-3 are all misplaced and are duplicative of other existing NERC requirements in the following NERC standards: IRO-017, MOD-032 and TPL-001 as described below. For these reasons, we believe that FAC-010 can still be retired even if FAC-015 is withdrawn.

FAC-014-3

We have an overall concern with the term Facility Rating as applied in these FAC Standards and the confusion with those used in the MOD Standards. Does the SDT really mean Thermal Operation Limits as developed from the Factility Ratings? This set of standards talks about Steady State Voltage Limits, Stability Limits, but is silent on Thermal Operation Limits. We believe it would provide more clarity if the term Thermal Operation Limit was used in place of Facility Rating.

FAC-014-3, R6

We believe FAC-014-3, R6, i.e. to implement a documented process for Facility Ratings, voltage limits and stability criteria, is duplicative of existing NERC Standard MOD-032-1 (R2) and TPL-001-4, R1 which require each Planning Coordinator and Transmission Planner to maintain models that represent projected System conditions. If the SDT believes additional detail is required, we suggest MOD-032 or TPL-001-4 be updated so that all related requirements are located together. Keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

If FAC-014-3, requirement R6 is not retired, the IRC SRC requests that it be modified to acknowledge that the determination of Facility Ratings is the responsibility of Generator Owners (GO) and Transmission Owners (TO) under FAC-008-3 as follows:

Proposed Language:

FAC-014-3, R6. Each Planning Coordinator and each Transmission Planner shall implement a documented process to use Facility Ratings, System steady-state voltage limits and stability criteria in its Planning Assessment of Near Term Transmission Planning Horizon that represent projected System Operating Limits that are equally limiting or more limiting than the Facility Ratings, System steady-state Voltage Limits and stability criteria as determined by the Transmission Owners and Generator Owners in accordance with FAC-008 and provided to the PC via MOD-032, R2 and in accordance with their respective RC's SOL methodology (FAC-011-4, R9).

Likewise, the requirement for the PC to notify impacted entities and provide a technical rationale for the use of a less limiting Facility Rating in its Planning Assessment (under FAC-014-3, R6) is misplaced. Instead, the IRC SRC recommends FAC-008-3 be revised (*see* requirement R8) and expanded to require GOs and TOs notify applicable entities, including the PC, of planned upgrades that will increase a Facility Rating and modify FAC-014-3 to recognize this.

- The Planning Coordinator may use less limiting Facility Ratings as provided by the GO or TO (in accordance with FAC-008-3, R8), to recognize planned upgrades in the Near Term Transmisison Planning Horizon, System steady-state voltage limits and stability criteria if it provides a technical rationale to each affected Transmission Planner, Transmission Operator and Reliability Coordinator

Alternatively, MOD-032, R3 could be updated to reflect this detail as MOD-032-1, R3, Part 3.1 already requires Balancing Authorities, Generator Owners, Load Serving Entities, Resource Planners, Transmission Owners and Transmission Service Providers to provide an explanation with a technical basis for the data.

FAC-014-3, R7

We believe FAC-014-3, R7 is duplicative of existing NERC Standard IRO-017-1, R3 which obligates each Planning Coordinator and Transmission Planner to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need need to request this information. If the SDT believes additional detail is required, we suggest IRO-017-1, R3 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the

overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

FAC-014-3, R8

We believe FAC-014-3, R8 is duplicative of existing NERC Standard TPL-001-4, requirements R6 and R8 and IRO-017-1, R4 which collectively include the obligation for the Planning Coordinator and Transmission Planner to define and document when the Planning Assessment indicates the inability of the system to meet the performance requirements, including System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding and to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need need to request this information. If the SDT believes additional detail is required, we suggest that IRO-017-1, R3 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

Facility Ratings, as referenced in the current draft of FAC-014, is consistent with the NERC glossary term as it is in all NERC Reliability Standards. Further, the SDT recognizes the owner's responsibility in determining Facility Ratings per FAC-008 and this is supported in the current proposal for FAC-014. Thermal Operation Limits is not defined in the NERC Glossary and is therefore not an appropriate reference for a NERC Reliability Standard as different entities may or may not use this terminology the same way if they use it at all.

R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6 of TPL-001-4, compared to that reflected in the RC's SOL Methodology.

IRO-017-1 deals with outage coordination, not SOLs, and as such, the SDT believes FAC-014 remains the proper place for SOL transmittal and related information between entities. The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability.

FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirements in TPL-001-4 and IRO-017-1 only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee	
Answer	No
Document Name	
Comment	

The IRC SRC believes the three requirements (R6-R8) proposed for FAC-014-3 are all misplaced and are duplicative of other existing NERC requirements in the following NERC standards: IRO-017, MOD-032 and TPL-001 as described below. For these reasons, we believe that FAC-010 can still be retired even if FAC-015 is withdrawn.

FAC-014-3

We have an overall concern with the term Facility Rating as applied in these FAC Standards and the confusion with those used in the MOD Standards. Does the SDT really mean Thermal Operation Limits as developed from the Factility Ratings? This set of standards talks about Steady State Voltage Limits, Stability Limits, but is silent on Thermal Operation Limits. We believe it would provide more clarity if the term Thermal Operation Limit was used in place of Facility Rating.

FAC-014-3, R6

We believe FAC-014-3, R6, i.e. to implement a documented process for Facility Ratings, voltage limits and stability criteria, is duplicative of existing NERC Standard MOD-032-1 (R2) and TPL-001-4, R1 which require each Planning Coordinator and Transmission Planner to maintain models that represent projected System conditions. If the SDT believes additional detail is required, we suggest MOD-032 or TPL-001-4 be updated so that all related requirements are located together. Keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project

If FAC-014-3, requirement R6 is not retired, the IRC SRC requests that it be modified to acknowledge that the determination of Facility Ratings is the responsibility of Generator Owners (GO) and Transmission Owners (TO) under FAC-008-3 as follows:

Proposed Language:

FAC-014-3, R6. Each Planning Coordinator and each Transmission Planner shall implement a documented process to use Facility Ratings, System steady-state voltage limits and stability criteria in its Planning Assessment of Near Term Transmission Planning Horizon that represent projected System Operating Limits that are equally limiting or more limiting than the ***(delete - criteria for)*** Facility Ratings, System ***steady-state*** Voltage Limits and stability ***criteria*** as ***determined by the Transmission Owners and Generator Owners in accordance with FAC-008 and provided to the PC via MOD-032, R2 and in accordance with their respective RC's SOL methodology (FAC-011-4, R9).***

Likewise, the requirement for the PC to notify impacted entities and provide a technical rationale for the use of a less limiting Facility Rating in its Planning Assessment (under FAC-014-3, R6) is misplaced. Instead, the IRC SRC recommends FAC-008-3 be revised (*see* requirement R8) and expanded to require GOs and TOs notify applicable entities, including the PC, of planned upgrades that will increase a Facility Rating and modify FAC-014-3 to recognize this.

· The Planning Coordinator may use less limiting Facility Ratings ***as provided by the GO or TO (in accordance with FAC-008-3, R8), to recognize planned upgrades in the Near Term Transmisison Planning Horizon***, System steady-state voltage limits and stability criteria if it provides a technical rationale to each affected Transmission Planner, Transmission Operator and Reliability Coordinator

Alternatively, MOD-032, R3 could be updated to reflect this detail as MOD-032-1, R3, Part 3.1 already requires Balancing Authorities, Generator Owners, Load Serving Entities, Resource Planners, Transmission Owners and Transmission Service Providers to provide an explanation with a technical basis for the data.

FAC-014-3, R7

We believe FAC-014-3, R7 is duplicative of existing NERC Standard IRO-017-1, R3 which obligates each Planning Coordinator and Transmission Planner to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need need to request this information. If the SDT believes additional detail is required, we suggest IRO-017-1, R3 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the overall context of the requirements, increase effiiciency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

FAC-014-3, R8

We believe FAC-014-3, R8 is duplicative of existing NERC Standard TPL-001-4, requirements R6 and R8 and IRO-017-1, R4 which collectively include the obligation for the Planning Coordinator and Transmission Planner to define and document when the Planning Assessment indicates the inability of the system to meet the performance requirements, including System instability for conditions such as Cascading, voltage instability, or uncontrolled islanding and to provide its Planning Assessment to impacted Reliability Coordinators. In addition, TPL-001-4, R8 allows any functional entity that has a reliability related need need to request this information. If the SDT believes additional detail is required, we suggest that IRO-017-1, R3 be updated so that this type of request is located in a single requirement or standard. Keeping "like" requirements together will retain the overall context of the requirements, increase efficiency, minimize opportunities for confusion and support the efforts of the Standards Efficiency Review project.

Likes 0	
Dislikes 0	

Response
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard. Facility Ratings, as referenced in the current draft of FAC-014, is consistent with the NERC glossary term as it is in all NERC Reliability Standards. Further, the SDT recognizes the owner's responsibility in determining Facility Ratings per FAC-008 and this is supported in the current proposal for FAC-014, as well as FAC-011-4. Thermal Operation Limits is not defined in the NERC Glossary and is therefore not an appropriate reference for a NERC Reliability Standard as different entities may or may not use this terminology the same way if they use it at all. R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6 of TPL-001-4, compared to that reflected in the RC's SOL Methodology. IRO-017-1 deals with outage coordination, not SOLs, and as such, the SDT believes FAC-014 remains the proper place for SOL transmittal and related information between entities. The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability. FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirements in TPL-001-4 and IRO-017-1 only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Lee Maurer - Oncor Electric Delivery - 1	
Answer	No
Document Name	
Comment	
Oncor supports EEI comments.	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group	
Answer	No
Document Name	
Comment	

FAC-014-3 R6

The SPP Standards Review Group asks the SDTs consideration that coverage of FAC-014-3 is included in the data provided in MOD-032-1, and in the model building in TPL-001-4 R1, where the models contain Facility Ratings, System steady-state voltage limits, and stability criteria that are equally limiting or more limiting than the ones utilized by the Reliability Coordinator (RC).

The SPP Standards Review Group asks the SDTs consideration of these differences in the scope for TPL-001-4 R1.

The development of Facility Ratings is the responsibility of the Transmission Owner (TO) in accordance with FAC-008-3. To allow the Planning Coordinator (PC) or Transmission Planner (TP) to develop a "less limiting", "higher" Facility Rating, could lead to unrealistic and/or invalid Planning Assessments.

The PC and/or the TP should not have the ability to overrule the TOs capability to maintain conservative Facility Ratings in accordance with manufacturer recommendations to protect its personnel and equipment. If the PCs and TPs want to adjust system models with a higher Facility Rating based on a proposed system upgrade, that is included in TPL-001-4 R1, Part 1.1.3. FAC-014-3 R6, as written, could lead to the misunderstanding of the context, the expectations, and/or the compliance failures. **FAC-014-3 R7** The SPP Standards Review Group asks the SDTs consideration that TPL-001-4 R8 is for the PC and TP to share information on their annual Planning Assessments. The SPP Standards Review Group recommends that the list of entities in TPL-001-4 R8 include RCs and TOPs the ability to request and receive the information. FAC-014-3 R7, as written, could lead to the misunderstanding of the context, the expectations, and/or the compliance failures. **FAC-014-3 R8** The SPP Standards Review Group considers existing coverage of FAC-014-3 R8 in TPL-001-4 R8. The SPP Standards Review Group recommends that the list of entities in FAC-014-3 R8 include TOs and Generator Owners (GOs) the ability to request and receive the information. FAC-014-3 R8, as written, could lead to the misunderstanding of the context, the expectations, and/or the compliance failures.

Likes 0	
Dislikes 0	

Response
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard. Facility Ratings, as referenced in the current draft of FAC-014, is consistent with the NERC glossary term as it is in all NERC Reliability Standards. Further, the SDT recognizes the owner's responsibility in determining Facility Ratings per FAC-008 and this is supported in the current proposal for FAC-014. Additionally, there is no ability for the PC or TP to overrule the owner in the development of Facility Ratings. The owner, per FAC-008, develops and communicates its Facility Ratings and any relevant assumptions for these ratings. The operators and planners are then required to use these ratings, or the appropriate subset of them in the planning and operating studies of the system. The intent of R6 in the current proposal is to ensure planners are not using less limiting ratings than the RC has allowed for in operations (example: The PC & TP should not plan to a 30-minute rating if the RC only allows for operators to operate to a 2-hour rating). R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6 of TPL-001-4, compared to that reflected in the RC's SOL Methodology.

Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin	
Answer	No
Document Name	
Comment	
The proposed requirements R7 and R8 in FAC-014-3 are unnecessary. Requirement R5 ensures that the Reliability Coordinators provide the Plannning Coordinators and Transmission Planners the SOLs for their respective areas. If instability is identified in the Planning Assessments which drives an SOL, it would be provided to the TOPs through instabilitie identified by requirement R5. If the identified instability does not	

require an SOL then providing that information to TOPs could lead to uncertantity as to what to do with the information. Many of the instabilities identified by Planning should be items strictly for the Planning Horizon, as Planning should be addressing them with Corrective Action Plans prior to them making it to become a Real Time Operating Horizon SOL issue.

FAC-014 Requirement R6 is more appropriately placed in the TPL-001 standard to avoid possible confusion in completing the task in finalizing the completion of the models needed for performing the Near Term Assessments. All of the other requirements for the models are identified in this standard.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. Requirement R5 of the current draft for FAC-014 is RC information being communicated to other entities. R7 & R8 involve information identified by the planners being communicated to the appropriate entities. This represents different communication paths involving different sets of data/information.

The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

R6 merely requires consideration of the criteria used in planning, which could include the thermal ratings modeled in the cases created per MOD-032-1 or TPL-001-4, R1, or the criteria (voltage and stability) the planner documented per R5 and R6 of TPL-001-4, compared to that reflected in the RC's SOL Methodology.

Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable

Answer	No
Document Name	
Comment	
While EEI is supportive of the general concepts for Requirements R6 through R8, the language lacks sufficient clarity to address what results or outcomes are expected. Given this ambiguity, the outcomes could result in inconsistent application across the various regions. Moreover, the current language in these three requirements do not adequately conform to the tenant of a Results Based Standard. For these reasons, we cannot support the currently proposed draft of FAC-014-3 at this time.	
Likes 0	
Dislikes 0	
Response	
Thank you for the comment. The ambiguity referenced and the risks it presents is not particularly clear so the SDT cannot respond further or determine an action plan to address.	
Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company	
Answer	No
Document Name	
Comment	
While Southern Company supports the removal of FAC-015-1, retirement of FAC-010, and inclusion of the requirements as contemplated in R6 through R8 of the proposed FAC-014-3, these requirements are best located in TPL-001, not FAC-014. The proposed FAC-014-3 "Establish and Communicate System Operating Limits" should cover the responsibilities related to SOLs, which no longer apply to near/long-term planning horizons. The communication of planning information by the TP and PCs should be appropriately housed in the TPL standard family to prevent confusion and cross pollination of standards.	

Southern Company also suggests a modification to R7 of the proposed FAC-014-3 that will help focus the communication of any instabilities identified in the Planning Assessment to include only those contingency events which are the most impactful, as follows: *R7 Each Planning Coordinator and each Transmission Planner shall annually communicate the following information for Corrective Action Plans developed to address any instability identified in its Planning Assessment of the near-Term Transmission Planning Horiozon,* ***using planning event contingencies only****, to each impacted Reliability Coordinator.* FAC – 014 R7 and R8 could result in burdensome communication even if there isn't any identified issues per the Planning Assessment to communicate. As such, we suggest the following language modifications: Modify the last sentence of FAC-014 R7 from "This communication shall include:" to "This communication, which is required if any information in Part 7.1 – Part7.5 is identified, shall include:" Modify the first sentence of FAC-014 R8 from "shall annually communicate any instability…" to "shall annually communicate if there is any identified instability……."	
Likes 1	Mark Pratt, N/A, Pratt Mark
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	

Clarifying wording changes to R7 & R8 were considered, and changes were made to R7 to have the PCs and TPs identify only the facilities to the transmission and generation asset owners. The SDT considered your suggested revisions to R7 and R8, but considered the value of an annual affirmation of "no instability impacts" more clear and precise than the suggested revision implying "no instability impacts" exist if no communication occurs.	
Michael Jones - National Grid USA – 1	
Answer	No
Document Name	
Comment	
FAC-014-3 Requirements (R6– R8) are not well aligned for inclusion in a FAC Standard and there are already similar requirements in TPL-001-4. Requirement R8 in FAC-014-3, which requires annual communication of any instability, Cascading or uncontrolled separation that adversely impact the reliability of the Bulk Electric System identified in its Planning Assessment, appears to already be covered by requirement R8 in TPL-001-4. In addition, FAC-014-3 Requirements (R6 - R8) are only related to the Near-Term Transmission Planning Time Horizon. There appears to be a need for further clarification regarding the relevant Time Horizon(s) which reference: "Time Horizon: Long-term Planning."	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	

The Near-Term Transmission Planning Horizon was chosen since the beginning of this time horizon is where you have overlap with the operating horizon. Additionally, a focus on near-term information from planners to be communicated to operators is typically more relevant and certain and is therefore of more use to operators. The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability. FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.	
Daniel Gacek - Exelon – 1	
Answer	No
Document Name	
Comment	
On behalf of Exelon, Segments 1, 3, 5, & 6 Exelon concurs with the comments submitted by the EEI.	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
Kevin Salsbury - Berkshire Hathaway - NV Energy - 5	

Answer	No
Document Name	
Comment	

NV Energy does not agree with the proposed requirement R6 of FAC-014-3. The proposed requirement requires additional clarity on the potential opportunity of a RC creating a Facility Rating based upon its own SOL methodology, and removing the ownership provided to Entities through FAC-008-3. FAC-014-3 requirement R6, currently reads that each Planning Coordinator and Transmission Planner shall implement a process to use Facility Ratings…that are equally limiting or more limiting than the criteria for Facility Ratings…as described in its RC's SOL methodology. NV Energy currently interprets this this as the RC can create a Facility Rating based on its own SOL methodology. Under this interpretation of the requirement, NV Energy cannot approve the current draft of the requirement R6..

Additionally, the remainder of the Standard, FAC-014-3, states that the PC and TP may use less limiting Facility Ratings, if the Entity provides a technical rationale. NV Energy interprets the intention of this language that the TP can use a less limiting element (higher facility rating) than what the RC provides, but that isn't entirely clear in the requirement's current draft.

Likes 0	
Dislikes 0	
Response	

Thank you for your comment. The RC is bound to use the owner-provided Facility Ratings. There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade.

Douglas Webb - Douglas Webb On Behalf of: Allen Klassen, Westar Energy, 1, 5, 3, 6; Bryan Taggart, Westar Energy, 1, 5, 3, 6; Derek Brown, Westar Energy, 1, 5, 3, 6; Grant Wilkerson, Westar Energy, 1, 5, 3, 6; Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., ; James McBee, Westar Energy, 1, 5, 3, 6; Marcus Moor, Westar Energy, 1, 5, 3, 6; - Douglas Webb, Group Name Westar-KCPL

Answer	No

Document Name	
Comment	

The Evergy companies support, and incorporate by reference, Edison Electric Institute's response to Question No. 4.

Evergy would further respond:

Proposed Revisions Add Reliability Risk. Transmission Owners are required to develop Facility Ratings under FAC-008. The proposed two bulleted subparts permit the Planning Coordinator or Transmission Planner to use "less limiting" (higher) Facility Ratings. Inconsistencies between FAC-008 Facility Ratings and ratings developed under the R6 bulleted subparts can lead to unrealistic Planning Assessments or invalidate Planning Assessments, altogether.

The proposed bulleted subparts seek to address the described reliability risk by requiring PCs or TPs to submit a technical rationale to affected TPs, TOs, and RCs. The proposed revision to FAC-014-3 does not consider the possibility TPs, TOs, RCs not wanting to accept a risk posed by the technical rationale. As such, the PCs or TPs could effectively reject TP, TO, or RC concerns raised by the technical rationale and proceed to operate at the less limiting Facility Ratings, regardless of those concerns; for example, the Transmission Owner needing to maintain conservative Facility Ratings in accordance with manufacture recommendations to protect its personnel and equipment.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade.

Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC

Answer	No

Document Name	
Comment	
The proposed Requirements R6-R8 in FAC-014-3 all require actions associated with the PC and TP annual Planning Assessment, which is required by TPL-001. If not already sufficiently addressed by the Requirements in TPL-001, we believe it would be better to address any additional actions associated with the annual Planning Assessment in a revision to TPL-001 to avoid requirement fragmentation between TPL-001 and FAC-014.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	
Larisa Loyferman - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	No
Document Name	
Comment	
The proposed FAC-014-3 Requirements R6 through R8 obligate the Planning Coordinator and Transmission Planner to share information on their annual Transmission Planning Assessments. The proposed requirements are redundant because Planning Coordinators and Transmission Planners are already required to share planning assessments under TPL-001-4, Requirement R8. Requirement R8 states: "**Each Planning Coordinator and Transmission Planner shall distribute its Planning Assessment results to adjacent Planning Coordinators and adjacent Transmission Planners within 90 calendar days of completing its Planning Assessment, and to any functional entity that has a reliability**	

related need and submits a written request for the information within 30 days of such a request." The proposed requirements would be inefficient, increase administrative compliance responsibilities, and would be contrary to ongoing work of the NERC Standards Efficiency Review project.

Alternatively, if the SDT does not withdraw Requirements R6 through R8, the intent with regard to the Time Horizon must be clarified. SOLs applied to support the Operations Planning Time Horizon will be different than those applied to the Long-Term Planning Time Horizon. Stability limits identified by the Reliability Coordinator may become invalid in the Planning Time Horizon as new generation is potentially added in future power flow models. When this occurs, it is the Transmission Planner's and Planning Coordinator's stability limits that must be communicated to the Reliability Coordinator so that the Reliability Coordinator knows what to expect.

Also, the two bulleted items in the newly proposed Requirement R6 are troubling. The development of Facility Ratings is the responsibility of the Transmission Owner, per FAC-008. To allow the Planning Coordinator and Transmission Planner to develop a "less limiting" Facility Rating could result in inaccurate Operational and Transmission Planning Assessments. The Planning Coordinator or Transmission Planner should not be allowed to independently overrule the Transmission Owner's responsibility to develop Facility Ratings.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade.

The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability. In addition, FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 (R8) only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 – WECC	
Answer	No
Document Name	
Comment	

BPA agrees with the withdrawal of FAC-015-1 and consolidating the requirements into FAC-014-3. However, BPA offers the following comments on the new Requirements.

FAC-014-3 Requirement R6: Facility Ratings are modeling data, as developed and reported in Standards FAC-008 and MOD-032. System steady-state voltage limits and stability criteria used in Planning Assessments are criteria developed and documented in annual system assessments required by Standard TPL-001.

BPA suggests including the following language (bold. italic text added) to add clarity to R6:

R6. Each Planning Coordinator and each Transmission Planner shall ***ensure that, when developing its steady-state modeling data requirements, Facility Ratings used in its Planning Assessment*** of the Near-Term Transmission Planning Horizon are equally limiting or more limiting than the criteria for Facility Ratings described in its respective Reliability Coordinator's SOL methodology. ***In addition, each Planning***

Coordinator and each Transmission Planner shall ensure that criteria developed and documented for System steady state voltage limits and stability performance for its Planning Assessment of the Near-Term Transmission Planning Horizon are equally limiting or more limiting than the criteria for System Voltage Limits and stability described in its respective Reliability Coordinator's SOL methodology. **FAC-014-3 Requirement 7**: BPA believes it should only be necessary to communicate information for Corrective Action Plans to impacted Transmission Operators and Reliability Coordinators that adversely impact the reliability of the Bulk Electric System. This is also consistent with the SDT's response to comments from the previous posting. BPA suggests including the following language (bold, italic text added) to add clarity to R7. R7. Each Planning Coordinator and each Transmission Planner shall annually communicate the following information for Corrective Action Plans developed to address any instability identified in its Planning Assessment of the Near-Term Transmission Planning Horizon ***that adversely impacts the reliability of the Bulk Electric System*** to each impacted transmission Operator and Reliability Coordinator.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The above comment for R6 does capture the SDT's intent. The SDT will review the rationale for this requirement to ensure this clarity is captured. The SDT is considering modifications, to the effect of the above comment, to R8 of the current draft of FAC-014.	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
Answer	No
Document Name	
Comment	
MPC supports comments submitted by the MRO NERC Standards Review Forum.	
Likes 0	

Dislikes 0	
Response	
See response to referenced comment.	
Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE	
Answer	No
Document Name	
Comment	
OGE supports the concerns expressed by MRO-NSRF on the proposed FAC-014 R6, R7 and R8. OGE believes that the proposed R6, R7 and R8 are duplicative of requirements in TPL-001-4.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	No
Document Name	
Comment	

While the intent of the requirements in FAC-014 does not appear to be reflected in the actual words. These requirements are confusing and create ambiguity that could result in incomsistent results, especially with auditors.	
Likes 0	
Dislikes 0	
Response	
Thank you for the comment. The ambiguity referenced and the risks it presents is not particularly clear so the SDT cannot respond further or determine an action plan to address.	
Darnez Gresham - Berkshire Hathaway Energy - MidAmerican Energy Co. – 3	
Answer	No
Document Name	
Comment	
MEC Supports NSRF Comments	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. – 1	
Answer	No
Document Name	
Comment	

MEC supports MRO NSRF comments.

R6 Concerns

The NSRF does not support incorporating R6 into FAC-014 for the following reasons:

Duplicative. Proposed R6 is covered by the data required under MOD-032-1 and TPL-001-4 R1 model building which specifies that models "*shall represent projected System conditions.*"

Questions for SDT Consideration

1. Wouldn't the models already evaluate System conditions against Facility Ratings, System steady-state voltage limits and stability criteria that are equally limiting or more limiting than those used by the RC?

2. Today, if there are differences, they should fall within the TPL-001-4 R1 audit scope.

Adds Reliability Risk. Transmission Owners are required to develop Facility Ratings under FAC-008. The proposed two bulleted subparts permit the Planning Coordinator or Transmission Planner to develop "*less limiting*" (higher) Facility Ratings. Inconsistencies between FAC-008 Facility Ratings and ratings developed under the R6 bulleted subparts can lead to unrealistic Planning Assessments or invalidate Planning Assessments, altogether.

The proposed bulleted subparts seek to address the described reliability risk by requiring PCs or TPs to submit a technical rationale to affected TPs, TOs, and RCs. The proposed revision to FAC-014-3 does not consider the possibility TPs, TOs, RCs not wanting to accept a risk posed by the technical rationale. As such, the PCs or TPs could effectively reject TP, TO, or RC concerns raised by the technical rationale and proceed to operate at the less limiting Facility Ratings, regardless of those concerns; for example, the Transmission Owner needing to maintain conservative Facility Ratings in accordance with manufacture recommendations to protect its personnel and equipment.

We would note, however, if the Planning Coordinators and Transmission Planners want to adjust system models with a higher Facility Rating based on a proposed system upgrade, there is a path to do so under TPL-001-4 R1, Part 1.1.3. (*New planned Facilities and changes to existing Facilities*).

R7 Concerns

The NSRF does not support incorporating R7 into FAC-014 for the following reasons: *Duplicative*. The information sharing under proposed R7 is already addressed under TPL-001-4 R8, which establishes the Planning Coordinator and Transmission Planner are required to share information as part of their annual Planning Assessment. *Recommendation*. Revise TPL-001-4 R8 to permit Reliability Coordinators and Transmission Operators to request and receive the CAPs information as reflected in proposed FAC-014 R7. **R8 Concerns** The NSRF does not support incorporating R8 into FAC-014 for the following reasons: *Duplicative*. The information sharing under proposed R8 is already addressed under TPL-001-4 R8, which establishes the Planning Coordinator and Transmission Planner are required to share information as part of their annual Planning Assessment. *Recommendation*. Revise TPL-001-4 R8 to permit Transmission Owners and Generator Owners to request and receive the information in proposed FAC-014 R8, e.g. instability info, cascading and uncontrolled separation. *Clarification.* It looks as if the rationale document for FAC-014 infers the sole purpose of this requirement is to facilitate compliance administration needs for the Transmission Owners and Generator Owners since they do not operate the system. If that is the intent, it would be helpful to clarify and unambiguously state that for purposes of transparency. **R6 R7 R8 Shared Concerns** *Compliance Ambiguity.* As stated, above, incorporating R6, R7, and R8 into FAC-014 creates inconsistencies within the context of the Standard, providing unclear performance expectations and ambiguity around potential noncompliance. As such, the proposed revisions are incompatible with the Standards Efficiency Review project's effort to reduce ambiguity around compliance.

Likes 0	
Dislikes 0	
Response	

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade.

The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability.

In addition, FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 (R8) only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	No
Document Name	
Comment	

Alliant Energy supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy	
Answer	No
Document Name	
Comment	
Duke Energy recommends that FAC-014-3 R7 be modified to include the phrase "during the planning events" as an added measure of clarity. For example: R7. Each Planning Coordinator and each Transmission Planner shall annually communicate the following information for Corrective Action Plans developed to address any instability identified "during the planning events" in its Planning Assessment of the Near-Term Transmission Planning Horizon to each impacted Transmission Operator and Reliability Coordinator. Additionally, due to the numerous methodologies, procedures, processes, tools, and training impacts associated with this Project, suggest extending implementation period from 12 months to 30 months.	
Likes 0	
Dislikes 0	
Response	
Thank you for the comment. The reference to CAPs in R7 and the associated rationale provide the clarity suggested in this comment in the SDT's opinion.	

The request for a reconsideration of the implementation period is duly noted and will be re-evaluated by the SDT.	
Thomas Foltz - AEP - 5	
Answer	No
Document Name	
Comment	
AEP disagrees with incorporating R6-R8 into FAC-014 as currently proposed. It is not clear exactly what the SDT believes the benefits would be of such an approach. FAC-014 and its obligations have historically been centric to the Operations Planning Time Horizon, not the Near/Long Term Planning Horizon as currently proposed in these most recent revisions. To do so would change the original intent and purpose of FAC-014 into something more reminiscent of TPL-001. We believe the SDT needs to clarify their strategies and intentions regarding the "mixing" of these time horizons, and for them to further consider the unintentional impacts of making such changes. The "planning assessments" proposed in FAC-014 seem redundant to that which is already required under TPL-001. We believe the SDT needs to be clear as to the intent of R6-R8 with regard to the Time Horizon. SOLs applied to support Operations Planning Time Horizon will be different than those applied to the Long-Term Planning Time Horizon. If the intent is to ensure SOLs applied in the Operations Planning Time Horizon are incorporated in any Planning Assessments performed, the existing language does not accomplish this. An RC's stability limits may become obsolete and thus inapplicable in the planning time horizon as new generation is added. When this happens, it is rather the TP's and PC's stability limits that ought to be communicated to the RC so the RC knows what to expect in the future. If industry and the SDT believe that the obligations proposed in R6-R8 are indeed worth pursuing, it may be worth considering including them within a new FAC standard of their own. The revised FAC-014 R6, R7, and R8 apply directly to the conduct and communication of planning assessments. While we recognize that TPL-001 is not within scope of the project's SAR, we believe such obligations are already captured as part of TPL-001. FAC-014 R6 states "Each Planning Coordinator and each Transmission Planner shall implement a documented process", but it is not clear exactly where the creation of this documented process is/was originally required.	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment. The currently approved version of FAC-014 contains requirements of planners to establish and communicate SOLs per the PC SOL methodology. Therefore, the concept of the planning horizon is already fully embedded in FAC-014. The retirement of FAC-010, as proposed by the SDT, makes it necessary to replace the current SOL-based requirements with more appropriate mechanisms to ensure communication and coordination between planners and operators is provided for in the standard.

The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The data provided through TPL-001-4 only provides information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	No
Document Name	
Comment	

"These comments represent the MRO NSRF membership as a whole but would not preclude members from submitting individual comments".

R6 Concerns

The NSRF does not support incorporating R6 into FAC-014 for the following reasons:

Duplicative. Proposed R6 is covered by the data required under MOD-032-1 and TPL-001-4 R1 model building which specifies that models "*shall represent projected System conditions.*"

Questions for SDT Consideration

1. Wouldn't the models already evaluate System conditions against Facility Ratings, System steady-state voltage limits and stability criteria that are equally limiting or more limiting than those used by the RC?

2. Today, if there are differences, they should fall within the TPL-001-4 R1 audit scope.

Adds Reliability Risk. Transmission Owners are required to develop Facility Ratings under FAC-008. The proposed two bulleted subparts permit the Planning Coordinator or Transmission Planner to develop "*less limiting*" (higher) Facility Ratings. Inconsistencies between FAC-008 Facility Ratings and ratings developed under the R6 bulleted subparts can lead to unrealistic Planning Assessments or invalidate Planning Assessments, altogether.

The proposed bulleted subparts seek to address the described reliability risk by requiring PCs or TPs to submit a technical rationale to affected TPs, TOs, and RCs. The proposed revision to FAC-014-3 does not consider the possibility TPs, TOs, RCs not wanting to accept a risk posed by the technical rationale. As such, the PCs or TPs could effectively reject TP, TO, or RC concerns raised by the technical rationale and proceed to operate at the less limiting Facility Ratings, regardless of those concerns; for example, the Transmission Owner needing to maintain conservative Facility Ratings in accordance with manufacture recommendations to protect its personnel and equipment.

We would note, however, if the Planning Coordinators and Transmission Planners want to adjust system models with a higher Facility Rating based on a proposed system upgrade, there is a path to do so under TPL-001-4 R1, Part 1.1.3. (*New planned Facilities and changes to existing Facilities*).

R7 Concerns

The NSRF does not support incorporating R7 into FAC-014 for the following reasons:

Duplicative. The information sharing under proposed R7 is already addressed under TPL-001-4 R8, which establishes the Planning Coordinator and Transmission Planner are required to share information as part of their annual Planning Assessment.

Recommendation. Revise TPL-001-4 R8 to permit Reliability Coordinators and Transmission Operators to request and receive the CAPs information as reflected in proposed FAC-014 R7.

R8 Concerns

The NSRF does not support incorporating R8 into FAC-014 for the following reasons:

Duplicative. The information sharing under proposed R8 is already addressed under TPL-001-4 R8, which establishes the Planning Coordinator and Transmission Planner are required to share information as part of their annual Planning Assessment.

Recommendation. Revise TPL-001-4 R8 to permit Transmission Owners and Generator Owners to request and receive the information in proposed FAC-014 R8, e.g. instability info, cascading and uncontrolled separation.

Clarification. It looks as if the rationale document for FAC-014 infers the sole purpose of this requirement is to facilitate compliance administration needs for the Transmission Owners and Generator Owners since they do not operate the system. If that is the intent, it would be helpful to clarify and unambiguously state that for purposes of transparency.

R6 R7 R8 Shared Concerns

Compliance Ambiguity. As stated, above, incorporating R6, R7, and R8 into FAC-014 creates inconsistencies within the context of the Standard, providing unclear performance expectations and ambiguity around potential noncompliance. As such, the proposed revisions are incompatible with the Standards Efficiency Review project's effort to reduce ambiguity around compliance.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade. The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability. In addition, FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 (R8) only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.	
Marty Hostler - Northern California Power Agency - 3,4,5,6	
Answer	No
Document Name	
Comment	
NCPA supports John Allen's, City Utilities of Springfield, Missouri, comments.	
Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
John Allen - City Utilities of Springfield, Missouri - 4	
Answer	No
Document Name	
Comment	

R6. This requirement is out of place in FAC-014 and should already be covered in the data provided via MOD-032-1 and model building effort via TPL-001-4 R1, which specifies that models "*shall represent projected System conditions*". Therefore, why wouldn't the models already contain Facility Ratings, System steady-state voltage limits and stability criteria that are equally limiting or more limiting than those used by the Reliability Coordinator? If there are significant differences between how the system is being planned and how it's being operated, then that should be within the scope for auditing TPL-001-4 R1 today. Having this requirement detached in FAC-014 could lead to misunderstanding of context, expectations and/or compliance failures, which is not effective or efficient and contrary to ongoing work by the Standards Efficiency Review project.

Additionally, the two bulleted items are problematic since the development of Facility Ratings is the responsibility of the Transmission Owner in accordance with FAC-008. To allow the Planning Coordinator or Transmission Planner to develop a "*less limiting*" (higher) Facility Rating could lead to unrealistic and/or invalid Planning Assessments. The Planning Coordinator and/or Transmission Planner should not be allowed on their own to overrule the Transmission Owner's ability to maintain conservative Facility Ratings in accordance with manufacture recommendations to protect its personnel and equipment. However, if the Planning Coordinators and Transmission Planners want to adjust system models with a higher Facility Rating based on a proposed system upgrade, then that is already allowed via TPL-001-4 R1, Part 1.1.3. (*New planned Facilities and changes to existing Facilities*).

R7. This requirement is out of place in FAC-014 and should be covered in TPL-001-4 R8 where the requirement for the Planning Coordinator and Transmission Planner to share information on their annual Planning Assessment resides. Having this requirement detached in FAC-014 could lead to misunderstanding of context, expectations and/or compliance failures, which is not effective or efficient and contrary to ongoing work by the Standards Efficiency Review project. Therefore, the list of entities in TPL-001-4 R8 should be enhanced to allow Reliabilty Coordinators and Transmission Operators the ability to request and receive this information.

R8. This requirement is out of place in FAC-014 and should be covered in TPL-001-4 R8 where the requirement for the Planning Coordinator and Transmission Planner to share information on their annual Planning Assessment resides. Having this requirement detached in FAC-014 could lead to misunderstanding of context, expectations and/or compliance failures, which is not effective or efficient and contrary to ongoing work by the Standards Efficiency Review project. It also appears in the rationale document for FAC-014 the sole purpose of this requirement is to facilitate compliance administration needs for the Transmission Owners and Generator Owners. Therefore, the list of entities in TPL-001-4 R8 should be expanded to allow Transmission Owners and Generator Owners the ability to request and receive this information.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

There is no provision in the current proposal of FAC-014 or any related standard proposal that allows a planner or operator to overrule an owner on its Facility Ratings.

The technical rationale provision is intended to allow the planner to use less limiting Facility Ratings (not a less limiting Element on a Facility) if they document the rationale why this is used. The most common instances for a planner to use less limiting Facility Ratings is when a Rating changes due to a future planned upgrade.

The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability.

In addition, FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 (R8) only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations

Answer	No
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1	
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you.	
Pamalet Mackey - Pamalet Mackey On Behalf of: James Mearns, Pacific Gas and Electric Company, 1, 3, 5; Sandra Ellis, Pacific Gas and Electric Company, 1, 3, 5; - Pamalet Mackey	
Answer	Yes
Document Name	
Comment	
In concept, the proposed requirements for FAC-014-3 R6 to R8 are good, but the details need to be further developed. For instance, for R6, the RC can change their methodology at any time and the Transmission Planner will then be responsible to ensure that any more stringent criteria are then reflected in Planning studies, but the RC is required by FAC-011-4 R9 to provide its SOL methodology to PCs and TPs, so there	

should be adequate notification which would allow the TP to implement such changes in their next reliability assessment. The greatest concern, then, appears to be possible disconnects between Operating and Planning criteria that make it difficult to ensure compliance with R6 and leave certain aspects up to interpretation, such as differences in Facility Ratings used in Operations vs. Planning. The standard as currently written does not require the RC to accept and respond to feedback from other entities if the methodology is unclear, but R6 will require the PC and TP to correctly interpret the methodology for ratings, limits, and criteria. For R7 and R8, the concept of notification to TOPs/RCs (R7) and TOs/GOs (R8) is sound, but the implementation may not be straightforward. In R7, for instance, "instability" must be communicated – does this include small generators that lose synchronism for P1 events? How does an entity differentiate bad models from instability when compliance directly depends on notifications of such issues? Clear definitions of the terms involved here would be a significant improvement.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The intent of R6 is to provide a mechanism for performance criteria (ratings, voltage/stability limits) to be coordinated between operations and planning in an effort to ensure there is appropriate agreement on these criteria. If there is confusion on the RC's methodology, there is nothing that precludes the PC or TP from seeking this clarity directly from the RC. The PC & TP are also afforded the flexibility to document a technical rationale to describe deviations between criteria used in planning from those prescribed in the RC's SOL methodology. R7 requires information communicated on corrective actions developed to address instability. As such, small generators pulling out of synchronism for P1 events is not applicable to R7.	
Maurice Paulk - Cleco Corporation - 1,3,5,6	
Answer	Yes
Document Name	
Comment	
See SEE, EEI and MISO comments	

Likes 0	
Dislikes 0	
Response	
See response to referenced comment.	
Colleen Campbell - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
IPL offers no further comment.	
Likes 0	
Dislikes 0	
Response	
Thank you.	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	
Comment	
No Comment	
Likes 0	
Dislikes 0	
Response	

Thank you.	
David Jendras - Ameren - Ameren Services - 3	
Answer	Yes
Document Name	
Comment	
In our opinion we need to be careful that there is only one methodology for SOL's going forward. We agree with the proposed requirements but also suggests that the team consider instead adding these requirements within TPL-001, which deals with the Planning Assessment and correspondence/communication of the Planning Study to affected entities.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee	
Answer	Yes
Document Name	
Comment	
We have an overall concern with the term Facility Rating as applied in these FAC Standards and the confusion with those used in the MOD Standards. Does the SDT really mean Thermal Operation Limits as developed from the Facility Ratings? This set of standards talks about	

Steady State Voltage Limits, Stability Limits, but us silent on Thermal Operation Limits. We believe it would provide more clarity if the term Thermal Operation Limit was used in place of Facility Limit.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. Facility Ratings, as referenced in the current draft of FAC-014, is consistent with the NERC glossary term as it is in all NERC Reliability Standards. Per the definition, the maximum current, real or reactive power flow should constitute the thermal limits for facilities, which is part of the Facility Rating. Further, the SDT recognizes the owner's responsibility in determining Facility Ratings per FAC-008 and this is supported in the current proposal for FAC-014. Thermal Operation Limits is not defined in the NERC Glossary and is therefore not an appropriate reference for a NERC Reliability Standard as different entities may or may not use this terminology the same way if they use it at all.	
Tammy Porter - Tammy Porter On Behalf of: Lee Maurer, Oncor Electric Delivery, 1; - Tammy Porter	
Answer	Yes
Document Name	
Comment	
FAC-014-3 The statement "any instability identified in its Planning Assessment of the Near-Term Transmission…" seems unclear. I think an improvement and more clear statement might be, "any stability criteria violation identified in its Planning Assessment of the Near-Term Transmission…".	

The revision that Oncor is proposing also seems to better align with the deliverables outlined in R7.1 – R7.5, and in particular, R7.3: The associated stability criteria violation requiring the Corrective Action Plan (e.g. violation of transient voltage response criteria or damping rate criteria).	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. Clarifying modifications to R7 and the associated rationale are being considered by the SDT.	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	

1. The IESO is concerned that there is no requirement for the affected RC to provide feedback on the technical rationale provided by the PC or TP for using less limiting ratings. The IESO proposes to add a sub-requirement to establish this feedback loop between the affected entities and the PC or TP. The proposed requirement would mirror Requirement R8, sub-requirement 8.1. of Reliability Standard TPL-001-4 which allows the recipient of the Planning Assessment results to provide documented comments on the results, and the respective PC or TP to provide a documented response to that recipient within 90 calendar days of receipt of those comments:

Proposed Requirement R6, Sub-requirement 6.1:

"The recipient of the technical rationale may provide documented comments on the results, and the respective PC or TP to provide a documented response to that recipient within 90 calendar days of receipt of those comments"

Alternatively, the IESO would like to clarify if Requirement R8., subrequirement 8.1 is the feedback loop that can be used to address the lack of input from the affected entities on the technical rationale provided by the PC or TP on the use of less limiting ratings (this is based on the assumption that the technical rationale would be part of the Planning Assessment results).

2. Similar with the Reliability Standard TPL-001-4 where an RC can provide input on the Planning Assessment criteria, the IESO believes that the PC and TP should be afforded the reciprocal opportunity to provide input to its RC's methodology and have the RC provide a document response.

The IESO proposes to add *Sub-requirement R9.3 to FAC-011-4 as follows:*

"9.3. If a recipient of the Reliability Coordinator SOL methodology provides documented comments on the methodology, the respective Reliability Coordinator shall provide a documented response to that recipient within 90 calendar days of receipt of those comments."

3. We find that Requirements R7 and R8 are duplicative of existing communication requirements within other Reliability Standards. Specifically,

{C}o **Requirement R7 requires the PC and TP to communicate, annually any CAP identified in its Planning Assessments to the RC. Requirement 8 in TPL-001-4 requires the PC and TP to provide its Planning Asssessment results to affected entities, which include any CAP developed in R2 Sub-requirements 2.7 of TPL-001-4; and**

{C}o **Similarly, Requirement R8 requires the PC and TP to communicate, annually , any instability, Cascading or uncontrolled separation that adversely impacts the reliability of the BES in its Planning Assessment of the Near-Term Transmission Planning Horizon to TOs and GOs. All Planning Assessments performed by PCs and TPs are governed by other standards (TPL-001, PRC-012, PRC-023 etc.) and the processes required by those standards already include provisions for the communication of those results to the entities that have a reliability need.**

We suggest that Requirements R7 and R8 be removed to avoid duplication with existing communication obligations for the PC and TP.	
Likes 0	
Dislikes 0	

Response

Thank you for your comment.
The SDT understands the perception of redundancy of the proposed R6 & R7 with other requirements in existing Reliability Standards (TPL-001, MOD-032, etc.). Consideration was given to modifying other standards to accomplish the scope of the 2015-09 project SAR but industry and regulatory comments/input on those proposals moved the SDT down the current path of incorporating the concepts contained in these requirements into the FAC-014 standard. Additionally, the concept of coordinating and communicating information between planning and operations for the purpose of establishing and communicating SOLs is also appropriately placed in the FAC-014 Reliability Standard.

The feedback loop for the RC to the PC and TP concern is noted. This was not included in the current draft language due to a potential perception of "approval" of the rationale by the RC, which could imply an authority by the RC over the planners. This authority is not supported in the NERC functional model and a requirement for the planners to document a response only seemed administrative in nature and was thus not included.

The SDT discussed at length the annual planning assessment created per TPL-001, and noted that the specific information described in FAC-014-3, R7 is not necessarily included explicitly in annual planning assessments, but is of great use to operating entities seeking to monitor and mitigate any potential instability.

In addition, FAC-014-3, R8, is intended to comply with the FERC Order No. 777 directive identified in the Standard Authorization Request (SAR) for project 2015-09, requesting a requirement be added for the communication of IROL information to Transmission Owners. The cited requirement in TPL-001-4 (R8) only provided information to the operating entities (RCs and TOPs), and not the asset owners, as requested in FERC order 777.

Ray Jasicki - Xcel Energy, Inc. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Denise Sanchez - Denise Sanchez On Behalf of: Diana Torres, Imperial Irrigation District, 1, 6, 5, 3; Glen Allegranza, Imperial Irrigation District, 1, 6, 5, 3; Jesus Sammy Alcaraz, Imperial Irrigation District, 1, 6, 5, 3; Tino Zaragoza, Imperial Irrigation District, 1, 6, 5, 3; - Denise Sanchez	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Aaron Staley - Orlando Utilities Commission - 1	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Gul Khan - Oncor Electric Delivery - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Robert Hirchak - Cleco Corporation - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment.	
Scott Langston - Tallahassee Electric (City of Tallahassee, FL) - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Teresa Cantwell - Lower Colorado River Authority - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Daniela Atanasovski - APS - Arizona Public Service Co. - 1	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Joshua Andersen - Salt River Project - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	

Mark Holman - PJM Interconnection, L.L.C. - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Steven Rueckert - Western Electricity Coordinating Council - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Truong Le - Truong Le On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 5, 3; Chris Gowder, Florida Municipal Power Agency, 6, 4, 5, 3; Dale Ray, Florida Municipal Power Agency, 6, 4, 5, 3; Don Cuevas, Beaches Energy Services, 1, 3; Neville Bowen, Ocala Utility Services, 3; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 5, 3; Tom Reedy, Florida Municipal Power Pool, 6; - Truong Le	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF, Group Name PPL NERC Registered Affiliates	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment.	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Anthony Jablonski - ReliabilityFirst - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Richard Jackson - U.S. Bureau of Reclamation - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Kayleigh Wilkerson - Lincoln Electric System - 5, Group Name Lincoln Electric System	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	

Bruce Reimer - Manitoba Hydro - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merrell, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Marc Donaldson, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; - Jennie Wike	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Laura Nelson - IDACORP - Idaho Power Company - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment.	
Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Michael Courchesne	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Mickey Bellard - Seminole Electric Cooperative, Inc. - 1,5 - SERC	
Answer	
Document Name	FAC-014 SBS Comments 8-3-2020.docx
Comment	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	

5. If you have any other comments regarding FAC-014-3 that you haven't already provided, please provide them here.	
John Allen - City Utilities of Springfield, Missouri - 4	
Answer	
Document Name	
Comment	

R3. What is the purpose of the Transmission Operator providing its SOLs to the Reliability Coordinator? If it's for the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring and Real-time assessments, then keeping this requirement is redundant with the data specification in IRO-010-2 and contrary to ongoing work by the Standards Efficiency Review project to simplify data exchange requirements, reduce administrative burdens and remove redundancies. If not used for the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring and/or Real-time Assessments, then please explain the purpose and the corresponding obligation by the Reliability Coordinator to use the information? Otherwise, it potentially becomes an administrative compliance exercise that distracts our operations personnel and isn't benefiting reliability.

Furthermore, by definition SOLs change continuously based on "*a specified system configuration*". Therefore, does the SDT expect the Transmission Operator to continuously provide the Reliability Coordinator with updated SOLs for each system configuration within the timeframe of each Operational Planning Analysis, Real-time monitoring and/or Real-time Assessment? This is another reason why the information/data exchange activity needs to remain within IRO-010-2, where each Reliability Coordinator can determine the items that need reported, the method and a timeframe based on their individual operating environment.

R5.1 and R5.2. If one purpose of Project 2015-09 is to eliminate planning-based SOLs and IROLs, then what is the purpose of the Reliability Coordinator providing them to the Planning Coordinator and Transmission Planners in this requirement? If it's for the purpose of better aligning planning and operations, then where is the requirement for the Planning Coordinator or Transmission Planner to use them in the models for the Planning Assessments? If there isn't a corresponding obligation, then it potentially becomes an administrative compliance exercise that isn't benefiting reliability. Additionally, the model building topic is covered in MOD-032-1 and if the intent is to use additional information identified during operations in the models for TPL-001-4 Planning Assessments, then MOD-032-1 should be enhanced and the

Reliability Coordinator should be added to the applicability. Having it dispersed in other standards could lead to misunderstanding of context, expectations and/or compliance failures, which is not effective or efficient.

R5.3 and R5.4. What is the purpose of the Reliability Coordinator providing IROL information to the Transmission Operators? If it's for the Transmission Operator's Operational Planning Analyses, Real-time monitoring and Real-time assessments, then the data specification concept should be maintained and TOP-003-3 should be enhanced to allow the Transmission Operator to request and receive information from its Reliability Coordinator. To keep these requirements detached in FAC-014 is not effective or efficient and contrary to ongoing work by the Standards Efficiency Review project to simplify data exchange requirements, reduce administrative burdens and remove redundancies. If not used for the Transmission Operator's Operational Planning Analyses, Real-time monitoring and/or Real-time Assessments, then please explain the purpose and the corresponding obligation by the Transmission Operator to use the information? Otherwise, it potentially becomes an administrative compliance exercise that distracts our operations personnel and isn't benefiting reliability.

Likes 0	
Dislikes 0	

Response

R3: This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010 and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. This requirement does not preclude the RC from having the flexibility of specifying the SOL information it requires from the TOP to satisfy the requirement within its SOL Methodology such that there's a clear expectation of what's to be provided.

R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may influence them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement.

R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information which is key to maintaining reliable operation across our interconnections.

Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6	
Answer	
Document Name	
Comment	
None	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Marty Hostler - Northern California Power Agency - 3,4,5,6	
Answer	
Document Name	
Comment	
NCPA supports John Allen's, City Utilities of Springfield, Missouri, comments.	
Likes 0	

Dislikes 0	
Response	
Thank you for your comment. R3: This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010 and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. This requirement does not preclude the RC from having the flexibility of specifying the SOL information it requires from the TOP to satisfy the requirement within its SOL Methodology such that there's a clear expectation of what's to be provided. R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement. R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information which is key to maintaining reliable operation across our interconnections.	
Bruce Reimer - Manitoba Hydro - 1	
Answer	
Document Name	
Comment	

It is also important that RC and/or TO provide technical rationale to PC if they are using less restrictive SOLs than PC's SOLs.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The proposed standard requirement R6 suggests the PC and TP use more restrictive limitations, ratings, and performance criterion. Since this is in line with the proposed requirement, the SDT doesn't see why a rationale would be needed. If opposite were the case, i.e. where RC and TO are proposing to more restrictive criterion than PCs and TPs are using, the PC and TP need to flag this and work with the RC and TOP to build the technical rationale as the requirement is on the PC and TP to ensure.	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	
Document Name	
Comment	
"These comments represent the MRO NSRF membership as a whole but would not preclude members from submitting individual comments". **R3 Issues** A. Transmission Operators providing their SOLs to the Reliability Coordinator raises some questions for consideration by the SDT: 1. Is SOL data sharing being used for the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring and Real-time assessments? If that is the case, R3 is redundant with the data specification in IRO-010-2 and could be a candidate for deactivation under the Standards Efficiency Review project.	

2. If SOL data sharing is not used by the RC for OPA, RTM and RTAs, what is the purpose of the data sharing, and the corresponding obligation by the Reliability Coordinator, to use the information?

Concern. Without a clear purpose and specific benefit to reliability of BPS, R3 saddles operations personnel with an administrative compliance burden that provides little reliability benefit.

B. SOLs, by definition, continuously change based on "*a specified system configuration*".

1. Is the expectation for the Transmission Operator to continuously provide the Reliability Coordinator with updated SOLs for each system configuration within the timeframe of each Operational Planning Analysis, Real-time monitoring and/or Real-time Assessment?

This highlights why the information/data exchange topic probably needs to remain within IRO-010-2 where Reliability Coordinators can determine items that need to be reported, the method and a timeframe based on the RCs' specific operating environment.

R5 Issues

A. Reliability Coordinators providing planning-based SOLs and IROLS to the Planning Coordinator and Transmission Planner raises some questions for consideration by the SDT:

1. What is the purpose of the Reliability Coordinator providing SOLs and IROLS to the Planning Coordinator and Transmission Planners?

If the purpose is to better align planning and operations, we are unaware of any requirement for the Planning Coordinator or Transmission Planner to use SOLs and IROLS in models for the Planning Assessments.

Concern. Without a clear requirement for the Planning Coordinator or Transmission Planner to use SOLs and IROLS in models for the Planning Assessments, R5 loads operations personnel with an administrative compliance burden that provides little reliability benefit.

2. Is the intent to use additional information--like SOLs and IROLs--identified during operations in the models for TPL-001-4 Planning Assessments?

If that is the case, MOD-032-1, the model building Standard, should be revised to expand the Applicability to include the Reliability Coordinator.

Compliance Challenge. Scattering model building Requirements across multiple Standards is inefficient, creating the opportunity for discord between Requirements, even difficulties agreeing on the guiding Requirement for purposes of compliance and enforcement. Clarity as to the expected or desired performance under a Requirement better serves BPS reliability.

B. Reliability Coordinators providing IROL information to the Transmission Operators raises some questions for consideration by the SDT:

1. Is IROL data sharing being used for the Transmission Operator's Operational Planning Analyses, Real-time monitoring and Real-time assessments?

If that is the case, then the data specification concept should be maintained and TOP-003-3 revised to allow the Transmission Operator to request and receive the information from its Reliability Coordinator.

2. If IROL data is not used by the RC for OPA, RTM and RTAs, what is the purpose of the data sharing, and the corresponding obligation by the Reliability Coordinator, to use the information?

Concern. Without a clear purpose and specific benefit to BPS reliability, R5 encumbers operations personnel with an administrative compliance burden that provides little reliability benefit.

3. The NSRF does not support incorporating R5 into FAC-014. As outlined, above, the revision may be inconsistent with the Standards Efficiency Review project goals of simplifying data exchange requirements and addressing redundancies.

Purpose Statement Issue

The NSRF does not support adding the phrase, "…and that Planning Assessment performance criteria is coordinated with these methodologies," to the proposed FAC-014-3 Purpose statement.

As already discussed in our previous responses, we believe consolidating the four FAC-015 requirements into proposed FAC-014-3 R6, R7 and R8 creates redundant Requirements; the planning aspects of the proposed Requirements are represented within other Standards. As such, the proposed revision to the FAC-014-3 Purpose statement is unnecessary.

Likes 0	
Dislikes 0	

Response
Thank you for your comment. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data spec. what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement. R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement. R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Richard Jackson - U.S. Bureau of Reclamation - 1	
Answer	
Document Name	
Comment	

None	
Likes 0	
Dislikes 0	
Response	
Thomas Foltz - AEP – 5	
Answer	
Document Name	
Comment	
If retained, we believe FAC-014 should be revised as "Each Reliability Coordinator shall establish stability limits to be used in operations when *an instability* impacts adjacent Reliability Coordinator Areas or more than one Transmission Operator in its Reliability Coordinator Area in accordance with its SOL methodology."	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. Your suggestion was used to revise the language in the requirement.	
Vince Ordax - Florida Reliability Coordinating Council – Member Services Division - 8	
Answer	
Document Name	
Comment	

R5.5: This language is awkward. Please clarify and reword to capture intent.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. This is a statement that highlights that the RC is required to provide any of its TOPs, upon their request to the RC, with SOL information pertaining to another TOP area that is within its RC's footprint. This is explained in the rationale for R5.5. Further information will be added to the rationale document as to why this may be useful. For example, in deriving a new SOL that may impact adjacent TOPs, a TOP may need detailed information regarding another TOP's SOLs.	
Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy	
Answer	
Document Name	
Comment	
None.	
Likes 0	
Dislikes 0	
Response	
Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	
Document Name	
Comment	

Alliant Energy supports the comments submitted by the MRO NSRF.

Likes 0	
Dislikes 0	

Response

Thank you for your comments. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data specification what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement.

R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement.

R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	
Document Name	
Comment	

MEC supports MRO NSRF comments.

R3 Issues

A. Transmission Operators providing their SOLs to the Reliability Coordinator raises some questions for consideration by the SDT:

1. Is SOL data sharing being used for the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring and Real-time assessments?

If that is the case, R3 is redundant with the data specification in IRO-010-2 and could be a candidate for deactivation under the Standards Efficiency Review project.

2. If SOL data sharing is not used by the RC for OPA, RTM and RTAs, what is the purpose of the data sharing, and the corresponding obligation by the Reliability Coordinator, to use the information?

Concern. Without a clear purpose and specific benefit to reliability of BPS, R3 saddles operations personnel with an administrative compliance burden that provides little reliability benefit.

B. SOLs, by definition, continuously change based on "*a specified system configuration*".

1. Is the expectation for the Transmission Operator to continuously provide the Reliability Coordinator with updated SOLs for each system configuration within the timeframe of each Operational Planning Analysis, Real-time monitoring and/or Real-time Assessment?

This highlights why the information/data exchange topic probably needs to remain within IRO-010-2 where Reliability Coordinators can determine items that need to be reported, the method and a timeframe based on the RCs' specific operating environment.

R5 Issues

A. Reliability Coordinators providing planning-based SOLs and IROLS to the Planning Coordinator and Transmission Planner raises some questions for consideration by the SDT:

1. What is the purpose of the Reliability Coordinator providing SOLs and IROLS to the Planning Coordinator and Transmission Planners?

If the purpose is to better align planning and operations, we are unaware of any requirement for the Planning Coordinator or Transmission Planner to use SOLs and IROLS in models for the Planning Assessments.

Concern. Without a clear requirement for the Planning Coordinator or Transmission Planner to use SOLs and IROLS in models for the Planning Assessments, R5 loads operations personnel with an administrative compliance burden that provides little reliability benefit.

2. Is the intent to use additional information--like SOLs and IROLs--identified during operations in the models for TPL-001-4 Planning Assessments?

If that is the case, MOD-032-1, the model building Standard, should be revised to expand the Applicability to include the Reliability Coordinator.

Compliance Challenge. Scattering model building Requirements across multiple Standards is inefficient, creating the opportunity for discord between Requirements, even difficulties agreeing on the guiding Requirement for purposes of compliance and enforcement. Clarity as to the expected or desired performance under a Requirement better serves BPS reliability.

B. Reliability Coordinators providing IROL information to the Transmission Operators raises some questions for consideration by the SDT:

1. Is IROL data sharing being used for the Transmission Operator's Operational Planning Analyses, Real-time monitoring and Real-time assessments?

If that is the case, then the data specification concept should be maintained and TOP-003-3 revised to allow the Transmission Operator to request and receive the information from its Reliability Coordinator.

2. If IROL data is not used by the RC for OPA, RTM and RTAs, what is the purpose of the data sharing, and the corresponding obligation by the Reliability Coordinator, to use the information?

Concern. Without a clear purpose and specific benefit to BPS reliability, R5 encumbers operations personnel with an administrative compliance burden that provides little reliability benefit.

3. The NSRF does not support incorporating R5 into FAC-014. As outlined, above, the revision may be inconsistent with the Standards Efficiency Review project goals of simplifying data exchange requirements and addressing redundancies.

Purpose Statement Issue

The NSRF does not support adding the phrase, "…and that Planning Assessment performance criteria is coordinated with these methodologies," to the proposed FAC-014-3 Purpose statement.

As already discussed in our previous responses, we believe consolidating the four FAC-015 requirements into proposed FAC-014-3 R6, R7 and R8 creates redundant Requirements; the planning aspects of the proposed Requirements are represented within other Standards. As such, the proposed revision to the FAC-014-3 Purpose statement is unnecessary.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data spec. what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement.

R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models

associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement. R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Darnez Gresham - Berkshire Hathaway Energy - MidAmerican Energy Co. - 3	
Answer	
Document Name	
Comment	
MEC Supports NSRF Comments	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data spec. what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement.	

R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement. R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	
Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company	
Answer	
Document Name	2015-09_Unofficial_Comment_Form_202006 - SOCO Comments Final.pdf
Comment	
Detailed comments are in the attached file with special formatting for clarity and emphasis where needed (strike-through, highlighting, etc.).	
Likes 1	Mark Pratt, N/A, Pratt Mark
Dislikes 0	
Response	
Thank you for your comment. R5.1 and R5.2: Please see the explanation offered in the rationale for Requirements R5.1 and R5.2. The SDT believes that using the "upon written request" language may result in important SOL information not getting to the TP and RC such that they may not be aware of what to look for in their Planning Assessments to identify potential impacts to known stability issues or new issues that may arise. Requirements in the MOD and TPL standards do not cover the information with enough specificity for the RC to understand the necessary IROL and stability related information required to be provided under R5.2 See Q3 response to your suggestion regarding a new time horizon.	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
Answer	
Document Name	
Comment	
MPC supports comments submitted by the MRO NERC Standards Review Forum.	
Likes 0	
Dislikes 0	

Response
Thank you for your comment. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data specification what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement. R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement. R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Steven Rueckert - Western Electricity Coordinating Council – 10	
Answer	
Document Name	
Comment	

Measure M3, the phrase "in accordance with its Reliability Coordinator's SOL methodology" should be stricken since it is stricken in the requirement. Proposed language "in accordance with requirement R3" would suffice.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. This has been corrected.	
Mark Holman - PJM Interconnection, L.L.C. – 2	
Answer	
Document Name	
Comment	

R3 - The new language provides no suggested timeline beyond the Time Horizon of Operations Planning. Many SOLs, the limit itself, not the basis for the limit which can include Facility Ratings, at minimum, are derived/determined in the Real-time horizon. The Rationale gives several options/examples of how this might transpire which are not governed by the requirement language, which drops the suggested option of "*in accordance with its Reliability Coordinators SOL methodology*". As such, the proposed SDT language for R3 is ambiguous and either allows the TOP to indicate an SOL as they see fit, or continuously.

Yet, the measurement indicates that evidence demonstrating the TOP provided its SOLs in accordance with its RC's SOL methodology. Which seems appropriate.

R5 - RC's have Facility Ratings. RC's have stability limits. RC's have criteria for the determination of IROLs. The value of the SOL, which could include, for example a single temperature set rating for a given facility, is of minimal benefit to a PC or TP and is an incomplete set.

· The methodology and ratings sets that can lead to potential SOLs would be of value to the PC or TP.

As written, this requirement and many of its subparts serve minimal reliability value and is highly administrative in nature; and is not an improvement over the current FAC-014-2 R5. Requiring the formalized exchange of such information is not necessarily a determination that it is of value to the recipient.

Suggest R5 be rewritten to align with R6 and provided the criteria, methodology and supporting data (including Facility Ratings) that may be both relevant and beneficial to a TP or PC. Alternatively, providing a list of SOL exceedances and/or trends may also be of some value to the PC or TP. A long list of SOLs with no additional context is an overlap of other requirements/obligations set on the TO/GOs in other standards.

Likes 0	
Dislikes 0	

Response

Thank you for your comment. The time horizons for R3 are Operations Planning, Same-day Operations, Real-Time Operations as specified on the proposed clean version of the FAC-014-3 standard as linked to the 2015-09 Project page on the NERC website. In the requirement for R3, "in accordance with its RC methodology was removed", as provision of SOL information may be agreed upon through means other than within the methodology itself. See the rationale for R3 for more explanation.

R5: This requirement is intended to be all encompassing in the areas of concern and give the RC the flexibility to work with PC and TPs to decide what is and isn't important information that should be shared within the terms mandated within the requirement.

Rachel Coyne - Texas Reliability Entity, Inc. – 10

Answer	
Document Name	

Comment

Texas RE recommends the SDT consider the following:

- In Requirement R4, add "adjacent Reliability Coordinators Areas **within its Interconnection** or" unless it has an understanding that there is a need to confirm stability limits used in operations between RCs in different Interconnections.
- Revise Part 5.4 from "each established stability limit or each IROL" to "each established stability limit **and** each IROL applicable to the impacted Transmission Operator". Both the stability limit and the IROL should be provided to each impacted Transmission Operator.
- In Requirement R6, the term "System steady-state voltage limits" is not defined. Is this term intended to be different than the proposed term "System Voltage Limit," which was introduced in this project?
- Include a check and balance for use of the less limiting parameter in Requirement R6. This requirement allows for any criteria to be used (i.e. less limiting Facility Rating, etc) as it simply states a "technical rationale" has to be provided to any entity affected by a "less limiting" parameter.
- Requirement R6 uses "affected Transmission Planner, Transmission Operator and Reliability Coordinator," while R7 references "impacted Transmission Operator and Reliability Coordinator" and R8 references "impacted Transmission Owner and Generation Owner." Unless there is a specific reason for difference in verbiage, Texas RE recommends being consistent to avoid confusion and potential interpretation attempts at differences in language in the Requirements.
- Requirement R7 appears to exclude any CAP for Cascading or uncontrolled separation. Please provide the rationale for the exclusion.
- Provide more clarity in Requirement R8. In the phrase "any Facilities critical to the instability, Cascading or uncontrolled separation identified," it is not clear what would constitute "Facilities critical to the instability, Cascading or uncontrolled separation identified," and how these are different than "Facilities that comprise the Contingency(ies) (planning events only)."
- Requirement R8 requires the PC and TP to communicate "Facilities that comprise the Contingency(ies) (planning events only) and any Facilities critical to the instability, Cascading or uncontrolled separation identified." Many of the updated Standards (e.g. CIP-014-3, FAC-003-5) use the applicability language "Facilities that if lost or degraded are expected to result in instances of instability, Cascading, or uncontrolled separation, that adversely impacts the reliability of the Bulk Electric System for planning events". It would be helpful if the information provided by the PC and TP directly maps to the applicability section of these other Standards. Texas RE recommends requiring that communication to the TO and GO include "Facilities that if lost or degraded are expected to result in instances of

instability, Cascading, or uncontrolled separation, that adversely impacts the reliability of the Bulk Electric System for planning events" instead of "Facilities that comprise the Contingency(ies) (planning events only) and any Facilities critical to the instability, Cascading or uncontrolled separation identified." • Requirement R8 uses the phrase "planning events only." Texas RE recommends including an explanation that these events refer to the events in Table 1 of TPL-001.	
Likes 0	
Dislikes 0	

Response

Thank you for your comment. Requirement R4 as worded only speaks to stability limits that influence adjacent RC areas or more than one TOP in its area. If an adjacent RC is in another interconnection and won't be impacted, it may not need to be considered in the analysis; however, this requirement leaves room for where there may be such an impact via transfer levels on asynchronous tie-lines or unavailability of these tie-lines due to outages or a contingency. The rationale for R4 has been updated accordingly

R5.4 The SDT agrees with your suggestion.

The use of "System steady-state voltage limits" language was used to be consistent with TPL-001-4 R5 and makes use of the defined term "System" to clarify which steady-state voltage limits needed to be provided to the TP and PC and which are those are associated with System operation as opposed to operation of specific equipment. Use of the term is also is associated with the criteria that each PC and TP must follow in carrying out their Planning Assessment.

The reason the language surrounding the provision of the technical rationale was chosen was in hopes that the entities receiving it would engage the provider if they had concern around the merit of the rationale and work out an agreement. Stronger language around the confirmation of these rationales by either the RC or PC was avoided as both entities are on equal footing and one side should not have veto rights on such a rationale.

For R6 - R8, there was no intent to differentiate between impacted and affected system as worded in these requirements.

In requirement R7, there was no intention to avoid the use of cascading and uncontrolled separation with regards to corrective action plans. As cascading and uncontrolled separation is a result of instability, it falls under the same umbrella and is thus addressed by CAPs preventing instability. Facilities that are critical to the derivation of IROLs can be different than what facilities comprise the contingencies. For example, a large generator or shunt capacitor which is not lost as part of a contingency triggering instability may play a big role in keeping healthy voltages on the system necessary to prevent instability occurring post-contingency.

Jennifer Bray - Arizona Electric Power Cooperative, Inc. – 1	
Answer	
Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	

Joshua Andersen - Salt River Project - 1,3,5,6 – WECC	
Answer	
Document Name	
Comment	
The time horizon in R6-R8 are currently identified as “Long-Term Planning Horizon” While this aligns with the horizon of the TPL-001-4 standard where issues would be identified, it is specifically the Near-Term Planning horizon that these issues point to. We recommend	

adjusting the time horizon assocoaited with R6-R8 to more accurately reflect the portion of the TPL-001-4 assessment they are intended to align to.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT agrees with you that near-term Planning is the timeframe at which these issues will be considered. However, there's no time horizon definition for near-term planning within the body of NERC standards. Therefore, the most appropriate time horizon was chosen, the Long-term Planning Horizon.	
Daniela Atanasovski - APS - Arizona Public Service Co. – 1	
Answer	
Document Name	
Comment	
None	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee	
Answer	
Document Name	
Comment	

NERC Standard IRO-17 obligates each Planning Coordinator and Transmission Planner to provide its Planning Assessment to impacted Reliability Coordinators. NERC TPL-001 includes the obligation that when the analysis indicates the inability of the system to meet the performance requirements. We believe FAC-014-3 R7 basically includes/requires the same if not similar information. If this additional detail is required, we suggest that IRO-017 be updated so that this type of request is located in a single requirement or standard.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. IRO-017 is specific to outage coordination whereas TPL-001 is specific to sharing with other planning entities but recognizes other entities, which may have a reliability, need. FAC-014-3 is about better coordination between Planning and Operating entities around specific aspects of the Planning Assessments and R7 in particular is about sharing details resulting from corrective action plans (CAPs) that would be of value to operations. Although there is probably some overlap in what will be shared, all three standards are focusing on a different aspect that's important for their intended purpose. The team recommends this concern is better looked at as part of a holistic review of standards efficiency.	
Kevin Salsbury - Berkshire Hathaway - NV Energy – 5	
Answer	
Document Name	
Comment	
NV Energy would like to communicate its additional concern over FAC-014-3, with the retirement of FAC-010-3. With the retirement of FAC-10-3, Transmission Planners will not be able to use their IROL methodology for the Planning Horizon anymore, and as stated, will be forced to adjust to their respective RC's SOL Methodology and definition of an IROL. NV Energy's concern with using a respective RC's IROL definition is the potential for the RC to identify an IROL for a more conservative loss than what a Transmission Planner would determine. NV Energy understands the need for a secure BES with the establishment of an IROL in an Interconnection; however, the ramifications of an IROL	

declaration stretch into multiple Standards that require a substantial amount of work for compliance implementation (i.e. CIP Standard suite), as well as the equipment modifications for facilities to monitor the flows on Elements within an IROL. NV Energy still believes their should still be a responsibility of defining IROLs with the Transmission Planner.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The new FAC-014-3 standard allows the Planning entity to choose how to perform its assessments as long as the performance criterion used is as conservative as or more conservative than what's in the RC's SOL Methodology under the confines of TPL-001-4 requirements. The requirements for scope of coverage (consideration of elements out of service) that must be studied for planning assessments is specified in TPL-001-4.	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	
Document Name	
Comment	
No Comment	
Likes 0	
Dislikes 0	
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group	
Answer	
Document Name	

Comment
The SPP Standards Review Group offers the following "***non-content***" considerations for SDT review: 1. Implementation of the "blue box" concept, as in previous standards development processes, which could give industry insight on proposed revisions. 2. Consideration of the concept could assist in a seamless transfer of information to the future Guideline and Technical Basis documentation.

Likes 0	
Dislikes 0	

Response
Thank you for your comment. They will be considered by NERC staff.

Gul Khan - Oncor Electric Delivery - 1 - Texas RE	
Answer	
Document Name	

Comment
n/a

Likes 0	
Dislikes 0	

Response

Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee	
Answer	

Document Name	
Comment	
The IRC SRC would like to note that discrepancies may be introduced when applying Facility Ratings derived in accordance with the RC's SOL methodology to the Near Term Transmission Planning Horizon because system topology may change from the time the Facility Ratings are developed in the current year to the time when the limit is applied in the Planning Assessment of the Near Term Transmission Planning Horizon; a study of anticipated system performance one (1) to five (5) years in the future. Therefore, it is preferable to retain the process under TPL-001-4 "as is."	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT would like to understand specifically what discrepancies are being referred to in order to give a better answer to this question. However, based on what's been provided, the team feels that the only discrepancies from what is done today should result from more conservative facility ratings used in Operations that do not have a corrective action plan in place to increase them. The planning ratings used in these studies should generally always be equally or more restrictive unless there's an upgrade of the facility planned further out which is a justified reason for having a higher rating; this is true for how things are studied under the existing standards and are allowed under these new standards as well via a rationale.	
Bobbi Welch - Midcontinent ISO, Inc. – 2	
Answer	
Document Name	
Comment	
MISO supports the comments filed by the IRC SRC. The IRC SRC would like to note that discrepancies may be introduced when applying Facility Ratings derived in accordance with the RC's SOL methodology to the Near Term Transmission Planning Horizon because system topology may change from the time the Facility Ratings are	

developed in the current year to the time when the limit is applied in the Planning Assessment of the Near Term Transmission Planning Horizon; a study of anticipated system performance one (1) to five (5) years in the future. Therefore, it is preferable to retain the process under TPL-001-4 "as is."	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT would like to understand specifically what discrepancies are being referred to in order to give a better answer to this question. However, based on what's been provided, the team feels that the only discrepancies from what is done today should result from more conservative facility ratings used in Operations that do not have a corrective action plan in place to increase them. The planning ratings used in these studies should generally always be equally or more restrictive unless there's an upgrade of the facility planned further out which is a justified reason for having a higher rating; this is true for how things are studied under the existing standards and are allowed under these new standards as well via a rationale.	
Brandon Gleason - Electric Reliability Council of Texas, Inc. – 2	
Answer	
Document Name	
Comment	
None.	
Likes 0	
Dislikes 0	
Response	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations	

Answer	
Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	
Jamie Johnson - California ISO – 2	
Answer	
Document Name	
Comment	

In addtion to comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee the CAISO has the following comments:

The SDT proposal to retire FAC-010 and the requirement to establish SOLs and IROLs for the planning horizon appear to be the result of the following two misconceptions:

- The “new” TPL 001-4 standard eliminates the need for developing SOLs and IROLs for the planning horizon, which is incorrect and
- SOLs are not useful for the reliable planning of the BES, which is also incorrect.

TPL 001-4 standard does not replace the need for developing SOLs and IROLs for the planning horizon and eliminate the need for the existing FAC-010 and Requirement R3 and R4 of the existing FAC-014. This is because TPL-001-4 is all about ensuring reliable service to firm load and firm transmission services. It does not require planning entities to stress tranfers on any part of the system to determine its limit. Also, since TPL-001-4 studies do not require stressing the system they are less suited to identifiying contingencies the lead to system instability,

cascading and uncontrolled separation compared to SOL and IROL Studies performed under FAC-014 R3 and R4. Even if, TPL 001-4 studies identify contingencies that lead to such adverse impacts, they would be mitigated, which means there would be no planning contingencies with such adverse impacts. SOLs are useful in the reliable planning of the system. For example, in the Western Interconnection (accepted) path ratings, which California ISO deems to be SOLs and are typically developed in the planning horizon, are used in the reliable planning of the system. In all its studies including the annual reliability assessment and local capacity studies, the CAISO ensures these SOLs are not exceeded. For example, reliability assessments and local capacity studies performed use this SOL information.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT would like to understand specifically what discrepancies are being referred to in order to give a better answer to this question. However, based on what's been provided, the team feels that the only discrepancies from what is done today should result from more conservative facility ratings used in Operations that do not have a corrective action plan in place to increase them. The planning ratings used in these studies should generally always be equally or more restrictive unless there's an upgrade of the facility planned further out which is a justified reason for having a higher rating; this is true for how things are studied under the existing standards and are allowed under these new standards as well via a rationale. R7 is meant to capture and highlight in the Planning Assessment any instance where mitigation measures are used such that they do not hide limitations discovered. How far to stress the system and under what assumptions limitations are found in the planning horizon is something that is unique to each entity and was not part of FAC-010 and currently not part of TPL-001-4. Therefore, the team believes although there could be stronger requirements language to better address the concern, no gap was created in retiring FAC-010.	
Wayne Guttormson - SaskPower – 1	
Answer	
Document Name	
Comment	

Support the MRO-NSRF comments.	
Likes 0	
Dislikes 0	

Response

Thank you for your comment. R3: The SDT assumes you are referring to Operations Planning SOLs. This was a previously existing requirement that was moved. The SDT recognized the potential redundancy with IRO-010, which focuses on data specification and acknowledged that in its rationale document. However, as you've suggested further clarity in the rationale could be beneficial. Regarding your question in 1B, as identified in the rationale document around the proposed R3, the RC should include in their IRO-010 data specification what they need in terms of SOLs for all three categories mentioned and any additional SOL information outside of these categories can be specified under the proposed R3 requirement.

R5.1 R5.2: These existing requirements remain important even without FAC-010 so that Planning entities are aware of where system limitations exist within the Operating Horizon and how planned system changes in the near and long term planning horizon may impact them. Regardless of FAC-010, limitations in these horizons must be tested to determine system performance with the future system in mind. Planning SOL/IROLs as specified in FAC-010 were just a construct representing these limitations that need to be investigated and fully understood under TPL-001-4 and thus FAC-010 (and the construct of Planning based SOL/IROL) could be removed. Furthermore, the models associated with the SOLs and IROLs shared by the RC may or may not be required for consideration of these limitations in the Planning Assessment and would be at the discretion of the Planner of whether to request them through the MOD-32 specification. If required, they will have originated from the TO or GO themselves so provision through the existing channels created in the MOD-32 should not be an issue without the RC's involvement.

R5.3 R5.4: The rationale documentation around R5.3 and R5.4 describes the importance of this requirement is to ensure that the TOP has the value of the corresponding IROL or stability limit for each Operations time horizon. This information is critical to ensuring the TOP and the RC are working together to ensure cascading and uncontrolled separation do not occur. TOP-003-3 is a very non-specific requirement for the TOP and doesn't require the RC to fulfill the obligation to send the TOP IROL/stability information, which is key to maintaining reliable operation across our interconnections.

Kenya Streeter - Edison International - Southern California Edison Company – 6	
Answer	
Document Name	
Comment	
Please see comments submitted by Edison Electric Institute	
Likes 0	
Dislikes 0	
Response	
sean erickson - Western Area Power Administration - 1	
Answer	
Document Name	
Comment	
No. Thank you	
Likes 0	
Dislikes 0	
Response	
Pamalet Mackey - Pamalet Mackey On Behalf of: James Mearns, Pacific Gas and Electric Company, 1, 3, 5; Sandra Ellis, Pacific Gas and Electric Company, 1, 3, 5; - Pamalet Mackey	
Answer	

Document Name	
Comment	
PG&E has no additional comments.	
Likes 0	
Dislikes 0	
Response	
Marco Rios - Pacific Gas and Electric Company - 1	
Answer	
Document Name	
Comment	
PG&E has no additional comments.	
Likes 0	
Dislikes 0	
Response	