

Comment Report

Project Name: Project 2015-09 Establish and Communicate System Operating Limits | FAC-014-3
Comment Period Start Date: 7/14/2016
Comment Period End Date: 8/12/2016
Associated Ballots:

There were 33 sets of responses, including comments from approximately 33 different people from approximately 30 companies representing 8 of the Industry Segments as shown in the table on the following pages.

Questions

1. Do you agree with that the Reliability Coordinator (RC) should have primary responsibility for establishing IROLs for its RC Area? If not, please provide your comments on the appropriate break down of responsibilities (between RC and TOP) in establishing IROLs.

2. The proposed revisions work together with the proposed revisions to the definition of SOL. The new requirement makes clear that the TOP will establish SOLs in accordance with the RC SOL Methodology. This means that the TOP will follow the RC Methodology to determine: applicable Facility Ratings for use in operations (see, proposed FAC-011-4 Requirement R2); applicable steady-state System voltage limits to be used in operations (see, proposed FAC-011-4 Requirement R3); and, the applicable stability limitations, if any, that are to be used in operations (see, proposed FAC-011-4 Requirement R4). Do you believe that it is clear that the TOP must establish SOLs in accordance with what is outlined in the RC Methodology?

3. TOP application of the RC Methodology will always result in identification of the appropriate Facility Ratings and steady-state System voltage limits, however, it may not always result in identification of stability limitations (this is *only if* there are no applicable limitations specific to the TOP). If there are appropriate stability limitations (identified as a result of implementing the RC method for determining the stability limitations in proposed FAC-011-4 Requirement R4), then the TOP will identify these SOLs. Do you believe this is clear from the language of the requirements (both in FAC-14-3 Requirement R2 combined with the proposed revisions to FAC-011)?

4. Do you believe that the RC should be responsible for establishing stability limitations used in operations where more than one TOP is impacted?

5. Do you agree that the RC should be the only entity responsible for providing other entities within its RC Area the established SOLs? If no, do you believe the entity that establishes the SOL (either the RC *or the TOP*) should be the entity that communicates the SOL to other entities? Please explain.

6. With regard to proposed Part 4.1: Do you believe that the language provides sufficient clarity regarding what is required for communicating updates to dynamically updated limits? If not, what language do you propose?

7. With regard to proposed Part 4.1: Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the communications, or should the RC have flexibility in determining what is appropriate for its particular RC Area?

8. Do you agree with the information identified in Parts 5.1 through 5.4? Is there any additional information that the RC should provide regarding IROLs? Are there any additional entities that should be included in this requirement and receive the information from the RC?

9. In consideration of the FERC directive regarding communicating IROL information to the Transmission Owner, do you agree with this proposed new requirement? If not, please explain the basis for why you do not support the proposed requirement, and the alternative language you are proposing to address the issues raised in FERC Order No. 777.

10. Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the

information to the Transmission Owner and Generator Owner?

11. Do you agree that there is a reliability-related need for the RCs and TOPs to obtain the information from the Planning Assessment and Transfer Capability analysis for the purpose of identifying instability risks when establishing SOLs (and IROLs)? Are there other “studies” that are currently performed that should also be included in this communication requirement?

12. Are there additional “studies” or activities that planners should undertake (beyond those currently required in the current standards, including TPL-001-4 and FAC-013-2) to identify instability risks? If so, please describe.

13. With regard to Part 8.3: The SDT believes that the information listed in Part 8.3 is critical for RC and TOP awareness and understanding of the instability risks identified in the planning horizon and the listed mitigation measures employed to address those risks. Do you agree? If not, please explain why you believe it is not critical that the RC and TOP obtain this information from the planning entities?

14. Do you agree that this proposed requirement is appropriately placed in FAC-014, or do you believe the proposed requirement should be placed in another standard (*i.e.*, TPL-001-4 and FAC-013-2)?

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
Independent Electricity System Operator	Ben Li	2	NPCC	ISO/RTO Council Standards Review Committee	Charles Yeung	SPP	2	SPP RE
					Greg Campoli	NYISO	2	NPCC
					Ali Miremadi	CAISO	2	WECC
					Ben Li	IESO	2	NPCC
					Kathleen Goodman	ISO-NE	2	NPCC
					Nathan Bigbee	ERCOT	2	Texas RE
Duke Energy	Colby Bellville	1,3,5,6	FRCC,RF,SERC	Duke Energy	Doug Hills	Duke Energy	1	RF
					Lee Schuster	Duke Energy	3	FRCC
					Dale Goodwine	Duke Energy	5	SERC
					Greg Cecil	Duke Energy	6	RF
ACES Power Marketing	Colleen Campbell	6	NA - Not Applicable	ACES Standards Collaborators	Shari Heino	Brazos Electric Power Cooperative, Inc.	1,5	Texas RE
					Chip Koloini	Golden Spread Electric Cooperative, Inc.	5	SPP RE
					Greg Froehling	Rayburn Country Electric Cooperative	3	SPP RE
					John Shaver	Arizona Electric Power Cooperative, Inc.	1	WECC
					Mike Brytowski	Great River Energy	1,3,5,6	MRO
					Scott Brame	North Carolina Electric Membership Corporation	3,4,5	SERC
					Karl Kohlrus	Prairie Power, Inc.	1,3	SERC
					Paul Mehlhaff	Sunflower Electric Power	1	SPP RE

						Corporation		
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	1	RF
Tennessee Valley Authority	Dennis Chastain	1,3,5,6	SERC	Tennessee Valley Authority	DeWayne Scott	Tennessee Valley Authority	1	SERC
					Ian Grant	Tennessee Valley Authority	3	SERC
					Brandy Spraker	Tennessee Valley Authority	5	SERC
					Marjorie Parsons	Tennessee Valley Authority	6	SERC
Seattle City Light	Ginette Lacasse	1,3,4,5,6	WECC	Seattle City Light Ballot Body	Pawel Krupa	Seattle City Light	1	WECC
					Dana Wheelock	Seattle City Light	3	WECC
					Hao Li	Seattle City Light	4	WECC
					Bud (Charles) Freeman	Seattle City Light	6	WECC
					Mike haynes	Seattle City Light	5	WECC
					Michael Watkins	Seattle City Light	1,3,4	WECC
					Faz Kasraie	Seattle City Light	5	WECC
					John Clark	Seattle City Light	6	WECC
Lower Colorado River Authority	Michael Shaw	1,5,6		LCRA Compliance	Teresa Cantwell	LCRA	1	Texas RE
					Dixie Wells	LCRA	5	Texas RE
					Michael Shaw	LCRA	6	Texas RE
Northeast Power Coordinating	Ruida Shu	1,2,3,4,5,6,7,10	NPCC	RSC no Con Edison and ISO-NE	Paul Malozewski	Hydro One.	1	NPCC
					Guy Zito	Northeast Power	NA - Not Applicable	NPCC

Council						Coordinating Council		
					Mark J. Kenny	Eversource Energy	1	NPCC
					Gregory A. Campoli	NY-ISO	2	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Wayne Sipperly	New York Power Authority	4	NPCC
					David Ramkalawan	Ontario Power Generation	4	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Brian Robinson	Utility Services	5	NPCC
					Bruce Metruck	New York Power Authority	6	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					Edward Bedder	Orange & Rockland Utilities	1	NPCC
					David Burke	UI	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Sylvain Clermont	Hydro Quebec	1	NPCC
					Si Truc Phan	Hydro Quebec	2	NPCC
					Sean Bodkin	Dominion	4	NPCC
					Silvia Parada Mitchell	NextEra Energy	4	NPCC
					Helen Lainis	IESO	2	NPCC
					Laura Mcleod	NB Power	1	NPCC
					Brian Shanahan	National Grid	1	NPCC
				Michael Jones	National Grid	3	NPCC	
Southwest Power Pool, Inc. (RTO)	Shannon Mickens	2	SPP RE	SPP Standards Review Group	Shannon Mickens	Southwest Power Pool Inc.	2	SPP RE

					John Allen	City of Utilities of Springfield, MO	1,4	SPP RE
					Ron Losh	Southwest Power Pool Inc.	2	SPP RE
					Jim Nail	Independence Power and Light	3	SPP RE
					Robert Hirschak	Cleco	1,3,5,6	SPP RE
Lower Colorado River Authority	Teresa Cantwell	1,5,6		LCRA Compliance	Michael Shaw	LCRA	6	Texas RE
					Dixie Wells	LCRA	5	Texas RE
					Teresa Cantwell	LCRA	1	Texas RE

1. Do you agree with that the Reliability Coordinator (RC) should have primary responsibility for establishing IROLs for its RC Area? If not, please provide your comments on the appropriate break down of responsibilities (between RC and TOP) in establishing IROLs.

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

Duke Energy disagrees that the RC should solely be responsible for establishing IROLs. The TOP is and should be involved in the establishment of IROLs as well as the RC from a practical standpoint as well as a defense in depth standpoint. Multiple function having the ability or responsibility to communicate an IROL as needed provides an extra layer of defense to defend the reliability of the BES. We suggest the drafting team revise the language of R1 to provide for a collaboration between the RC and TOP in the establishment of IROL(s).

Likes 0

Dislikes 0

Response

Gregory Campoli - New York Independent System Operator - 2

Answer No

Document Name

Comment

We should provide an option where the TOP may determine an IROL based on following the RC Methodology. We don't believe IROL's are the sole responsibility of the RC. There may be TOP's that have local problems that could have a wide area impact.

Likes 0

Dislikes 0

Response

Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee

Answer No

Document Name

Comment

We propose that the RC and the TOP both should have responsibilities for establishing IROLs, for their footprint, depending on the nature and impact of the limit. They will also be required to communicate and coordinate so that everyone is aware of the IROL's and that we

operate to the most limiting condition.

Note: ERCOT and CAISO do not support the above comment.

Likes 0

Dislikes 0

Response

GINETTE LACASSE - SEATTLE CITY LIGHT - 1,3,4,5,6 - WECC, GROUP NAME SEATTLE CITY LIGHT BALLOT BODY

Answer

Yes

Document Name

Comment

NOTE: The answers to questions 1 - 14 are from our City Light SMEs

No comment for 1.

Likes 0

Dislikes 0

Response

JASON SMITH - SOUTHWEST POWER POOL, INC. (RTO) - 2 - MRO, WECC, SPP RE

Answer

Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]

Likes 0

Dislikes 0

Response

SARAH GASIENICA - NISOURCE - NORTHERN INDIANA PUBLIC SERVICE CO. - 1,3,5,6

Answer

Yes

Document Name	
Comment	
We agree that the RC should have the primary responsibility for establishing IROLs, but believe that IROL should be established with input from the TOP and respecting TOP system operating limits.	
Likes 0	
Dislikes 0	
Response	
Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators	
Answer	Yes
Document Name	
Comment	
1. We appreciate the clarified responsibility for compliance. The RC should have as part of their process for establishment verification or validation of IROL's and the data from the TO or TOP's who are involved in the IROL.	
Likes 0	
Dislikes 0	
Response	
Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC	
Answer	Yes
Document Name	
Comment	
In some instances it may be relevant for the TOP to be involved in establishing an IROL.	
Likes 0	
Dislikes 0	
Response	
Aaron Staley - Orlando Utilities Commission - 1 - FRCC	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name Tennessee Valley Authority	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response**Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Leonard Kula - Independent Electricity System Operator - 2****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC**Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

Response**Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

Response**Terry Bilke - Midcontinent ISO, Inc. - 2****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

Response**Rachel Coyne - Texas Reliability Entity, Inc. - 10****Answer****Document Name****Comment**

To be clear the PC and TP should coordinate with RCs when IROLS are identified in the planning horizon and the RC should coordinate with the PC

and TP when IROLs are discovered in the operations horizon. The methodologies must be compatible so IROLs discovered in the long term look can be accommodated by the PC/TP process and be made known to the RC and vice-versa. With regards to TOPs, the TOPs should establish the IROLs within their Areas which should be confirmed with the RC review and the RC may have to develop IROLs that encompass more than one TOP asset. The TOP should establish IROLs per the RC methodology.

Likes 0

Dislikes 0

Response

2. The proposed revisions work together with the proposed revisions to the definition of SOL. The new requirement makes clear that the TOP will establish SOLs in accordance with the RC SOL Methodology. This means that the TOP will follow the RC Methodology to determine: applicable Facility Ratings for use in operations (see, proposed FAC-011-4 Requirement R2); applicable steady-state System voltage limits to be used in operations (see, proposed FAC-011-4 Requirement R3); and, the applicable stability limitations, if any, that are to be used in operations (see, proposed FAC-011-4 Requirement R4). Do you believe that it is clear that the TOP must establish SOLs in accordance with what is outlined in the RC Methodology?

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team. Additionally, we don't believe that every facility limit is an SOL nor is reaching a normal rating of a facility is an SOL exceedance. A different term is needed for this.

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer No

Document Name

Comment

No, the language is not entirely clear. It is not clear how IROLs fit in, nor does it address how the RC must be able to identify SOLs over a broader area than a TOP. It is an assumption that this will work with the revised SOL definition but "reliability limits" may be broader than a TOP can actually review and determine. Texas RE recommends SOLs and IROLs be identified in the planning horizon to be properly managed prior to the operations horizon.

The proposed language specifies the TOP will establish SOLs "consistent with" the RC's methodology. Texas RE recommends using the phrase "in accordance with" to ensure the TOPs do what the RC Methodology says, rather than just perform actions that do not conflict with the RC methodology.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer No

Document Name**Comment**

Because of the need to refer to FAC-011-4, FAC-011-4 and FAC-014-3 should be combined into one standard. Requirement R2 makes it clear that the Transmission Operator must establish IROLs, but as we commented on FAC-011-4, the owner of the equipment needs to be involved with the development of Facility Ratings. That will have to be considered in the applicability of FAC-014-3.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer

No

Document Name**Comment**

Duke Energy requests clarification from the drafting team that this requirement does not infringe or conflict with FAC-008. As written, it could be interpreted that the RC would have some amount of leverage over an entity's own FAC-008 methodology. If that is the intent of the drafting team, we cannot agree with this approach. We do not believe the RC should have leverage or the ability to change/impact an entity's FAC-008 methodology.

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer

No

Document Name**Comment**

We disagree that the RC should be allowed to determine the Facility Ratings that are used in operations. Facility owners should decide what kind of equipment risk (i.e. loss of life) they are willing to take in operating their facilities. These assumptions are rolled in to the facility rating methodology. It is not appropriate to take this away from the facility owners.

Likes 0

Dislikes 0

Response

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

Answer	No
Document Name	
Comment	
It isn't clear if the Reliability Coordinator or the TOP will identify the stability limitations described in FAC-011 R4 and therefore by requiring the TOP to establish SOLs in FAC-014 R2, it doesn't ensure the TOP is identifying the stability limitations. This is especially true if the RC thinks the stability limitation is an SOL but the TOP thinks the stability limitation is an IROL, this may leave a gap where neither entity identifies the stability limitation.	
Likes 0	
Dislikes 0	
Response	
Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee	
Answer	Yes
Document Name	
Comment	
Note: ERCOT does not support the above comment.	
Likes 0	
Dislikes 0	
Response	
Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
BPA agrees with R2, as it is a clear requirement and allows flexibility.	
Likes 0	
Dislikes 0	
Response	
Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC	
Answer	Yes

Document Name**Comment**

Considering the structure and scope of the new standards, we suggest that the SDT consider merging FAC-011 and FAC-014 in a single standard. If the standards are not merged, the purpose of FAC-014-2 should be modified to reflect the title of the standards and its requirements. E.g. To ensure SOLs are established and communicated to the relevant entities.

Likes 0

Dislikes 0

Response**Jared Shakespeare - Peak Reliability - 1 - WECC****Answer**

Yes

Document Name**Comment**

The SDT might consider including the preface to question 2 in a technical guidelines section of FAC-011 to clarify expectations.

Likes 0

Dislikes 0

Response**Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators****Answer**

Yes

Document Name**Comment**

1. The requirement is clear that the TOP must establish SOL's in accordance with what is outlined in the RC Methodology. One item to consider is that flexibility must be allowed for the TOP to place stricter limitation where local sensitivities may require individual differences with the RC's Methodology.

Likes 0

Dislikes 0

Response**Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE**

Answer	Yes
Document Name	
Comment	
[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Very clear.	
Likes 0	
Dislikes 0	
Response	
Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body	
Answer	Yes
Document Name	
Comment	
No comments	
Likes 0	
Dislikes 0	
Response	
Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance	
Answer	Yes
Document Name	

Comment

Likes 0

Dislikes 0

Response**Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Gregory Campoli - New York Independent System Operator - 2****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer	Yes
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Document Name	
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Comment	
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Likes 0	
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Dislikes 0	
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Response	
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Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer	Yes
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Document Name	
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Comment	
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Likes 0	
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Dislikes 0	
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Response	
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Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer	Yes
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Document Name	
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Comment	
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Likes 0	
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Dislikes 0	
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Response	
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3. TOP application of the RC Methodology will always result in identification of the appropriate Facility Ratings and steady-state System voltage limits, however, it may not always result in identification of stability limitations (this is *only if* there are no applicable limitations specific to the TOP). If there are appropriate stability limitations (identified as a result of implementing the RC method for determining the stability limitations in proposed FAC-011-4 Requirement R4), then the TOP will identify these SOLs. Do you believe this is clear from the language of the requirements (both in FAC-14-3 Requirement R2 combined with the proposed revisions to FAC-011)?

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

Answer No

Document Name

Comment

It isn't clear if the Reliability Coordinator or the TOP will identify the stability limitations described in FAC-011 R4 and therefore by requiring the TOP to establish SOLs in FAC-014 R2, it doesn't ensure the TOP is identifying the stability limitations. This is especially true if the RC thinks the stability limitation is an SOL but the TOP thinks the stability limitation is an IROL, this may leave a gap where neither entity identifies the stability limitation.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer No

Document Name

Comment

We support SPP RTO comments.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer No

Document Name

Comment

The statement that TOP application of the RC Methodology will always result in identification of the appropriate Facility Ratings and steady-state System voltage limits is incorrect. It assumes that the RC Methodology is complete and comprehensive. Qualifying all results will be accurate based upon on the use of RC Methodology may not always be true. It is clear that if the RC Methodology is used that the TOP is in

compliance, but not that the results will always be 100% accurate or complete.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer

No

Document Name

Comment

No, we do not think the expectations are clear based on the language proposed. We believe that the proposed language makes the issue somewhat confusing. The requirement should more simply outline responsibilities and expectations. An entity is expected to operate within its facility limits, if stability limitations are present, this would rise to the categorization level of an SOL. From this point, the determination of an IROL may be ascertained.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer

No

Document Name

Comment

Because of the need to refer to FAC-011-4, FAC-011-4 and FAC-014-3 should be combined into standard.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer

No

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] It is not clear, based on the definition of SOL exceedance whether an entity is required

to have online (vs offline) stability analysis capabilities. Also, the way the definition is worded could also lead an entity to interpret that they HAVE to identify stability limitations (stress till it breaks).

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

No

Document Name

Comment

It is not clear, based on the definition of SOL exceedance whether an entity is required to have online (vs offline) stability analysis capabilities. Also, the way the definition is worded could also lead an entity to interpret that they HAVE to identify stability limitations (stress till it breaks).

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

No

Document Name

Comment

1. It is not clear, based on the definition of SOL exceedance whether an entity is required to have online (vs offline) stability analysis capabilities. Also, the way the definition is worded could also lead an entity to interpret that they HAVE to identify stability limitations (stress till it breaks?).

Likes 0

Dislikes 0

Response

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer

No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer

Yes

Document Name

Comment

“Yes” I believe this requirement, in conjunction with the new definition of SOL, make it clear that a TOP must include transient stability limits and voltage stability limits when determining SOL’s.

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

FAC-011-4 R4 requires the RC to include stability in its SOL methodology, so TOP implementation of the RC methodology should pick up stability SOLs.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

Yes

Document Name

Comment

We believe the intent to calculate SOLs that are restricted by stability limitations are clear from the language of the requirements (both in

FAC-14-3 Requirement R2 combined with the proposed revisions to FAC-011).

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

The SDT might consider including the preface to question 3 in a technical guidelines section of FAC-011 to clarify expectations.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer

Yes

Document Name

Comment

It would be much clearer if the requirements from both standards were merged in a single standard.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Holman - PJM Interconnection, L.L.C. - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

4. Do you believe that the RC should be responsible for establishing stability limitations used in operations where more than one TOP is impacted?

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

BPA believes the RC should not be responsible for establishing stability limitations, except when a limit has been established as an IROL.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

No, we do not believe the RC should be responsible for establishing stability limitations even when more than one TOP is impacted. We do not believe that all RCs throughout all of the Interconnections regularly perform stability studies, or are even set up to perform these studies at all. We believe that coordination should take place between impacted TOPs prior to being relayed to the RC.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer No

Document Name

Comment

The stability limitations should be jointly developed by the impacted Transmission Owners. The RC may not have the expertise to develop stability limitations for all areas of its system.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer Yes

Document Name

Comment

1. The RC SOL Methodology will include instability criteria, as such it would make sense that the RC review all stability limitation determined by the TOP to eliminate all stability limitations from being possible IROL's instead of just those involving more than one TOP.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer Yes

Document Name

Comment

In the planning horizon, the PC should also be responsible for establishing stability limitations used in operations where more than one TOP is impacted.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Yes, we agree, but that's already achieved by the RC developing IROLs, which can be restricted by stability limitations.

As such, we do not believe R3 in FAC-014-3 is needed given that the RC is required to develop IROLs and the TOP for SOLs combined with the proposed revised definition of SOL (with our suggested wording change indicated in the FAC-011 Comment Form), whose determination must meet acceptable BES performance with respect to Facility rating, System voltage limits, and stability limitations. System limitations are a measure or a restriction which needs to be respected in assessing BES performance, but itself not an SOL or IROL. However, by virtue of developing SOLs and IROLs that simultaneously satisfy all three restrictions (Facility Rating, System voltage limits and stability limitations), the BES is deemed to be reliable if operated within these limits.

While we concur with the SDT that “not all stability limitations are automatically IROLs” and that “there may be instances of local, contained instability that are not appropriately designated an IROL”, SOLs that have local impact only are also developed respecting stability limitations. With the TOP establishing stability limitation SOLs and the RC establishing stability limitation IROLs, we do not see a reliability gap and are unable to identify what other stability limitations may exist that could impact more than one TOP in an RC Area that are not already covered by IROLs.

In brief, we believe the determination of SOLs and IROLs should be governed by the follow basic principles:

1. The RC develops the SOL and IROL calculation methodologies considering the restrictions imposed by/performance criteria for Facility Rating, System voltage limits and stability limitations, along with the scope of single and multiple contingencies to be observed and the acceptable BES performance.
2. The RC develop the method and criteria for establishing IROLs;
3. The TOP calculates SOLs, which have local area impact;
4. The RC calculates IROLs, which have impacts on more than one TOP areas.

We suggest the SDT to develop the FAC standards based on the above basic principles as opposed to trying to find holes in them and propose requirements that are duplicative or unnecessary. (please see our argument that stability limitations are not IROLs in the FAC-011 Comment Form).

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name

Comment

The RC should work with the TOP in a collaborative and coordinated process to address/establish stability limits and particularly when more than one TOP is impacted. The RC may also need to work with another RC when stability issues are identified on the seams.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

AZPS believes the RC should be responsible for establishing stability limitations used in operations where more than one TOP is impacted, unless another established agreement is in place between the affected TOPs which clearly defines the party responsible for establishing stability limitations.

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

There seems to be a gap in the requirements for instances where there is a stability limit between two TOPs with different RCs.

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

We agree with and fully support the fundamental concept that not all stability limitations are automatically "IROLs."

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer Yes

Document Name

Comment

Yes. If a TOP establishes a lower SOL for any reason, the neighboring TOP should be forced to use the most restrictive SOL. The RC is the appropriate entity to study and enforce these situations. It may be helpful to clarify that TOP studies will feed into this process, rather than being the sole responsibility of the RC (if this is so).

Likes 0

Dislikes 0

Response

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Tammy Porter - Oncor Electric Delivery - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Gregory Campoli - New York Independent System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Holman - PJM Interconnection, L.L.C. - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Jared Shakespeare - Peak Reliability - 1 - WECC	
Answer	
Document Name	
Comment	
<p>Peak supports this concept that RCs should collaborate with TOPs in the establishment of stability limitations where more than one TOP is impacted; however, a potential unintended negative consequence of the language as proposed is that TOP-to-TOP coordination, collaboration, and communication could be diminished. TOPs that might have otherwise been working collaboratively with neighboring entities might use the language in proposed R3 as a justification for “lowering the bar”, potentially creating a TOP mindset that says, “It’s not my responsibility – it’s the RC’s responsibility – so, I no longer need to work with my TOP neighbor in addressing these stability limitations.” The language should not serve as an enabler for lowering reliability the bar.</p>	
Likes 0	
Dislikes 0	
Response	

5. Do you agree that the RC should be the only entity responsible for providing other entities within its RC Area the established SOLs? If no, do you believe the entity that establishes the SOL (either the RC or the TOP) should be the entity that communicates the SOL to other entities? Please explain.

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer No

Document Name

Comment

No. If TOPs are individually responsible for determining their SOL's, then they should be responsible for communicating them when they change. The RC should be responsible for determining and communicating IROL's and SOLs that impact more than one TOP including the SOLs of all the tie-lines between TOPs.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

The RC should be the primary entity responsible for providing other entities with the established SOLs, but TOPs should exchange SOLs with each other if requested or the need arises.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

No, we do not agree that the RC should be the only entity responsible for providing other entities within the RC Area the established SOLs. It is not clear to us why relaying this information should lie solely with the RC. We believe the TOP should be allowed to relay this information to let other entities know if they will be impacted by the SOL. We understand that even if a TOP were to communicate this information with other impacted entities, the RC would still need to be notified as well. To allow for flexibility of multiple avenues of communication as well as allowing for the RC to be notified, we

suggest the drafting team consider the following:

“ Each Reliability Coordinator shall ensure that SOLs in its RC Area are provided to adjacent Reliability Coordinators within an Interconnection...”

The above language and the use of the term “ensure” makes certain that the information is relayed appropriately, but allows for flexibility in who shall relay said information.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

No

Document Name

Comment

We believe the entities that develop the SOLs (the TOPs) should be responsible for providing other entities within its RC Area the established SOLs. This is in line with the RC developing IROLs and TOP developing SOLs.

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

No

Document Name

Comment

WAPA's concern that this interpretation would hamper TOP-to-TOP communication and timing, e.g. Seasonal Studies usually have a few old facility ratings that are identified and this information is required well before the RC needs it.

Also it conflicts with TOP-003-3 R3 & R5 and could be duplicative of IRO-010-2.

WAPA does believe that the RC should be the “clearing house” for SOL information (among other things) come Day 0-1.

Likes 0

Dislikes 0

Response

Gregory Campoli - New York Independent System Operator - 2

Answer No

Document Name

Comment

We believe the entities that develop the SOLs (the TOPs) should be responsible for providing other entities within its RC Area the established SOLs. This is in line with the RC developing IROLs and TOP developing SOLs

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer Yes

Document Name

Comment

The standard should (and does) establish that the RC is responsible for communicating all the SOL values. However the wording in FAC 14 R4 is unclear. Which parties does the RC provide data automatically? Which parties do they only have to provide data to upon request? Why is the TSP only able to get SOLs for just it's TOP?

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name

Comment

We believe that any SOL developed by the TOP should be reviewed by the RC before communicating to other entities.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

The RC should be responsible but may not necessarily be the entity that establishes the SOL. TOPs may establish SOLs but the RC has the responsibility to review, approve, and disseminate the SOL..

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer Yes

Document Name

Comment

The RC should also provide SOLs to RCs outside of its interconnection.

Texas RE is concerned with the use of the phrase "reliability-related need" as it is subjective and will be difficult to determine. Texas RE sees no harm in removing this phrase so the RC must provide the information when asked by Transmission Operators, Transmission Planners, and Planning Coordinators within its Reliability Coordinator Area.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] It will make the communication more consistent in the long run if all entities know that the RC will be the one communicating the information. However, we request that in order to avoid making this requirement an administrative nightmare, the requirement should be restated to require the RC to make changes to SOLs 'available' rather than requiring them to demonstrate communication (which also requires proof of receipt). The unintended consequence of the requirement as proposed is that the RC now has to maintain and validate

constantly the list of entities who need this information. TOPs, other RC's, and other entities who need the data, also share in the obligation to make sure they get it. Putting it solely on the RC to communicate it, removes any obligation from other entities to make sure they have the SOL information they need. Additional Rationale may be needed to further explain this.

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Yes

Document Name

Comment

It will make the communication more consistent in the long run if all entities know that the RC will be the one communicating the information.

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

Yes, but we believe that the requirement should be modified to say "Each Reliability Coordinator shall provide the SOLs for its RC Area to adjacent Reliability Coordinators within an Interconnection and Reliability Coordinators, Transmission Operators, Transmission Planners, and Planning Coordinators who request and indicate a reliability-related need for those limits, and to the Transmission Operators, Transmission Planners, and Planning Coordinators within its Reliability Coordinator Area."

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

Yes

Document Name

Comment

1. Placing this requirement on the RC level would drive consistencies in SOL's across the Interconnection and provide better coordination for TOP's located near RC area borders. It would also improve the Data communication requirements established within the IRO-010 and TOP-003 requirements.
2. Editorial comment: In the 'Explanation of Proposed Revision' column, change "TC" to RC.

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

Peak supports the concept of the RC serving as the data source for SOLs (per the revised SOL definition). This is a cleaner and simpler model than each SOL establisher communicating SOLs with other entities that need them.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer

Yes

Document Name

Comment

Yes, the RC should have this responsibility.

However, we consider that the standard gives a simplified picture of the complexity of communicating an SOL. For example, an SOL is not a static value : it can depend on many factors and evolve through time. We store (and calculate) SOLs in a complex EMS application. The information can be difficult to extract and even once communicated, difficult to interpret by the receiving entity. Some guidance around expectations for this communicated SOL should be circulated for comment in a future draft.

The above problem is compounded if, as the requirement implies, an entity will receive all established SOLs. Since an entity is probably only interested in the SOLs that can affect it and does not wish to be submerged by all existing SOLs in the RC area and communicating all SOLs to all entities distributes sensitive information more broadly than necessary to support reliability, we propose limiting the required distribution of SOLs, perhaps "Each RC shall provide SOLs for its RC Area **that may impact the other entity** (...)" or alternatively "Each RC shall provide SOLs for its RC Area to entities **that have a reliability-related need** (...)"

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

BPA agrees with the intent of R4. However, we feel it is still important for the TOPs to be required to communicate, coordinate and share its SOLs to neighboring or impacted TOPs.

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Terry Bllke - Midcontinent ISO, Inc. - 2

Answer

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

6. With regard to proposed Part 4.1: Do you believe that the language provides sufficient clarity regarding what is required for communicating updates to dynamically updated limits? If not, what language do you propose?

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer No

Document Name

Comment

The 4.1 sub-requirement seems redundant and unnecessary. The SDT should consider rewording R4 in a single part. Other suggestions: "Each RC shall provide any updates to the SOL values established dynamically or offline (...)" Since the SOLs provided in R4.1 may include IROLs, is it possible that the corresponding Tv may also have been updated. Thus: "Each RC shall provide any updates to the SOL values and corresponding Tv if applicable (...)"

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer No

Document Name

Comment

Though Peak agrees with the concept, it is difficult to glean the proper understanding of R4.1 without the explanation provided. Peak suggest crafting language that more clearly conveys the expectation. The SDT should also consider clarifying these expectations in a technical guidelines section of FAC-014.

Likes 0

Dislikes 0

Response

Gregory Campoli - New York Independent System Operator - 2

Answer No

Document Name

Comment

Part 4.1 needs to be revised if R4 is changed such that the TOP is responsible for communicating SOLs to others. Wrt what is required for communicating updates to dynamically updated limits, we are unable to answer that part since Part 4.1 makes references to R1 and R3 is, neither of which have anything to do with SOLs.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer No

Document Name

Comment

1. With the way Requirement R4 is written, it is not clear if a dynamically determined Facility Rating (that is telemetered in real-time for example) is required to be communicated (in Real-time?) to the TP and PC also. There may be value in requiring that information be provided to the TP and PC (such as the range of dynamically determined values experienced); it is not clear what needs to be provided.

2. We suggest adding some tie to the IRO-010 and TOP-003 Standards such as "4.1 The Reliability Coordinators shall provide any updates to the SOL values established as part of Requirement R1 or Requirement R3 to impacted TOPs in its Reliability Coordinators Area in a mutually agreeable periodicity and format as stated in the Reliability Data Specifications established in IRO-010 and TOP-003."

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer No

Document Name

Comment

With the way R4 is written, it is not clear if a dynamically determined Facility Rating (that is telemetered in real-time for example) is required to be communicated (in real time?) to the TP and PC also. There may be value in requiring that information to be provided to the TP and PC (such as the range of dynamically determined values experienced), however it is not clear what needs to be provided.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer

No

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] With the way R4 is written, it is not clear if a dynamically determined Facility Rating (that is telemetered in real-time for example) change is required to be communicated (in real time?) to the TP and PC also. There may be value in requiring that information to be provided to the TP and PC (such as the range of dynamically determined values experienced), however it is not clear what needs to be provided.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

No

Document Name

Comment

Part 4.1 needs to be revised if R4 is changed such that the TOP is responsible for communicating SOLs to others. Wrt what is required for communicating updates to dynamically updated limits, we are unable to answer that part since Part 4.1 makes references to R1 and R3 is, neither of which have anything to do with SOLs.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer

No

Document Name**Comment**

Because of the importance of operating to SOLs, the time to communicate updates needs to be specified. Propose the following wording to Part 4.1:

The Reliability Coordinators shall provide any updates to the SOL values that affect System Operating Limits established as part of Requirement R1 or Requirement R3 to impacted TOPs in its Reliability Coordinator Area within 15 (fifteen) minutes of being calculated.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer

No

Document Name**Comment**

No, we do not believe the language provides sufficient clarity regarding what is required for communicating updates to dynamically updated limits. It is unclear what the drafting team means by dynamically updated limits. The term dynamically updated limits does not appear in the requirement, and it is not very clear on what this alludes to. Also, we are unsure of the necessity of Part 4.1. We believe that this may already be accomplished via the IRO and TOP standards.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer

No

Document Name**Comment**

Support SPP RTO Comments.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

When SOLs are communicated, it must also be communicated how those SOLs are to be used, e.g. time limits associated with each rating, temperatures associated with each rating, whether ratings can be interpolated between temperatures, etc..

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer No

Document Name

Comment

No. Dynamically determined facility ratings are not mentioned at all in the language, so I'm not sure how it provides any clarity. Entities that use dynamically determined ratings should be required to effectively communicate those ratings in real time to the RC and all effected entities. Those entities should be required to fully implement an operating agreement specifying the use of Dynamic ratings with adjacent TOPs before they can be used in the Planning Horizon or Operating Horizon.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer No

Document Name

Comment

Why does Part FAC 14 part 4.1 not cover TOP ratings provided in FAC 14 R7?

Shouldn't FAC 14 R7 include language similar to FAC 14 Part 4.1 regarding regular updates, format, and periodicity of updates? This does not preclude the TOP from providing the information to someone, but the standard responsibility should be on the RC who gathers all the SOLs from all the TOPs.

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

Yes

Document Name

Comment

TOP-to-TOP communications are addressed in TOP-003-3 R3 & R5

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer	Yes
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Document Name	
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Comment	
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Likes	0
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Dislikes	0
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Response	
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Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer	Yes
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Document Name	
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Comment	
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Likes	0
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Dislikes	0
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Response	
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Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer	Yes
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Document Name	
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Comment	
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Likes	0
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Dislikes	0
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Response	
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Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer	
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Document Name	
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Comment	
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Texas RE is concerned there is no guidance on how "impacted" TOPs are determined.

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer

Document Name

Comment

The question is not clear. What are dynamically updated limits?

Likes 0

Dislikes 0

Response

7. With regard to proposed Part 4.1: Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the communications, or should the RC have flexibility in determining what is appropriate for its particular RC Area?

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer No

Document Name

Comment

The RC should have the flexibility.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

The RC should have flexibility in determining what is appropriate for its particular RC Area. The time frame of the communications could be outlined in the RC SOL methodology. RCs may just provide TOPs with access to a RC area ratings database instead of providing communications, it may be worth looking into if this type of communication would be acceptable or if notification of ratings changes is what the standard drafting team is looking for. For large RC areas with a large number of TOPs these notifications could become numerous for the TOPs and contain information they don't care about.

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer No

Document Name

Comment

RC should have flexibility.

Likes 0

Dislikes 0

Response

Andrew Puzstai - American Transmission Company, LLC - 1

Answer No

Document Name

Comment

The statement of “mutually agreeable periodicity and format” allows flexibility, but also ensures that TOPs receive the needed information when needed.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer No

Document Name

Comment

Support SPP RTO Comments.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

No, we do not believe that a specific timeframe is necessary for when the RC must provide these communications. We agree that the RC should be afforded the flexibility of determining what is appropriate for its particular RC Area.

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer No

Document Name

Comment

The RC and the mutually agreeable party should retain the flexibility around this exchange. If the concept of “minimum acceptable time” around such communications were to be included, it would be best to have that as a requirement that should be established and/or defined within, or ancillary to, the RC’s Methodology.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] We agree that the RC should communicate updates as soon as possible in order to facilitate accurate OPAs and RTAs; however the nature of the updates may not always be time sensitive. For example an update to an SOL that may be effective at a future date. It may be difficult to set a minimum acceptable time in the standard to cover all the various types of updates that may be received. Including a timeframe may result in a requirement that is too prescriptive and would result in requiring a specific means of exchanging information in order to meet the requirement. The RC could describe the method and timeframe within its data exchange documents in IRO-010.

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer No

Document Name

Comment

We agree that the RC should communicate updates as soon as possible in order to facilitate accurate OPAs and RTAs; however the nature of the updates may not always be time sensitive. For example an update to an SOL that may be effective at a future date. It may be difficult to set a minimum acceptable time in the standard to cover all the various types of updates that may be received. Including a timeframe may result in a requirement that is too prescriptive and would result in requiring a specific means of exchanging information in order to meet the requirement. The RC could describe the

method and timeframe within its data exchange documents in IRO-010.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

No

Document Name

Comment

1. We agree that the RC should communicate updates as soon as possible in order to facilitate accurate OPAs and RTAs; however the nature of the updates may not always be time sensitive. For example, an update to an SOL that may be effective at a future date. It may be difficult to set a minimum acceptable time in the standard to cover all the various types of updates that may be received.
2. Including a timeframe may result in a requirement that is too prescriptive and would result in requiring a specific means of exchanging information in order to meet the requirement. The RC could describe the method and timeframe within its data exchange documents in IRO-010.
3. If tied back to the IRO-010 and TOP-003 the timeframe should be the mutually agreed to timeframes between the different functional entities.

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer

No

Document Name

Comment

RC should have flexibility in coordination with TOPs in determining what is appropriate for its particular RC area.

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

No

Document Name

Comment

RC should have flexibility in determining what timeframe is appropriate for its area.

Likes 0

Dislikes 0

Response**Jared Shakespeare - Peak Reliability - 1 - WECC**

Answer

No

Document Name

Comment

Peak believes a timeframe specification is not necessary for reliability.

Likes 0

Dislikes 0

Response**Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC**

Answer

No

Document Name

Comment

BPA believes the RC should have flexibility in determining what is appropriate for its RC area.

Likes 0

Dislikes 0

Response**Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance**

Answer

No

Document Name

Comment

RC should have flexibility in determining what timeframe is appropriate for its area.

Likes 0

Dislikes 0

Response

Terry BIlke - Midcontinent ISO, Inc. - 2

Answer

No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

RC should have the flexibility to provide more often updates as necessary but there should be a minimum of one update every year.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

There should be a hard limit for providing the communication to provide for reliable operation of the BPS. One suggested timeframe would be 30 minutes. This would provide the RC ample time to disseminate the communication and ensure it has been received.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer Yes

Document Name

Comment

See the response to Question 6.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

R4 needs to be revised if R3 is changed such that the TOP is responsible for communicating SOLs to others. Wrt time frame, there should be a specific time for such communications since this information is needed by all parties prior to implementing any new or revised SOLs.

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer Yes

Document Name

Comment

Any time a stability limit is identified by a TOP, specifically when the limitation impacts more than one TOP, the RC should immediately notify all impacted TOPs.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

“in a mutually agreeable periodicity and format.” seems appropriate to consider the particular needs of each TOP as inputs to define the timeframe.

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gregory Campoli - New York Independent System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer

Document Name

Comment

Flexibility seems appropriate.

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

Document Name

Comment

We support allowing the RC the flexibility and discretion to determine what is appropriate for its RC Area.

Likes 0

Dislikes 0

Response

8. Do you agree with the information identified in Parts 5.1 through 5.4? Is there any additional information that the RC should provide regarding IROLs? Are there any additional entities that should be included in this requirement and receive the information from the RC?

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

I am concerned with the word "critical" in 5.1 – is "pertinent" more appropriate? Also, items 5.1-5.4 should be the minimum and this should not preclude providing additional information about the IROL that the RC and affected entities feel is necessary.

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

I am concerned with the word "critical" in 5.1 – is "pertinent" more appropriate? Also, items 5.1-5.4 should be the minimum and this should not preclude providing additional information about the IROL that the RC and affected entities feel is necessary.

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer No

Document Name

Comment

- Q8.1 Yes, PJM agrees with the information provided in Parts 5.1 – 5.4.
- Q8.2 No, PJM doesn't feel the Standard needs a further requirement around IROL derivation.
- Q8.3 Yes, impacted neighboring TOPs are other potential recipients.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer No

Document Name

Comment

The only information that needs to be provided are Part 5.2 (IROL and IROL Tv), and Part 5.4 (IROL type). Parts 5.1 and 5.3 only need to be known internally to the RC.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer No

Document Name

Comment

The term "Facilities that are critical to derivation of IROL" is not clear. Does it refer to substation as a whole or the elements in the substations? It would be more appropriate to use the word "elements" since IROL is related to specific contingency causing problems on specific elements.

Likes 0

Dislikes 0

Response

Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee

Answer Yes

Document Name

Comment

Information similar to that provided in Parts 5.1 to 5.4 should also be specified in Requirement R4 for communicating SOLs/ (i.e. those entities that need to know the SOL should also be provided the related information, or else they don't need the SOLs to begin with).

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

BPA agrees that the information in Parts 5.1 through 5.4 is adequate. The RC should communicate its IROLs to BAs in its RC footprint.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

In 5.2, the term "value" does not seem appropriate. The value of the IROL is only relevant for a specific system condition. The IROL calculation method that includes the IROL values for various System conditions should be shared when [\[GM1\]](#) appropriate.

We note that R5 and R4 are highly redundant in structure. Since we argue for a rewrite of R4 in the previous questions, we suggest that R4 and R5 could be combined, and a sub requirement of R4 drafted to address SOLs that are IROLs have an additional series of content requirements as per the actual subrequirements of 5.

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

R5 is adequate as written.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

Yes

Document Name

Comment

1. We agree, and no additional information should be necessary.

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

Yes

Document Name

Comment

The list appears to be a subset of the entire story. The Assumption is 5.1 will contain the necessary details, e.g. Un-Seasonable load, shoulder season

lows, prior outage(s), known issue, etc to allow the effected neighboring entities a full understanding.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer

Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Yes

Document Name

Comment

Texas RE suggests adding a Requirement to FAC-014-3 to address operating states where the next contingency has the potential to cause System instability, Cascading outages or uncontrolled separation.

Note that the IROL provision to the PC/TP is very appropriate and should be in-line with a methodology to identify IROLS. Part 5.4 includes “angular stability” which may or may not be covered by the newly proposed SOL definition. The SOL definition is too wide and does not provide the proper guidance expected with a definition.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

Yes

Document Name

Comment

Information similar to that provided in Parts 5.1 to 5.4 should also be specified in Requirement R4 for communicating SOLs/ (i.e. those entities that need to know the SOL should also be provided the related information, or else they don't need the SOLs to begin with).

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer

Yes

Document Name

Comment

Yes, Duke Energy agrees with the information identified in Parts 5.1 through 5.4. However, we suggest adding language stating that the sharing of this information is required if neighboring RC Areas are impacted, and remove the language regarding the demonstration of a reliability related need.

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

The RC should also include any mitigation identified to resolve the IROL, and the RC should provide the information to entities with actions in the IROL, such as GOPs with actions.

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

No additional entities need to be included.

Likes 0

Dislikes 0

Response**Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE**

Answer

Yes

Document Name

Comment

Information in Parts 5.1 to 5.4 is adequate for BES reliability. No additional information or entities should be included.

Likes 0

Dislikes 0

Response**Aaron Staley - Orlando Utilities Commission - 1 - FRCC**

Answer

Yes

Document Name

Comment

FAC 14 R5 is unclear. Who does the RC have to provide the data to by default? Who does it have to provide data to upon request? Also shouldn't Transmission Service Providers be included as entities that can request the data so they aren't limited to just their TOP area?

Likes 0

Dislikes 0

Response**Tammy Porter - Oncor Electric Delivery - 1 - Texas RE**

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Don Schmit - Nebraska Public Power District - 1,3,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

9. In consideration of the FERC directive regarding communicating IROL information to the Transmission Owner, do you agree with this proposed new requirement? If not, please explain the basis for why you do not support the proposed requirement, and the alternative language you are proposing to address the issues raised in FERC Order No. 777.

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer No

Document Name

Comment

FAC 14 R6 should require the RC to respond to a query from a Transmission Owner to either define the facilities or specify that they do not have any facilities that are critical to the derivation of the IROL.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer No

Document Name

Comment

AZPS believes it would be more appropriate to use the word "elements" since IROL is related to specific contingency causing problems on specific elements.

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer No

Document Name

Comment

No, we believe that information should be supplied to any adjacent TOs and GOs. The requirement should be modified to say "Each Reliability Coordinator with an established IROL shall provide the following IROL information to Transmission Owners and Generation Owners."

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer Yes

Document Name

Comment

Yes, we agree that the RC is best suited to provide this IROL information to TOs and GOs in this instance. As stated earlier, while the RC may be best suited in this instance, we do believe that the TOP is capable of, and should be included in the establishment and communication of IROLs in some instances as well.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer Yes

Document Name

Comment

Suggest Requirement R6 to read:

R6. Each Reliability Coordinator with an established IROL shall provide to the Transmission Owners and Generation Owners identification of the Facilities they own that are critical to the derivation of that IROL.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

Yes

Document Name

Comment

1. We agree, and have no additional comments.

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

I would also add an RC requirement to positively state that no TO or GO facilities were pertinent to the derivation of an IROL – otherwise, a missed notification could be construed as “no facilities”. Also, prefer “pertinent” to “critical”.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer

Yes

Document Name

Comment

The requirement needs to be reworded in a single part to reduce confusion and facilitate compliance.

Since the need for IROL information is related to FAC-003, the information given to the TOs and GOs should be limited to what they need to apply FAC-003 and using the same language as FAC-003 to avoid any confusion. Thus we propose: "R6.1 Identification of the **lines** that are owned by that entity, which **are an element of an IROL.**"

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response**Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Leonard Kula - Independent Electricity System Operator - 2****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Mark Holman - PJM Interconnection, L.L.C. - 2****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Terry Bilke - Midcontinent ISO, Inc. - 2	
Answer	
Document Name	
Comment	
We agree with the comments of the MISO TOP-IRO Task team. Additionally, we don't believe that every facility limit is an SOL nor is reaching a normal rating of a facility is an SOL exceedance. A different term is needed for this.	
Likes 0	
Dislikes 0	
Response	

10. Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the information to the Transmission Owner and Generator Owner?

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

BPA believes the RC should have flexibility in determining what is appropriate for its RC area.

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer No

Document Name

Comment

Peak believes a timeframe specification is not necessary for reliability.

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE**Answer** No**Document Name****Comment**

RC, TO and GO should coordinate with each other through the RC to determine appropriate timeframe.

Likes 0

Dislikes 0

Response**Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators****Answer** No**Document Name****Comment**

1. We believe it would be difficult to come up with a timeframe that would not result in an administrative requirement. TO and GO tasks are not typically related to Real-time reliability, so establishing a time limit is not related to preserving reliability. It's simply facilitating compliance.

2. TOP's and then GOP's should receive the information necessary for Real-time operation in a timeframe necessary to protect BES Reliability. The TO and GO would need the information for future Planning requirements and therefore we believe the RC should NOT delay in notifying TOs and GOs of their ownership of those facilities since they have supportive reliability related tasks (FAC-003, CIP, etc.) to perform. Any time limit should be based on effectively facilitating those activities.

Likes 0

Dislikes 0

Response**Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group****Answer** No**Document Name****Comment**

It would be difficult to come up with a time that would not just result in an administrative requirement. TO and GO tasks are not typically related to real-time reliability so establishing a time limit is not related to preserving reliability, but facilitating compliance. However the RC should not delay in notifying them of their ownership of those facilities since they have supportive tasks (FAC-003, CIP, etc) for reliability that need to be undertaken. Any time limit should be based on appropriately facilitating those activities.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] It would be difficult to come up with a time that would not just result in an administrative requirement. TO and GO tasks are not typically related to real-time reliability so establishing a time limit is not related to preserving reliability, but facilitating compliance. However the RC should not delay in notifying them of their ownership of those facilities since they have supportive tasks (FAC-003, CIP, etc) for reliability that need to be undertaken. Any time limit should be based on appropriately facilitating those activities.

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer No

Document Name

Comment

If the concept of "minimum acceptable time" around such communications were to be included, it would be best to have that as a requirement that should be established and/or defined within, or ancillary to, the RC's Methodology.

Likes 0

Dislikes 0

Response

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

No, we do not believe that a specific timeframe should be required for the RC to provide this information to a TO or GO.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer No

Document Name

Comment

Support SPP RTO Comments.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer No

Document Name

Comment

The time criticality depends upon the type of scenario. For example, if the real-time assessment shows that the next contingency is creating an IROL, it is important the TOP and GOP be identified and notified ASAP. The TO, GO, should also be notified in due course.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

The RC should have flexibility in determining what is appropriate for its particular RC Area. The time frame of the communications could be outlined in the RC SOL methodology.

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee

Answer Yes

Document Name

Comment

Yes, we believe such communication needs to occur some days prior to the new or revised IROLs are implemented.

Note: ERCOT does not support the above comment.

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Yes

Document Name

Comment

Texas RE recommends setting a time limit for providing the IROL information to the Transmission Owners and Generation Owners within its RC Area since certain activities, such as CIP-014-2 activities, may have to occur after the provision. Texas RE recommends IROLs be established in the planning horizon so TOs and GOs would be notified prior to the IROL becoming operational. The proposed revisions to the SOL definition no longer requires IROLs to be established in the planning horizon.

Texas RE recommends the SDT consider the following:

- It appears the applicability section of FAC-003-4 intends that IROLs will be identified in the planning horizon, since section 4.3.1.2 uses the language “Operated below 200kV identified as an element of an IROL under NERC Standard FAC-014 by the Planning Coordinator.”
- If the PC is no longer required to have an SOL methodology, it is unlikely that the PC will identify IROLs. Does this mean that elements of an IROL are no longer applicable in FAC-003-4 since they were not identified by the PC?
- If the purpose of this requirement is to make TOs and GOs aware of compliance obligations related to Facilities identified as part of an IROL (FAC-003-4), how will this be handled for IROLs that are established in real-time due to system configuration, but retired after outages are returned to service?
- How will TOs and GOs be compliant with FAC-003-4 if they are not aware their Facility is an element of an IROL until the end of the calendar year?
- The Applicability section 4.1.1.3 of CIP-014 includes Transmission Facilities at a single station or substation location that are identified by its Reliability Coordinator, Planning Coordinator, or Transmission Planner as critical to the derivation of Interconnection Reliability Operating Limits (IROLs) and their associated contingencies. If the PC and TP are no longer required to identify IROLs, does this mean that these Facilities will not be identified as applicable until a real-time IROL is identified? If so, the implementation of physical security measures may not be completed for years after the IROL is identified.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Yes, we believe such communication needs to occur some days prior to the new or revised IROLs are implemented.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer Yes

Document Name

Comment

The Transmission Owners and Generation Owners should be notified within 15 minutes after their facilities are determined to be critical to the derivation of the IROL.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

As stated in Q7, a suggested timeframe is 30 minutes.

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

A timeline should be provided to ensure the TOs and GOs receive changes in a timely manner.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer Yes

Document Name

Comment

FAC 14 R6 should establish a minimum time for an RC to respond to a request from a transmission owner that they do or do not have any facilities that are critical to the derivation of the IROL.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

11. Do you agree that there is a reliability-related need for the RCs and TOPs to obtain the information from the Planning Assessment and Transfer Capability analysis for the purpose of identifying instability risks when establishing SOLs (and IROLs)? Are there other “studies” that are currently performed that should also be included in this communication requirement?

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

We subscribe to the MRO NSRF's comment that is provided below:

There is not an operating horizon reliability need for RCs and TOPs to have planning horizon Planning Assessments and Transfer Capability analyses because any future system performance deficiencies will be mitigated by Corrective Action Plans before the planning horizon timeframe becomes the operating horizon timeframe. In addition, planning horizon studies have some fundamental differences from operating horizon studies that reduce the worth of planning horizon finding for operating horizon purposes. Planning horizon studies are chiefly performed for firm Transmission Service and firm forecasted Load conditions. Operating horizon studies are performed for non-firm Transmission Service and non-firm, more accurately forecasted Load conditions. Operating horizon studies generally simulate only generator, line and transformer N-1 event contingencies, but planning horizon studies simulate a wider spectrum of planning event contingences (P1-P7), which include more severe, but less probable events. If there is a reliability-related need to know the expected system performance in the operating horizon for firm Transmission Service and Load operating conditions or for less probable planning event contingencies then RCs and TOPs can perform these types of simulations themselves as needed.

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer No

Document Name

Comment

Planning Assessment results are available to the RC from the PC. However, most of this information will not be applicable in the Operating Horizon, and we should not overburden the RC with voluminous results of non-applicable information. Planning Assessment results are dependent on specific generation dispatch, system configuration, load level, location and type of fault, clearing times (including failure of some equipment to clear), etc. In our opinion, it is doubtful that this planning information would be used to develop SOLs and IROLs.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer	No
Document Name	
Comment	
Support SPP RTO Comments.	
Likes	0
Dislikes	0
Response	
Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy	
Answer	No
Document Name	
Comment	
<p>We question the placement of this requirement which requires a Planning Coordinator or Transmission Planner to act. We think that this requirement would be more suitable in the TPL-001-4 and FAC-013-2 standards where the requirements for distribution of the associated assessment results already exist. A compliance “trap” may be created by placing a requirement to communicate the results in another standard not directly associated with performance of the assessment results being communicated. Note that these two standards already require distribution of the assessments, when requested, to functional entities with a reliability need. While we agree that information from a Planning Assessment or Transfer Capability Assessment may be of some overall value to RC’s, we fail to clearly understand how this information will be of direct value to the RC in the near-term operation of the system. For example, from an operational standpoint, a RC or TOP is dealing with the system based on whatever outages Generation and Transmission exist or the load levels they are at currently. Some useful information may be gleaned from the results of a TPL stability assessment, but this won’t help directly determine what operators are facing in the day ahead or month ahead from a stability standpoint.</p>	
Likes	0
Dislikes	0
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	No
Document Name	
Comment	
<p>While this may be a good practice and the information may be helpful for the RC and TOP to be aware of the stability risks/phenomena, this does not rise up to a standard level since the RCs and TOPs should already have some knowledge or will conduct some sensitivity testing to gauge the stability performance to begin with. We suggest to remove it.</p>	

Likes	0
Dislikes	0
Response	
Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE	
Answer	No
Document Name	
Comment	
<p>[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] It is not clear which Transfer Capability assessment the requirement is referring to? Is it the one in FAC-013? Not all Transfer Capability assessments are stability based. Also, we would like further explanation from the team regarding how and what planning assessment information should be communicated from other requirements such as FAC-013, TPL-001, and IRO-017. Guidance from the team that it interprets the information to come from XYZ would be helpful.</p> <p>We request that the team provide clarity that information needed from the planning assessments related to stability should be limited to only those applicable to the RC. For example, the RC should have little interest in an identified stability issue in the long term (10 years) that may have projects constructed to resolve by then.</p>	
Likes	0
Dislikes	0
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	No
Document Name	
Comment	
It is not clear which Transfer Capability assessment the requirement is referring to? Is it the one in FAC-013? Not all Transfer Capability assessments are stability based.	
Likes	0
Dislikes	0
Response	
Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators	
Answer	No
Document Name	

Comment

1. It is not clear which Transfer Capability assessment the requirement is referring to? Is it the one in FAC-013? Not all Transfer Capability assessments are stability based.
2. There is not an operating horizon reliability need for RCs and TOPs to have planning horizon Planning Assessments and Transfer Capability analyses because any future system performance deficiencies will be mitigated by Corrective Action Plans before the planning horizon timeframe becomes the operating horizon timeframe. If there is a reliability-related need to know the expected system performance in the operating horizon for firm Transmission Service and Load operating conditions or for less probable planning event contingencies, then RCs and TOPs can perform these types of simulations themselves as needed.

Likes 0

Dislikes 0

Response**Douglas Webb - Great Plains Energy - Kansas City Power and Light Co. - 1,3,5,6 - SPP RE****Answer**

No

Document Name**Comment**

Concern: We infer that including “Transfer Capability assessments” is related to FAC-013 Requirements. The FAC-013 Standard is only applicable to PCs, not TPs. Also, FAC-013 does not require stability analysis for Transfer Capability assessment. In consideration of FAC-013, proposed FAC-014-3 R8 should not imply the necessity for stability analysis for Transfer Capability assessment.

Suggestion: Delete “and Transfer Capability assessment” from proposed FAC-014-3 R8 language.

Likes 0

Dislikes 0

Response**Terry Blilke - Midcontinent ISO, Inc. - 2****Answer**

No

Document Name**Comment**

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer Yes

Document Name

Comment

Was the intent to capture the study results under TPL 001-4 and FAC 13? Or to capture information from any type of study performed by the TP and PA that might be interpreted to be a Planning Assessment or Transfer Capability assessment?

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer Yes

Document Name

Comment

Yes. Agree with the need. The SOLs established in the near term transmission planning horizon should also be included. Do not know of any other studies.

Likes 0

Dislikes 0

Response

Maryclaire Yatsko - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer Yes

Document Name

Comment

See Seminole's response to question 14 below.

CIP-014 requires the TO to perform a transmission analyses designed to identify the Transmission station(s) and Transmission substation(s) that if rendered inoperable or damaged could result in instability, uncontrolled separation, or Cascading within an Interconnection. This analysis is typically performed by the TP or PC; however, there is no requirement in CIP-014 as drafted, that requires the TO to notify the RC of such stations, which may be information that the RC should be aware of to understand the sensitivity/criticality of the identified stations.

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

The Transfer Capability analysis performed by the Planning Coordinator does not necessarily include stability analysis. This could lead to a gap whereas stability risks associated with transfers or loop-flows across a system are not being identified and communicated to the RCs and TOPs.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

The RC should be receiving the Planning Assessments via other standards.

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Yes

Document Name

Comment

Requirement might be redundant:

FAC-013-2 R5 already requires the Transfer Capability assessment to be provided to those entities that make a written request, which can easily be the RC and TO.

TPL-001-4 R8 already requires the Planning Assessment to be provided to those entities that make a written request, which can easily be the RC and TO.

FAC-011-4 requires the RC to consider the stability limitations provided by the PC in accordance with FAC-014-3 but perhaps this standard should simply refer to stability limitations identified by the PC in FAC-013 and TPL-001.

Likes 0

Dislikes 0

Response

Greg Davis - Georgia Transmission Corporation - 1 - SERC

Answer

Yes

Document Name

Comment

The characteristics of the transmission models (generation dispatch, load levels, topology, etc) used in planning studies are vastly different from those used in analysis of the operational time horizon. Therefore, establishing SOLs based on a planning study, is typically not feasible.

However, there are certain configurations or multiple contingencies that are assessed by planners in accordance with TPL-001-4 that operators may need to be aware of. This is primarily true for instability risks that may not be analyzed in operational studies for some areas. It is up to the RC (and the tools available to them) to determine if establishment of an SOL based on a limitation identified in a planning study is appropriate for its area.

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

Planning horizon information from Planning Assessments (TPL-001-4 standard) and Transfer Capability analyses (FAC-013-2 standard) may help RCs and TOPs become aware of potential operating horizon reliability-related needs. However, actual operating horizon reliability needs can only be determined from studies of operating horizon system conditions and contingencies, which are different from the planning horizon system conditions and planning event contingencies. Information from planning horizon studies only provides ideas or hints of prospective operating horizon reliability-related needs.

Planning Coordinators and Transmission Planners perform (or will begin to perform) planning horizon studies that are beyond the FAC-013-2 and TPL-001-4 standards. These studies are, or will be, performed for the FAC-002-2 (Interconnection Studies) standard, PRC-006-2 standard (UFLS), the present EOP-003-2 and future PRC-010-1 (UVLS) standards, and the present PRC-015-0 and future PRC-012-2 standards (RAS). Study results from these other standards may also be helpful to RCs and TOPs.

Study results that may be helpful to RCs and TOPs are not limited stability results. Steady-state overload, over-voltage, and under-voltage results may also be helpful to RCs and TOPs become aware of prospective operating horizon reliability-related needs.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE

Answer Yes

Document Name

Comment

Because equipment may be automatically removed from service without a Fault condition or equipment failure, Part 8.2 should be revised to read:

8.2 The Contingencies or removals from service of equipment which result in the instability

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer Yes

Document Name

Comment

There is a need for this information. However, R8 requires each PC and TP to communicate the results of their Transfer Capability assessments, but FAC-013-2 only requires each PC to perform this type of assessment. There is not a requirement for TPs to perform Transfer Capability assessments, but this requirement implies that TPs should perform this assessment. The language should be changed. Also, I believe that it would be more efficient for the PC and TP communicate only the instabilities identified in the assessments instead of providing all of the results of the assessments.

In Requirement R8, Texas RE recommends changing “the results of the stability analysis” to “any instability”.

Texas RE also recommends adding another requirement for each PC and TP should be added that matches Requirement R6.

R9. Each Planning Coordinator and Transmission Planner shall provide any instability identified in its assessments to each affected Transmission Owner and Generation Owner the following:

9.1 The identification of the Facilities that are owned by that entity, which are critical to the derivation of an instability.

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

The information in the Planning Assessment and Transfer Capability analysis is important for identifying instability risks. However, BPA believes that the stability results that need to be communicated should be those results where Stability is the defining limit in the near term Planning Horizon. If the SOL is Thermally limited, there is no need to communicate the Stability limit.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC**Answer****Document Name****Comment**

Because Peak is registered as an RC, Peak is not intimately familiar with the various types of studies performed in the planning horizon and whether or not those studies stress the system sufficiently to uncover potential instability risks. So long as instability risks are adequately identified in the planning horizon and communicated to the RC and impacted TOPs in the operations horizon, there may be no need for additional studies.

Likes 0

Dislikes 0

Response

12. Are there additional “studies” or activities that planners should undertake (beyond those currently required in the current standards, including TPL-001-4 and FAC-013-2) to identify instability risks? If so, please describe.

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer No

Document Name

Comment

1. FAC-013 is only applicable to the Planning Coordinator, so the way R8 is worded seems to obligate the TP to provide a Transfer Capability assessment that is not required to have. This is creating a new TP requirement.
2. There are planning horizon studies performed for the PRC-006-2 standard (UFLS), the present EOP-003-2 and future PRC-010-1 (UVLS) standards, and the present PRC-015-0 and future PRC-012-2 standards (RAS) and the results may be of interest or value to RCs and TOPs. We are not aware of any RC or TOP need for additional planning studies.

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer No

Document Name

Comment

The requirements in TPL-001-4 are sufficient to test the system for instability for the large majority of occurrences.

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer No

Document Name

Comment

FAC-013 is only applicable to the Planning Coordinator, so the way R8 is worded seems to obligate the TP to provide a Transfer Capability assessment that is not required to have. This is creating a new TP requirement.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] FAC-013 is only applicable to the Planning Coordinator, so the way R8 is worded seems to obligate the TP to provide a Transfer Capability assessment that is not required to have. This is creating a new TP requirement.

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer No

Document Name

Comment

Support SPP RTO Comments.

Likes 0

Dislikes 0

Response

Andrew Pusztai - American Transmission Company, LLC - 1

Answer No

Document Name

Comment

As noted in the response to Question 11, Planning Coordinators and Transmission Planners perform (and will begin to perform) planning horizon studies that are beyond the FAC-013-2 and TPL-001-4 standards. These studies are, or will be, performed for the FAC-002-2 (Interconnection Studies) standard, PRC-006-2 standard (UFLS), the present EOP-003-2 and future PRC-010-1 (UVLS) standards, and the present PRC-015-0 and future PRC-012-2 standards (RAS). Study results from these other standards may also be helpful to RCs and TOPs prospective operating horizon reliability-related

needs.

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer

No

Document Name

Comment

We believe that on-line stability assessments should be performed by the RC. Stability studies of specific system conditions in the operating horizon could be performed by the TOP or Operations Planners upon request.

Likes 0

Dislikes 0

Response

Greg Davis - Georgia Transmission Corporation - 1 - SERC

Answer

No

Document Name

Comment

The contingencies studied per TPL-001-4 is sufficiently thorough for planning analysis. If there is a particular anomaly in an Area that warrants additional analysis, that will be determined by the parties involved on a case-by-case basis.

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

No

Document Name

Comment

We subscribe to the MRO NSRF's comment that is provided below:

There are planning horizon studies performed for the PRC-006-2 standard (UFLS), the present EOP-003-2 and future PRC-010-2 (UVLS) standards, and the present PRC-015-0 and future PRC-012-2 standards (RAS) and the results may be of interest or value to RCs and TOPs. We are not aware of any RC or TOP need for additional planning studies.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer

No

Document Name

Comment

The term planners is unclear. Do you mean personnel performing studies to support their TP/PC/PA function or personnel performing studies to support the TOP function?

Likes 0

Dislikes 0

Response

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE	
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Holman - PJM Interconnection, L.L.C. - 2	
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	No
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Maryclaire Yatsko - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer

No

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ben Li - Independent Electricity System Operator - 2 - NPCC, Group Name ISO/RTO Council Standards Review Committee	
Answer	Yes
Document Name	
Comment	
Note: ERCOT does not support the above comment.	
Likes 0	
Dislikes 0	
Response	
sean erickson - Western Area Power Administration - 1,6	
Answer	Yes
Document Name	
Comment	
The Planning Standards (TPL-00104 & FAC-013-2) should be augmented with True N-1-1, not N-2 without system adjustments, and those finding should be disseminated to the TOPs and RC(s).	
Likes 0	
Dislikes 0	
Response	
Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name Tennessee Valley Authority	
Answer	Yes
Document Name	
Comment	

Historically, transmission planner's studies have been concerned with generation in the planner's area serving load in the planner's area. These studies tend to miss reliability risks due to loop-flows or transfers into, out of, or across systems. Transmission planners should be required to study realistic levels of transfers, load and generation dispatch similar to the language in FAC-011-4 R4.3 and share the results with the TOP and Reliability Coordinator. It is imperative that transmission planners are studying the flows on the system that the operators are experiencing in real-time, regardless if the flows are firm, non-firm or loop flows.

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Document Name

Comment

Because Peak is registered as an RC, Peak is not intimately familiar with the various types of studies performed in the planning horizon and whether or not those studies stress the system sufficiently to uncover potential instability risks. So long as instability risks are adequately identified in the planning horizon and communicated to the RC and impacted TOPs in the operations horizon, there may be no need for additional studies.

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Document Name

Comment

Planners often perform special studies that aren't required for the TPL and FAC standards, and these studies may identify instabilities that need to be communicated. In Requirement R8, Texas RE recommends the changing "the results of the stability analysis" to "any instability" and removing "Planning Assessments and Transfer Capability".

Likes 0

Dislikes 0

Response

13. With regard to Part 8.3: The SDT believes that the information listed in Part 8.3 is critical for RC and TOP awareness and understanding of the instability risks identified in the planning horizon and the listed mitigation measures employed to address those risks. Do you agree? If not, please explain why you believe it is not critical that the RC and TOP obtain this information from the planning entities?

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

The Part 8.3 information may be of some interest or value to RCs and TOPs, but we do not believe it is critical for RC and TOP awareness and understanding of the instability risks in operations horizon. It is highly unlikely that RAS, UVLS, or UFLS based on planning horizon study system conditions and planning event contingencies are applicable or critical to operating horizon study system conditions or operating event.

Likes 0

Dislikes 0

Response

David Jendras - Ameren - Ameren Services - 1,3,6

Answer No

Document Name

Comment

In our opinion the RC should not be concerned for stability results in the planning horizon, which covers system conditions up to 10 years in the future. (The TP should be working to address these stability concerns, before they would be a concern to the RC.) At a minimum, the stability assessment results in requirement R8 should be more narrowly focused to the near-term horizon. If operational awareness of instability risks is that important, then a requirement for a seasonal stability assessment should be added to the TOP standards. We believe this would provide much more useful information than the stability results to satisfy standard TPL-001-4.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer No

Document Name

Comment

Please see our suggestion to remove R8 altogether, under Q11.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

No

Document Name

Comment

1. We believe the information in Part 8.3 may be of interest or value to RCs and TOPs, but it is not critical. It is unlikely that RAS, UVLS, or UFLS based on planning horizon study system conditions and planning event contingencies are applicable or critical to operating horizon study system conditions or operating event.

Likes 0

Dislikes 0

Response

Terry BIlke - Midcontinent ISO, Inc. - 2

Answer

No

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer

Yes

Document Name

Comment

I agree with this in concept.

Likes 0

Dislikes 0

Response

Maryclaire Yatsko - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer

Yes

Document Name

Comment

While Seminole agrees that this information is critical, just as all information related to reliability is critical, we don't agree that a requirement to distribute results from other standards should be within FAC-014-3. See additional comments in question 14 below.

Likes 0

Dislikes 0

Response

Andrew Puztai - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

The Part 8.3 information is critical and may help RCs and TOPs become aware of potential operating horizon reliability-related needs (both steady state and stability). These results provide the RC and TOP an awareness and understanding of risks that are identified in the planning horizon that may occur under other conditions applicable to the operating horizon.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer

Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS]

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

This is good information to have and be aware of independent of any stability applications or concerns.

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

Yes

Document Name

Comment

Peak believes this information is important for the RC's and TOP's understanding of the full picture.

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Greg Davis - Georgia Transmission Corporation - 1 - SERC

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Don Schmit - Nebraska Public Power District - 1,3,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Tammy Porter - Oncor Electric Delivery - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Document Name

Comment

Texas RE recommends that list should include any actions to address instability, which includes the identification of SOLs and IROLs.

Likes 0

Dislikes 0

Response

14. Do you agree that this proposed requirement is appropriately placed in FAC-014, or do you believe the proposed requirement should be placed in another standard (i.e., TPL-001-4 and FAC-013-2)?

Teresa Cantwell - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer No

Document Name

Comment

The proposed R8 may fit better in TPL-001.

Likes 0

Dislikes 0

Response

Cain Braveheart - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

BPA believes that R8 is better placed in FAC-13. This will ensure that Planning requirements for establishing and communicating SOL's are located in one standard.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer No

Document Name

Comment

FAC-011/14 addresses SOL/IROL -methodology, setting, communicating. R8, as written, does not address these issues.

The proposed R8 should also include the criteria used by the PC and TP for identifying System instability (ref. TPL-001-4 R6) because these may differ from those defined by the RC in FAC-011 R4.1. However, with the retiring of FAC-010, the revised FAC-011 and FAC-014 should not be applicable to the PC or TP. Any requirement for sharing studies from other standards should be incorporated within the relevant standards (TPL, ...).

Overall, we think that FAC-011 and FAC-014 should be merged in a single standard applicable to the RC and TOP with regards to the establishment of

SOL/IROL. Also, there should be more consistency between the TPL standard and FAC-011/014. Although we recognize the differences between the planning and operating functions, those standards have a lot in common in terms of the studies performed to ensure power system reliability.

Likes 0

Dislikes 0

Response

Jared Shakespeare - Peak Reliability - 1 - WECC

Answer

No

Document Name

Comment

While the requirement can work in FAC-014, they may be a better fit for TPL-001-4 and FAC-013-2. If the requirement exists in these standards, the corresponding requirement in FAC-011 can be revised to reference the new location.

Likes 0

Dislikes 0

Response

Michael Shaw - Lower Colorado River Authority - 1,5,6, Group Name LCRA Compliance

Answer

No

Document Name

Comment

The proposed R8 may fit better in TPL-001.

Likes 0

Dislikes 0

Response

Colleen Campbell - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators

Answer

No

Document Name

Comment

1. We believe Requirement R8 is partly duplicative of Requirement R3 in IRO-017-1, which will become effective on 4/1/2017. IRO-017-

1/Requirement R3 obligated PCs and TPs to share their (entire) Planning Assessment with affected RCs. We propose the following:

a. In the near term Requirement R8 be worded as in IRO-017-1/Requirement R3, but obligate PCs and TPs to share their (entire) Planning Assessment with affected TOPs; and

b. In the long term, remove Requirement R8 after IRO-017-1/Requirement R3 is modified to add the obligation to share Planning Assessments with affected TOPs.

However, the Requirement R8.3 obligation to share RAS, UVLS, and UFLS study results (even those unrelated to instability) with RCs and TOPs is not duplicative of other requirements, and may be of some value to RCs and TOPS.

Likes 0

Dislikes 0

Response

sean erickson - Western Area Power Administration - 1,6

Answer

No

Document Name

Comment

No these requirements should be identified in TPL-001-4/FAC-013-2 and the TC(TP)/PC should be removed from the list of Applicable entities in FAC-014-3.

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

No

Document Name

Comment

It's unclear to us what "this proposed requirement" refers to, whether it is R8 or Part 8.3. Regardless, we do not believe R8 is needed and therefore Part 8.3 is also not needed – not in FAC-014 or any other standards.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no Con Edison and ISO-NE**Answer** No**Document Name****Comment**

Belongs in FAC-013-2 and TPL-001-4. Should not have to refer between standards.

Likes 0

Dislikes 0

Response**Andrew Pusztai - American Transmission Company, LLC - 1****Answer** No**Document Name****Comment**

Requirement R8 is partly duplicative of the Requirement R3 in the IRO-017-1 standard, which will become effective on 4/1/2017.) IRO-017-1_R3 will obligate PCs and TPs to share their (entire) Planning Assessment with affected RCs. As noted in the comments for Question 11 and Question 12, there are other studies performed for other existing or future standards (FAC-002-2, PRC-006-2, EOP-003-2, PRC-010-1, PRC-015-0, and PRC-012-2) that could be placed in FAC-014-3 or the other standards. It may be practical in the near term to place the desired communication requirement in FAC-014-3 for now, and in the long term to have them placed in the applicable standards.

Likes 0

Dislikes 0

Response**David Jendras - Ameren - Ameren Services - 1,3,6****Answer** No**Document Name****Comment**

If it is determined that RCs and TOPs need Planning Assessment stability information from standard TPL-001-4, then this requirement should be added to TPL-001-4 and not included in FAC-014-3. Requirement R8 of standard TPL-001-4 already requires planning study assessment results to be sent to the PC. The RC could be added to this requirement, or the PC could provide this information to the RC.

Likes 0

Dislikes 0

Response

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

We believe that this requirement should be placed in TPL-001-4 standard since its reliability objective is fundamentally the same as the existing R8 in TPL-001-4 which requires providing the annual planning assessment to certain functional entities. Note that most of the information specified in sub-parts 8.1 to 8.4 above (other than UVLS and UFLS assessment) is included in the TPL planning assessment.

Also, we note that part 8.3 is redundant to part 8.4 - all the mitigation actions listed in part 8.3 as essentially examples of Corrective Action Plans employed in the planning assessment.

Likes 0

Dislikes 0

Response

Maryclaire Yatsko - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer No

Document Name

Comment

The requirement to communicate the information identified in R8 is more appropriately required as part of the standards that requires the analysis, ie. TPL-001-4 and FAC-013-2. Having two individual standards that require analysis and a totally separate standard with only requirement that requires the analysis of the non-affiliated standards to be communicated to the RC/TOP becomes problematic.

Also, FAC-013-2 R5 as written (reference below), does not preclude the RC or TOP as a functional entity, if they so desire, to request the results of the FAC-013 assessment today, so I am not sure what value R8 of FAC-014-3 provides.

FAC-013-2 R5: "However, if a functional entity that has a reliability related need for the results of the annual assessment of the Transfer Capabilities makes a written request for such an assessment after the completion of the assessment, the Planning Coordinator shall make the documented Transfer Capability assessment results available to that entity within 45 calendar days of receipt of the request."

In regards to TPL-001-4, Seminole believes it to be more appropriate for the FAC drafting team to communicate a recommendation to the TPL-001-4 SDT to modify R8 of TPL-001-4 to either require the PC to provide the results of its Planning Assessment to the RC and/or TOP or use similar language that is in FAC-013-2 R5 where the language does not preclude any entity that has a reliability need for the results.

Likes 0

Dislikes 0

Response

Ginette Lacasse - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light Ballot Body

Answer No

Document Name

Comment

I believe this requirement would be more appropriate in the other standards mentioned. Those standards include other requirements relating to communication of assessment results where this requirement would fit in easily and therefore it would be less likely to be overlooked. It may be necessary, however, to include this requirement in this standard until FAC-008 and FAC-013 can be revised.

Likes 0

Dislikes 0

Response

Aaron Staley - Orlando Utilities Commission - 1 - FRCC

Answer No

Document Name

Comment

The proposed requirement should ideally be located in the TPL and FAC standard. That insures that it remains consistent with the standard product that it references and puts it in the logical place. It would not make sense to have a SOL methodology sharing requirement in the TPL standards, so having an assessment sharing requirement in the FAC standard is equally out of place. However practicality of the standards development process may require that it be here in the FAC 14 standard.

Likes 0

Dislikes 0

Response

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

As long as it doesn't result in another standard project, it can stay in FAC-014.

Likes 0

Dislikes 0

Response

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC,SPP RE

Answer Yes

Document Name

Comment

[THESE COMMENTS REPRESENT SPP STAFF COMMENTS] As long as it doesn't result in another standard project, it can stay in FAC-014.

Likes 0

Dislikes 0

Response

Greg Davis - Georgia Transmission Corporation - 1 - SERC

Answer Yes

Document Name

Comment

The purpose of FAC-014 is to establish and communicate SOLs. SOLs are established by the RC based on the analysis the RC deems appropriate for its area, which includes credible instability risks identified in planning studies. FAC-014 appears to be the correct medium to use for the communication of necessary planning information.

Likes 0

Dislikes 0

Response

Jeri Freimuth - APS - Arizona Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

AZPS agrees that the RC and TOPs should receive this information, however in FAC-014 AZPS believes it is more appropriate to write the standard from the focus of the RC and TOPs and not from the PC and TPs. The PC and TPs are already required to provide the information via other standards. In FAC-014 the requirement should be for the RC and TOPs to appropriately review the Assessments sent to them from the PC and TPs to increase awareness.

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

The proposed requirement is appropriately placed in FAC-014, but FAC-013 needs to be enhanced to require the Planning Coordinator to include stability analysis in it's Transfer Capability studies.

Likes 0

Dislikes 0

Response

Tammy Porter - Oncor Electric Delivery - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sarah Gasienica - NiSource - Northern Indiana Public Service Co. - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Bolivar - NextEra Energy - 1,3,5,6 - FRCC,Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sean Bodkin - Dominion - Dominion Resources, Inc. - 3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Don Schmit - Nebraska Public Power District - 1,3,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Nick Vtyurin - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Terry Bilke - Midcontinent ISO, Inc. - 2

Answer

Document Name

Comment

We agree with the comments of the MISO TOP-IRO Task team.

Likes 0

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Document Name

Comment

The proposed requirement would be more appropriate in TPL-001-4 since TPL-001-4 already addresses the stability studies and Planning Assessment performed by the PC and TP and this requirement says stability issues identified by the PC and TP should be communicated to its RC and impacted TOPs.

Likes 0

Dislikes 0

Response

Unofficial Comment Form for FAC-014-3

Project 2015-09 Establish and Communicate System Operating Limits

Do not use this form for submitting comments. Use the [electronic form](#) to submit comments on **Project 2015-09 Establish and Communicate System Operating Limits (SOL)**. The electronic form must be submitted by **8 p.m. Eastern, Friday, August 12, 2016**.

Additional information is available on the [project page](#). If you have questions, contact Lacey Ourso, Standards Developer by [email](#) or phone at 404.446.2581.

Background Information regarding Project 2015-09 Establish and Communicate System Operating Limits

Before submitting comments with regard to the proposed changes to FAC-014-3, please review the background information section provided in the “Unofficial Comment Form for FAC-011-4.” That document contains foundational information that must be reviewed in order to have a complete understanding of the proposed changes to FAC-014-3.

Proposed Revisions, Background Information and Questions

Proposed Reliability Standard: FAC-014-3, Requirement R1

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R1. Each Reliability Coordinator shall establish Interconnection Reliability Operating Limits (IROLs) for its Reliability Coordinator Area that are consistent with its System Operating Limit Methodology (“SOL Methodology”) as established in FAC-011-4.</p>	<p>The current FAC-014-2 Requirement R1 requires that the RC ensure SOLs and IROLs are established pursuant to its SOL Methodology. This creates a situation where the RC is responsible for “ensuring” actions out of its control. The proposed revisions do not change the intent of the standard –that the RC develop the SOL Methodology for establishing SOLs in its RC Area, and the TOP following the RC SOL Methodology in establishing those SOLs. Accordingly, the proposed Requirement R2 requires that the TOP establish SOLs as required by the RC SOL Methodology. The SDT believes this clarifies the appropriate responsibilities of the respective functional entities, while not creating ambiguity in the requirements in requiring the RC to do something that the TOP is, in all actuality, required to do.</p> <p>Additionally, this requirement carries forward the obligation of the RC to establish IROLs for its RC Area. The RC maintains primary responsibility for establishment of IROLs because these limits have the potential to impact a Wide-area.</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>FAC-014-2 Requirement R1</u> – Requires the RC to ensure SOLs and IROLs are establishing for its RC Area, consistent with its SOL Methodology. • <u>FAC-014-2 Requirement R2</u> – Requires the TOP to establish SOLs consistent with the RC SOL Methodology.

Question 1: Do you agree with that the Reliability Coordinator (RC) should have primary responsibility for establishing IROLs for its RC Area? If not, please provide your comments on the appropriate break down of responsibilities (between RC and TOP) in establishing IROLs.

- Yes
- No

Comments:

Proposed Reliability Standard: FAC-014-3, Requirement R2

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R2. Each Transmission Operator shall establish SOLs for its portion of the Reliability Coordinator Area consistent with its Reliability Coordinator’s SOL Methodology.</p>	<p>The SDT has removed language from the existing FAC-014-3 Requirement R2 that states the TOP, “shall establish SOLs (as directed by its Reliability Coordinator)” because it causes confusion and may be incorrectly understood to mean that the RC will issue a “Directive,” or that TOPs are only required to establish SOLs if they have been “directed to by their RC.” This is not the intended meaning of the requirement, thus, the drafting team has removed the unnecessary and potentially confusing language. The proposed language makes clear that the TOP is the entity responsible for establishing SOLs, and these SOLs must be established in accordance with (<i>i.e.</i>, pursuant to the “direction”) identified in the RC’s SOL Methodology.</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>FAC-014-2 Requirement R1</u> – Requires the RC to ensure SOLs and IROLs are establishing for its RC Area, consistent with its SOL Methodology. • <u>FAC-014-2 Requirement R2</u> – Requires the TOP to establish SOLs consistent with the RC SOL Methodology.

Question 2: The proposed revisions work together with the proposed revisions to the definition of SOL. The new requirement makes clear that the TOP will establish SOLs in accordance with the RC SOL Methodology. This means that the TOP will follow the RC Methodology to determine: applicable Facility Ratings for use in operations (see, proposed FAC-011-4 Requirement R2); applicable steady-state System

voltage limits to be used in operations (see, proposed FAC-011-4 Requirement R3); and, the applicable stability limitations, if any, that are to be used in operations (see, proposed FAC-011-4 Requirement R4). Do you believe that it is clear that the TOP must establish SOLs in accordance with what is outlined in the RC Methodology?

- Yes
- No

Comments: It is unclear that the TOP must establish all stability limits since R3 infers that this is solely an RC responsibility. This should be clarified by identifying each of the 3 types of limits in R2.

Question 3: TOP application of the RC Methodology will always result in identification of the appropriate Facility Ratings and steady-state System voltage limits, however, it may not always result in identification of stability limitations (this is *only if* there are no applicable limitations specific to the TOP). If there are appropriate stability limitations (identified as a result of implementing the RC method for determining the stability limitations in proposed FAC-011-4 Requirement R4), then the TOP will identify these SOLs. Do you believe this is clear from the language of the requirements (both in FAC-14-3 Requirement R2 combined with the proposed revisions to FAC-011)?

- Yes
- No

Comments: It is unclear that the TOP must establish all stability limits since R3 infers that this is solely an RC responsibility. This should be clarified by identifying each of the 3 types of limits in R2.

Proposed Reliability Standard: FAC-014-3, Requirement R3

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R3. Each Reliability Coordinator shall determine stability limitations to be used in operations when the limitation impacts more than one Transmission Operator in its Reliability Coordinator Area consistent with its SOL Methodology.</p>	<p>The proposed approach by the SDT is that the RC SOL Methodology will set the method for how all stability limitations for its RC Area must be established (see, proposed FAC-011-4 Requirement R4). The RC SOL Methodology must, among other things, specify the stability performance criteria for single Contingencies and multiple Contingencies,</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>N/A</u>: This proposed requirement addresses what the SDT believes to be a gap in the existing requirements.

Proposed Reliability Standard: FAC-014-3, Requirement R3

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
	<p>including any margins applied (see, proposed FAC-011-4 Part 4.1); meet the performance criteria for certain identified Contingencies listed in the standard (see, proposed FAC-011-4 Part 4.2); and describe how instability risks are identified (see, proposed FAC-011-4 Part 4.3). The TOP is required to establish stability limitation SOLs in accordance with everything outlined in the RC SOL Methodology. However, in addition to what is outlined above, the SDT believes that to the extent there are stability limitations that may impact more than one TOP in its RC Area, the RC should be responsible for determining these stability limitations (in accordance with its RC SOL Methodology – see, proposed FAC-011-4 Part 4.6).</p> <p>The purpose of providing a separate requirement for the RC to address this specific type of stability limitation is to provide clarity that there may be a stability limitation that is not appropriately labeled an “IROL,” and thus, would not be covered by proposed Requirement R1. It is the position of the SDT that not all stability limitations are automatically “IROLs.” For example, there may be instances of local, contained instability that are not appropriately designated an “IROL,” because labeling it as an IROL may require the TOP to take actions such as pre-Contingency load shedding, that is not warranted, and could actually cause a bigger</p>	

Proposed Reliability Standard: FAC-014-3, Requirement R3

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
	reliability impact. However, when the stability limitation impacts more than one TOP, the SDT believes the RC should have primary responsibility for establishing that SOL.	

Question 4: Do you believe that the RC should be responsible for establishing stability limitations used in operations where more than one TOP is impacted?

Yes

No

Comments:

Proposed Reliability Standard: FAC-014-3, Requirement R4

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R4. Each Reliability Coordinator shall provide the SOLs for its RC Area to adjacent Reliability Coordinators within an Interconnection and Reliability Coordinators who request and indicate a reliability-related need for those limits, and to the Transmission Operators, Transmission Planners, and Planning</p>	<p>The proposed Requirement R4 maintains the part of existing FAC-014-3 Requirement R5 which requires the TC to send the SOLs for its RC Area to adjacent RCs. The SDT has created a new/separate requirement related to communicating established IROLs (see proposed FAC-014-4 Requirement R5).</p> <p>The SDT added Part 4.1 to require the RC to provide updates to the SOLs to the impacted TOPs. It is expected that the RC and TOPs will establish a mutually agreeable means</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>FAC-014-2 Requirement R5</u> – Requires the TOP to establish SOLs consistent with the RC SOL Methodology.

Proposed Reliability Standard: FAC-014-3, Requirement R4

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>Coordinators within its Reliability Coordinator Area.</p> <p>4.1. The Reliability Coordinators shall provide any updates to the SOL values established as part of Requirement R1 or Requirement R3 to impacted TOPs in its Reliability Coordinators Area in a mutually agreeable periodicity and format.</p>	<p>(pursuant to IRO-010-2 and TOP-003-3) for exchanging dynamically determined Facility Ratings or stability limitations.</p>	

Question 5: Do you agree that the RC should be the only entity responsible for providing other entities within its RC Area the established SOLs? If no, do you believe the entity that establishes the SOL (either the RC *or the TOP*) should be the entity that communicates the SOL to other entities? Please explain.

Yes

No

Comments: The RC should not be the only entity responsible for providing other entities the established SOLs. The entity that establishes the SOL should communicate the SOL to the rest of the entities within the same RC area to provide a common source of information.

Question 6: With regard to proposed Part 4.1: Do you believe that the language provides sufficient clarity regarding what is required for communicating updates to dynamically updated limits? If not, what language do you propose?

Yes

No

Comments: Instead of RCs, TOPs should communicate the SOLs they establish, including dynamically updated limits, consistent with R2 as well.

Question 7: With regard to proposed Part 4.1: Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the communications, or should the RC have flexibility in determining what is appropriate for its particular RC Area?

Yes

No

Comments: The RC or TOP should have flexibility in setting a time requirement. However, entities in the same RC area should agree to a time requirement that allows the entity receiving the data to be consistent with the timeframe specified in IRO-010-2 and TOP-003-3.

Proposed Reliability Standard: FAC-014-3, Requirement R5

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R5. Each Reliability Coordinator with an established IROL shall provide the following IROL information to adjacent Reliability Coordinators within an Interconnection, to other Reliability Coordinators that indicate a reliability-related need for the information, and to the Transmission Operators, Transmission Planners, and Planning Coordinators within its Reliability Coordinator Area:</p> <p>5.1. Identification of the Facilities that are critical to the derivation of the IROL.</p> <p>5.2. The value of the IROL and its associated IROL T_v.</p> <p>5.3. The associated Contingency(ies).</p> <p>5.4. The type of limitation represented by the IROL (<i>e.g.</i>, voltage collapse, angular stability).</p>	<p>See above explanation. This requirement was previously combined with the requirement to provide updates to both SOLs and IROLs (existing FAC-014-3 Requirement R5). The SDT separated these into two requirements – one for SOL and one for IROL – so that greater detail could be provided regarding the type of IROL-information that must be communicated by the RC.</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>FAC-014-2 Requirement R5</u> – Requires the TOP to establish SOLs consistent with the RC SOL Methodology.

Question 8: Do you agree with the information identified in Parts 5.1 through 5.4? Is there any additional information that the RC should provide regarding IROLs? Are there any additional entities that should be included in this requirement and receive the information from the RC?

- Yes
- No

Comments: It may be a good idea to identify if it is a static value, fixed value, or dynamically calculated value.

Proposed Reliability Standard: FAC-014-3, Requirement R6

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R6. Each Reliability Coordinator with an established IROL shall provide the following IROL information to Transmission Owners and Generation Owners within its RC Area:</p> <p>6.1. Identification of the Facilities that are owned by that entity, which are critical to the derivation of the IROL.</p>	<p>In FERC Order No. 777, FERC directed NERC to develop a means to assure that IROLs are communicated to transmission owners (see, P6 and P41). The purpose of this proposed requirement is to address the concerns raised by FERC in Order No. 777. The RC is required to provide the IROL information identified in Part 6.1 to Transmission Owners and Generator Owners in its RC Area. The SDT included Generator Owners because it believes that GOs, in addition to TOs, need to receive information relating to facilities that are critical to the derivation of the IROL. The SDT did not combine this with proposed Requirement R5 because the team believes that the owners only need IROL information related to their facilities that are critical to the derivation of the IROL. However, the owners do not need the information identified in proposed Parts 5.2 through Part 5.4, and further, this information may contain sensitive</p>	<p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>N/A</u>: This proposed requirement is intended to address the issues raised in FERC Order No. 777.

Proposed Reliability Standard: FAC-014-3, Requirement R6

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
	operator information not appropriate for open-ended sharing.	

Question 9: In consideration of the FERC directive regarding communicating IROL information to the Transmission Owner, do you agree with this proposed new requirement? If not, please explain the basis for why you do not support the proposed requirement, and the alternative language you are proposing to address the issues raised in FERC Order No. 777.

- Yes
- No

Comments: ERCOT asks the SDT to consider simplifying R6 and R6.1 into a single requirement.

Question 10: Do you believe a specific timeframe should be included that sets the minimum acceptable time for when the RC must provide the information to the Transmission Owner and Generator Owner?

- Yes
- No

Comments: No, a specific timeframe should not be included. If the SDT decides to include a timeframe, ERCOT requests it be consistent with other standards, (e.g. 30 days).

Proposed Reliability Standard: FAC-014-3, Requirement R7

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
R7. The Transmission Operator shall provide any SOLs and updates to those limits to its Reliability Coordinator and to the	The SDT did not make substantive changes to this requirement; however, the requirement previously existed	<u>Mapping to existing FAC standards under revision:</u>

Proposed Reliability Standard: FAC-014-3, Requirement R7

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
Transmission Service Providers that share its portion of the Reliability Coordinator Area.	as a “part” of a requirement and it is now a stand-alone requirement.	<ul style="list-style-type: none"> • <u>FAC-014-2 Part 5.2</u> – Requires the TOP to provide its SOLs to the RC and Transmission Service Providers in its portion of the RC Area.

Question: None.

Proposed Reliability Standard: FAC-014-3, Requirement R8

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>R8. Each Planning Coordinator and Transmission Planner shall communicate the results of the stability analysis identified in its Planning Assessment and Transfer Capability assessment to each affected Reliability Coordinator and Transmission Operator. This shall include:</p> <p>8.1. The type of the instability (<i>e.g.</i>, voltage collapse, angular instability,</p>	Under proposed FAC-011-4 Part 4.4, the RC SOL Methodology must consider the stability limitations provided by the Planning Coordinator. Also, proposed FAC-014-3 Requirements R2 and R3, the applicable entities are required to establish stability limitations (if any) in accordance with the RC SOL Methodology. This requirement is intended to complement proposed FAC-011-4 Part 4.4 by ensuring that the planning entities provide the results of their stability analysis, including a list of those contingencies that are expected to produce the more severe System impacts, to the affected RC and TOP.	<p><u>Background regarding existing standards not under revision by SDT:</u></p> <ul style="list-style-type: none"> • <u>TPL-001-4</u> • <u>FAC-013-2</u> <p><u>Mapping to existing FAC standards under revision:</u></p> <ul style="list-style-type: none"> • <u>FAC -011-3 Part 3.3</u> • <u>FAC -014-2 Requirement R6</u>

Proposed Reliability Standard: FAC-014-3, Requirement R8

Proposed New/Revised Requirement	Explanation of Proposed Revision	Relevant Requirements in Existing Reliability Standard(s)
<p>transient voltage dip criteria violation);</p> <p>8.2. The Contingencies which result in the instability;</p> <p>8.3. Any Remedial Action Scheme action, under voltage load shedding (UVLS) action, under frequency load shedding (UFLS) action, interruption of Firm Transmission Service, or Non-Consequential Load Loss that was employed (or invoked) to address the instability; and,</p> <p>8.4. Any Corrective Action Plan associated with the instability.</p>	<p>This information may be relevant to the operating conditions for which the RC and TOP are determining SOLs. Further, FAC-013-2 requires that the PC have a methodology and annual assessment that identifies the weaknesses and limiting Facilities that could limit the ability of the Transmission System to reliably transfer energy. The results of the assessment, including the methodology used in the analysis, may contain information that may be relevant to the RC and TOP analysis for determining SOLs (and IROLs).</p>	

Question 11: Do you agree that there is a reliability-related need for the RCs and TOPs to obtain the information from the Planning Assessment and Transfer Capability analysis for the purpose of identifying instability risks when establishing SOLs (and IROLs)? Are there other “studies” that are currently performed that should also be included in this communication requirement?

- Yes
- No

Comments: UVLS studies may also identify instability risks.

Question 12: Are there additional “studies” or activities that planners should undertake (beyond those currently required in the current standards, including TPL-001-4 and FAC-013-2) to identify instability risks? If so, please describe.

Yes

No

Comments: RCs and TOPs should conduct the additional “studies” to ensure they have an operational perspective, whether planning staff or some other contractor performs the task in their behalf.

Question 13: With regard to Part 8.3: The SDT believes that the information listed in Part 8.3 is critical for RC and TOP awareness and understanding of the instability risks identified in the planning horizon and the listed mitigation measures employed to address those risks. Do you agree? If not, please explain why you believe it is not critical that the RC and TOP obtain this information from the planning entities?

Yes

No

Comments:

Question 14: Do you agree that this proposed requirement is appropriately placed in FAC-014, or do you believe the proposed requirement should be placed in another standard (*i.e.*, TPL-001-4 and FAC-013-2)?

Yes

No

Comments: