

Comment Report

Project Name: Enhanced Periodic Review - Standards Grading
Comment Period Start Date: 6/30/2016
Comment Period End Date: 8/1/2016
Associated Ballots:

There were 13 sets of responses, including comments from approximately 13 different people from approximately 13 companies representing 8 of the Industry Segments as shown in the table on the following pages.

Questions

1. The EPRSRT has not yet finalized consensus content scores on EOP-011-1, Requirements R3, R4, R5, and R6. Please provide comments on what you believe the EPRST should consider in developing its final content scores on these requirements. In particular, the EPRST is interested in confirming from industry's perspective whether the standard's content is well-understood by those implementing it.
2. The initial PRC-023-4 Content and Quality scoring from each EPRSRT member did not align due to a question on whether additional language is needed to clarify that the standard only applies to BES elements. Therefore, the EPRST seeks comments on whether there is a reliability concern not adequately captured by the existing language in PRC-023-4 that would warrant a low content score.
3. The EPRSRT seeks comments on FAC-008-3, Requirements R7 and R8. Specifically, is the language of the requirements confusing or ambiguous as to cause a reliability concern not adequately captured by the existing language in FAC-008-3 that would warrant a lower quality and content score? Please explain your response.
4. At least two EPRs will begin in 2017 from the following standards and standards families eligible for EPRs: BAL-001, INT-004, INT-006, INT-009, INT-010, EOP-010, FAC-003, FAC-008, NUC-001, and the PRC family of standards. Based on the ongoing efforts of the EPRSRT, which standards and standards families should have the highest priority for EPR in 2017?
5. Please provide any additional comments you believe would improve the standards grading process, the EPRSRT's approach to standards grading, and any other input you believe would be helpful in instructing the EPRSRT's final grading.

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
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
					Mark Ringhausen	Old Dominion Electric Cooperative	3,4	RF
					Greg Froehling	Rayburn Country Electric Cooperative	3	SPP RE
					Steve McElhaney	South Mississippi Electric Power Association	4,6	SERC
Southern Company - Southern Company Services, Inc.	Marsha Morgan	1,3,5,6	SERC	Southern Company	Robert Schaffeld	Southern Company Services, Inc	1	SERC
					John Ciza	Southern Company Generation and Energy Marketing	6	SERC
					R Scott Moore	Alabama Power Company	3	SERC
					William Shultz	Southern Company Generation	5	SERC
	Ruida Shu	1,2,3,4,5,6,7,10	NPCC		Paul Malozewski	Hydro One.	1	NPCC

Northeast
Power
Coordinating
Council

RSC no ISO-
NE

Guy Zito	Northeast Power Coordinating Council	NA - Not Applicable	NPCC
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
Michael Forte	Con-Edison	1	NPCC
Kelly Silver	Con-Edison	3	NPCC
Peter Yost	Con-Edison	4	NPCC
Sean Bodkin	Dominion	4	NPCC
Silvia Parada Mitchell	NextEra Energy	4	NPCC
Brian O'Boyle	Con-Edison	5	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
					Jason Smith	Southwest Power Pool Inc	2	SPP RE
					Kim VanBrimer	Southwest Power Pool Inc	2	SPP RE
					Jonathan Hayes	Southwest Power Pool Inc	2	SPP RE
					Lonnie Lindekguel	Southwest Power Pool Inc	2	SPP RE
					Ron Losh	Southwest Power Pool Inc	2	SPP RE
					TARA Lightner	Sunflower Electric Power Corporation	1	SPP RE
					Michelle Corely	Cleco Corporation	1,3,5,6	SPP RE
					Ellen Watkins	Sunflower Electric Power Corporation	1	SPP RE

1. The EPRSRT has not yet finalized consensus content scores on EOP-011-1, Requirements R3, R4, R5, and R6. Please provide comments on what you believe the EPRST should consider in developing its final content scores on these requirements. In particular, the EPRST is interested in confirming from industry's perspective whether the standard's content is well-understood by those implementing it.

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

Answer

Document Name

Comment

-

Likes 0

Dislikes 0

Response

Sean Bodkin - 3,5,6

Answer

Document Name

Comment

N/A

Likes 0

Dislikes 0

Response

Marsha Morgan - 1,3,5,6 - SERC, Group Name Southern Company

Answer

Document Name

Comment

Southern believes there are some additional clarifications to the Requirements that should be considered when developing the final content scores for the requirements. EOP-011-1, R5 needs to be reworded such that the requirement is to notify **impacted** BA and TOPs within the RC area, and **impacted** neighboring RCs.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

Duke Energy agrees that while the standard’s content is generally well-understood, there are some aspects of the standard that could use further clarification. Requirement 3.1.2 requires that the RC *“Review each submitted Operating Plan(s) for coordination to avoid risk to Wide Area reliability.”* Duke Energy believes the requirement’s language is too broad and the scope should be narrowed to help provide direction for the phrase *“coordination to avoid risk”*. It will benefit the industry to help define the types of coordination that the RCs should be evaluating to avoid risks to the BES. Without set objectives for an RC to use in reviewing the appropriateness of an Operating Plan, the requirement could be carried out differently and possibly impact the effectiveness of the evaluation. We suggest that consideration be given to clearly outline objectives for an RC to use in the evaluation of a BA/TOP’s Operating Plan.

Also, Duke Energy believes some ambiguity may exist regarding the use of the term “address” in R4. R4 requires that *“Each Transmission Operator and Balancing Authority shall address any reliability risks identified by its Reliability Coordinator pursuant to Requirement R3 and resubmit its Operating Plan(s) to its Reliability Coordinator within a time period specified by its Reliability Coordinator.”* We feel that the term “address” could be interpreted differently depending on the reader. Does “address” mean to provide a written response to the RC that the concerns the RC raises on the Operating Plan will be remedied at some date in the future? Or, does “address” mean that the issue must be remedied prior to the response from the BA or TOP being sent to the RC? More clarity around the use of the term “address” may be beneficial to industry stakeholders.

Likes 0

Dislikes 0

Response

Michael Puscas - 2

Answer

Document Name

Comment

These comments are on behalf of the ISO RTO Council (IRC) and their Standards Review Committee (SRC). These comments have been reviewed and approved by IESO, ISO-NE, MISO, ERCOT, NYISO, PJM, SPP, and CAISO and are submitted on their behalf.

Please see collective Comments from all ISO's under Question #5 below.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

We believe a RC should be familiar with its responsibilities identified within requirements R3, R5, and R6. While some may question if R3 falls within Paragraph 81 criteria, we feel that some accountability must be identified to complement the RC-reviewed Operating Plan development listed in R1 and R2 for TOPs and BAs, respectively. In requirement R4, we feel the EPRSRT has an opportunity to address an unnecessary burden placed on TOPs and BAs if their RC identifies an unreasonable time period for resubmittal of Operating Plans (i.e. same day). It appears the disagreement identified within the EPRSRT is that the RE representative felt "time frame requirements" should be clarified in R3 and added in R4. We disagree entirely and feel the whole review process implied within the standard should be retired, and instead incorporated into a reliability guideline that is approved and maintained by the NERC Operating Committee.

Likes 0

Dislikes 0

Response

Dennis Chastain - 1,3,5,6 - SERC

Answer

Document Name

Comment

EOP-011-1 (subject to future enforcement), Requirement R3 requires the Reliability Coordinator to review Operating Plans submitted by the TOP and BA, "on the basis of compatibility and interdependency with other Balancing Authorities' and Transmission Operators' Operating Plans." This requirement is ambiguous as to what exactly the Reliability Coordinator is looking for when reviewing the Operating Plans. This requirement is difficult to measure and doesn't really have a technical basis in engineering operations. How often have conflicts occurred between TOPs and BAs Operating Plans? These conflicts seem like they would rarely occur and if so, should probably be coordinated between the conflicting TOPs or BAs instead of the Reliability Coordinator. EOP-011-1, Requirements R4, R5, and R6 seem straightforward.

Likes 0

Dislikes 0

Response

Rachel Coyne - 10

Answer

Document Name

Comment

No comment.

Likes 0

Dislikes 0

Response

Shannon Mickens - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Document Name

Comment

In our evaluation, the only requirement that is unclear is R3 due to the way it is stated. As stated, it appears the RC is to review the Operating Plan (so that) the operating Emergency will be mitigated. That is not the intent of the requirement but the phrasing can lead to that interpretation. A better way to word R3 would be:

'The Reliability Coordinator shall review the Operating Plan(s) developed for R1 and R2 above and submitted by a Transmission Operator or a Balancing Authority in order to identify any reliability risks between those Operating Plans'.

We would like to have had more insight into why the EPRSRT couldn't agree on whether the requirements weren't clear. Particularly which parts were unclear?

Likes 0

Dislikes 0

Response

Si Truc Phan - 1 - NPCC

Answer

Document Name

Comment

HQT has commented on this standard in the attachment at the end. Aside from the nits, we note:

- Purpose: The purpose of the standard focuses on the development and coordination of the Operating Plans. Since the requirements require that the entities must implement the Operating Plans, the purpose should reflect the implementation aspect. This would align the language of EOP-011's purpose with the language of EOP-010's purpose.
- R1, R2 – Without specified delays, the notion of maintenance cannot be enforced.
- R2.2.6. Reduction of internal utility energy use = 'utility' is perhaps not defined in the context of NERC reliability standards.

- R3 - the notion of 'between Operating plans' is ambiguous. However, the requirement and rationale do not set expectations for what kind of risks should be considered (in-plan, in between different plans at the same time, in between plans in a temporal sense, out-of-plan, or all of the above).

Likes 0

Dislikes 0

Response

Douglas Webb - 1,3,5,6 - SPP RE

Answer

Document Name

Comment

No comment.

Likes 0

Dislikes 0

Response

Andrea Jessup - 1,3,5,6 - WECC

Answer

Document Name

Comment

BPA has no issues or comments on EOP-011-1

Likes 0

Dislikes 0

Response

2. The initial PRC-023-4 Content and Quality scoring from each EPRSRT member did not align due to a question on whether additional language is needed to clarify that the standard only applies to BES elements. Therefore, the EPRST seeks comments on whether there is a reliability concern not adequately captured by the existing language in PRC-023-4 that would warrant a low content score.

Andrea Jessup - 1,3,5,6 - WECC

Answer

Document Name

Comment

BPA has no comment.

Likes 0

Dislikes 0

Response

Douglas Webb - 1,3,5,6 - SPP RE

Answer

Document Name

Comment

No Comment.

Likes 0

Dislikes 0

Response

Si Truc Phan - 1 - NPCC

Answer

Document Name

Comment

Regarding the applicability section, it would have been clearer to write the exemption first and then clarify the inclusions, i.e.

4.2. Circuits:

All GSU transformers and Elements that connect the GSU transformer(s) to the Transmission system that are used exclusively to export energy directly from a BES generating unit or generating plant, which may also supply generating plant loads, are exempted from this standard.

4.2.1 Circuits Subject to Requirements R1 – R5:

Elements subject to these requirements are Elements which are part of the BES and are

4.2.1.1 Transmission lines operated at 200 kV and above;

4.2.1.2 Transmission lines operated at 100 kV to 200 kV selected by the Planning Coordinator in accordance with Requirement R6.

4.2.1.3 Transmission lines operated below 100 kV and selected by the Planning Coordinator in accordance with Requirement R6.

4.2.1.4 Transformers with low voltage terminals connected at 200 kV and above.

4.2.1.5 Transformers with low voltage terminals connected at 100 kV to 200 kV selected by the Planning Coordinator in accordance with Requirement R6.

4.2.1.6 Transformers with low voltage terminals connected below 100 kV and selected by the Planning Coordinator in accordance with Requirement R6.

4.2.2 Circuits Subject to Requirement R6:

Elements subject to these requirements are Elements which are part of the BES

4.2.2.1 Transmission lines operated at 100 kV to 200 kV and transformers with low voltage terminals connected at 100 kV to 200 kV.

Although in principle, 4.2.1.2 and 4.2.1.5 can be combined with 4.2.1.3 and 4.2.1.6 respectively, it is useful to clarify that Transmission Lines below 100 kV can be selected by the Transmission Planner.

The 'operator' in 'operator established emergency rating' (R1.criterion 10) is ambiguous. In FAC-008-3, the GO establishes an emergency rating. The history of this reliability issue suggests that the system operator (TOP) is intended. Although the intention of the 15% margin reflects good industry practice with respect to equipment margins, if the system operator can establish the Emergency rating referred to in this requirement, why is the 15% margin required? An operator established rating with 0% margin would make more sense. As an aside, there does not appear to be a requirement that the operator establish this rating in the standards. As a specific example, transformers in Hydro-Québec operate over a greater range of temperatures than most transformers in North America, particularly due to the northern location of many of its major power transformers and therefore the relevant margins with respect to equipment ratings are sometimes less than the industry standard 15%. Obviously, the system operator must account for this reality in operations.

SMEs have found R1-criteria 11 difficult to parse. If our interpretation is correct, this criteria could be written more clearly as follows (modification in bold):

For transformer overload protection relays that do not comply with the loadability component of Requirement R1, criterion 10 set the relays according to one of the following:

- *Set the relays such that the transformer can operate **at the overload level specified in criterion 10** for at least 15 minutes to provide time for the operator to take controlled action to relieve the overload.*
- *Install supervision for the relays using either a top oil or simulated winding hot spot temperature element set no less than 100° C for the top oil temperature or no less than 140° C for the winding hot spot temperature.*

Likes 0

Dislikes 0

Response

Shannon Mickens - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Document Name

Comment

We are unaware of any confusion on applicability of PRC-023-4. However, we feel that the EPRSRT may need to provide a summary on what led them to conclude that the Content and Quality scoring for PRC-023-4 isn't properly aligned. The industry can't provide solutions or accurate comments if we don't know what details led the EPRSRT to this current position in the grading process. Additionally, we would suggest that the EPRSRT use the PRC-025 Standard as a guideline in reference to structuring PRC-023-4 when clarifying applicability.

Likes 0

Dislikes 0

Response

Rachel Coyne - 10

Answer

Document Name

Comment

Texas RE recommends BES elements be specified in the applicability of the Standard. There should not be an assumption as to applicability to BES elements or non-BES elements and the language of the Standard should properly reflect applicability.

Likes 0

Dislikes 0

Response

Dennis Chastain - 1,3,5,6 - SERC

Answer

Document Name

Comment

We agree that additional language to clarify that the standard only applied to BES elements would be helpful. A low content score reflecting that fact seems warranted.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

We do not understand the question, but we agree the applicability section of this standard could be modified to clarify that it only applies to BES elements. If the EPRSRT needs to revise its initial assessment to align its numbers with this concern, then we have concerns with the overall grading process. We will address these concerns in question no. 5 below, when asked for our comments on process improvements.

Likes 0

Dislikes 0

Response

Michael Puscas - 2

Answer

Document Name

Comment

These comments are on behalf of the ISO RTO Council (IRC) and their Standards Review Committee (SRC). These comments have been reviewed and approved by IESO, ISO-NE, MISO, ERCOT, NYISO, PJM, SPP, and CAISO and are submitted on their behalf.

Please see collective Comments from all ISO's under Question #5 below.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

Duke Energy believes that additional language may be necessary to clarify that the standard only applies to BES elements. It is the understanding of industry stakeholders that all Reliability Standards are applicable to BES elements, unless it is explicitly stated otherwise in a standard or requirement. However, we do believe that some ambiguity exists regarding the exception process to the BES definition, and whether some of the language in section 4.2 "Circuits" alludes to the BES exception process. Currently, it is unclear whether the language "that are part of the BES" wording in 4.2.1.3, 4.2.1.6 and 4.2.2.2 is intended to account for elements included under the exception process. If this is the intent, the same language "that are part of the BES" is also needed in 4.2.1.1, 4.2.1.4 and 4.2.2.2 to eliminate any confusion on applicability.

Likes 0

Dislikes 0

Response**Sean Bodkin - 3,5,6****Answer****Document Name****Comment**

As NERC only has jurisdiction over BES facilities (and elements), additional clarity does not appear necessary. In addition, the current applicability section, specifically Section 4.1.2.3 and 4.1.2.6, specify that any transformers with a low side of either below 100kV or between 100 and 200kV must be part of the BES, eliminating any ambiguity. The other applicability sections do not appear to be ambiguous as they contain language specific to Transmission lines or voltages that are clearly BES.

Likes 0

Dislikes 0

Response**Nick Vtyurin - 1,3,5,6 - MRO****Answer****Document Name****Comment**

MH believes the language is sufficient in indicating that the standard is only applicable to BES elements.

Likes 0

Dislikes 0

Response

3. The EPRSRT seeks comments on FAC-008-3, Requirements R7 and R8. Specifically, is the language of the requirements confusing or ambiguous as to cause a reliability concern not adequately captured by the existing language in FAC-008-3 that would warrant a lower quality and content score? Please explain your response.

Michael Puscas - 2

Answer No

Document Name

Comment

These comments are on behalf of the ISO RTO Council (IRC) and their Standards Review Committee (SRC). These comments have been reviewed and approved by IESO, ISO-NE, MISO, ERCOT, NYISO, PJM, SPP, and CAISO and are submitted on their behalf.

Please see collective Comments from all ISO's under Question #5 below.

Likes 0

Dislikes 0

Response

Si Truc Phan - 1 - NPCC

Answer No

Document Name

Comment

The use of 'associated' entity is ambiguous - is the 'association' with the Facility or the entity? Furthermore, the term 'associated' is a weak identification, in comparison to 'responsible' or 'relevant' entity. As a consequence, its translation to French is not straightforward. Aside from this translation difficulty, this ambiguity does not cause problems in Québec since there is only one possible 'associated' RC, PC, TP and TOP in the Québec jurisdiction.

Also HQT supports NPCC comments.

Likes 0

Dislikes 0

Response

Ruida Shu - 1,2,3,4,5,6,7,10 - NPCC, Group Name RSC no ISO-NE

Answer No

Document Name

Comment

FAC-008-3 Requirements R7 and R8 are not confusing or ambiguous, however, the use of "as scheduled" fill-in-the-blank language results in inherently inconsistent application of the standard. This can lead to administrative compliance issues such as where a Registered Entity has not provided an increased facility rating far enough in-advance of "As scheduled." If the main concern of the FAC-008-3 standard is decreases to facility ratings, then the standard should be targeted to decreases to facility ratings, not system improvements that may result in increased facility ratings. It should be noted that FAC-008-3 is a commonly violated reliability standard.

Likes 0

Dislikes 0

Response**Sean Bodkin - 3,5,6****Answer**

No

Document Name**Comment**

Likes 0

Dislikes 0

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

No

Document Name**Comment**

Likes 0

Dislikes 0

Response**Andrea Jessup - 1,3,5,6 - WECC****Answer**

No

Document Name**Comment**

Likes	0
Dislikes	0
Response	
Nick Vtyurin - 1,3,5,6 - MRO	
Answer	Yes
Document Name	
Comment	
<p>The combination of R1, R2, R7 and R8 is unnecessarily complicated. The standard defines three different locations, low side of generator step-up, high side of generator step-up and point of interconnection with TO. It's unclear whether R7 applies only to R1. R8 implies that it refers to R2. The GO should be responsible for everything on their side of the POI and the TO on their side. We don't think there's a reliability gap but it would be nice if the standard could be simplified.</p>	
Likes	0
Dislikes	0
Response	
Marsha Morgan - 1,3,5,6 - SERC, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
<p>The 30 calendar days in 8.2 is too long for facilities involved in IROLs and TTCs.</p>	
Likes	0
Dislikes	0
Response	
Colleen Campbell - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators	
Answer	Yes
Document Name	
Comment	
<p>We interpret the question to read if we feel the language of the identified requirements is confusing or ambiguous, then the EPRSRT will lower their quality and content scores. The language of these requirements is confusing or ambiguous, as one interpretation of its meaning would require the TO and GO to provide their Facility Ratings on a scheduled basis identified by each external reliability entity. We would expect the TO and GO to provide</p>	

updated information when those entities identify any updates to their Facility Ratings. In light of the wording of this question, we have concerns with the overall grading process. We will address these concerns in question no. 5 below, when asked for our comments on process improvements.

Likes 0

Dislikes 0

Response

Shannon Mickens - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Yes

Document Name

Comment

R7 and R8 as written support only use of Facility Ratings and updates to those Facility Ratings in a non-time sensitive time horizon. Operations Planning occurs in real-time. Allowing 30 days to communicate an update of ratings on facilities could lead to reliability issues. Facility Ratings are a key element to determining SOLs. RCs, BAs, and TOPs must be continuously aware of the limitations on their systems. R7 and R8 as written would only support longer term system analysis and planning functions. Alternatively, Requirements R7 and R8 can be retired due to the fact that these Requirements are being addressed in TOP/IRO Standards.

Additionally, we would suggest that the EPRSRT remove the term "associated" in both Requirements R7 and R8. We suggest the term "applicable footprints." We feel that this helps Multiple Regional Registered Entities (MRREs) provide their data to all the applicable entities that require their Facility Ratings and also protects MRREs' sensitive data from entities that intend to misuse their data (which aren't applicable to reliability reasons).

In Requirement R8 (Section 8.2), the terms "major load center" and "impediment" were not defined.

Likes 0

Dislikes 0

Response

Douglas Webb - 1,3,5,6 - SPP RE

Answer

Yes

Document Name

Comment

The language of Requirement 8.2 Item 4 is ambiguous as to cause a reliability concern not adequately captured by the existing language and would warrant a lower content score.

Requirement 8.2, Item 4, "An impediment to service to a major load center..." is vague and ambiguous. Specifically, the term "major load center" is not defined. Vague and ambiguous terms call into question the auditability and enforceability of the Standard.

In reviewing the project materials for FAC-008-3, the Standard Drafting Team (SDT) offered in their Consideration of Comments on Facility Ratings Expansion (Project 2009-06), clarification of expressed concerns of ambiguity regarding Item 4. The SDT looked to the language of the original FERC directive (Order 693, Par. 756) and edited the Item 4 language to better reflect the directive's intent as well as to more closely mirror the language of the

FERC directive. The SDT also revised the term "a major city or load pocket" to "a major load center", with the explanation, "Power engineers and operators will be qualified to make the judgment of what a major load center is (allowing relative judgment) rather than having to specify the demographics of what a major city is or define a load pocket." [Link to Project 2009-06 Consideration of Comments of FR Expansion](#)

Based on the available record, the SDT recognized the ambiguous language of the directive and sought to address that ambiguity, balancing it with the "intent" of the directive, and modified the language which is represented in the current language of Item 4, "major load center." Their modified language did not substantially clarify the term and it remains ambiguous.

While we have great confidence in the expertise of engineers and operators, regardless of how good their judgment at discerning or divining whether a facility is a "major load center" or not, their expertise does not convert the vague and ambiguous term into one of clarity; it remains not auditable and, in turn, unenforceable.

Likes 0

Dislikes 0

Response

Dennis Chastain - 1,3,5,6 - SERC

Answer

Document Name

Comment

In FAC-008-3, Requirement R8, the Transmission Owner and applicable Generator Owner are required to provide facility information on requested schedules unless the facility causes an IROL, a limitation of TTC, an impediment to generator deliverability, or an impediment to service to a major load center. If those triggers occur then the delivery must occur less than 30 days unless the requester schedules a greater than 30 days time period. This standard seems confusing. It's very difficult to determine when the 30 day requirement is even required, it's hard for the TO to know if it's facility meets those requirements and even so the requester can request a longer duration schedule and therefore makes the 30 day requirement moot. This language may not cause a reliability concern, but it does warrant a lower quality score and should at some time be revised.

Likes 0

Dislikes 0

Response

Rachel Coyne - 10

Answer

Document Name

Comment

Yes, the language of the requirements is unclear and the content score should be lowered. Requirement R1, which is referenced effectively by Requirement R7, has ambiguous language associated with Facility Ratings that causes inconsistencies in implementation by Generator Owners. It is perceived that Emergency Ratings for Equipment do not need to be developed within a Facility or for the Facility itself. If the EPRSRT wants to create a single number to represent the output capabilities of a generation site there should be new definitions created to delineate that idea. As is, it does not make sense to expect Transmission Owners to provide Emergency Ratings and Normal Ratings for Equipment and not make Generator Owners of the

same type of Equipment do the same. Considerations for Emergency and Normal Ratings are provided within the Requirement but the development of Ratings by Generator Owners is different and subject to a great deal of professional judgement by the Generator Owner and those reviewing compliance for the Requirement.

Requirement R8 uses only "Thermal Rating" as a condition for "causing" issues but IROLs may have other conditions that need considered due to the definition of IROLs. In Requirement 8.2, items 3 and 4 are ambiguous when it comes to compliance review (e.g., companies know what a major load center is until there is a compliance question and suddenly there are no "major" load centers).

Likes	0	
Dislikes	0	
Response		

4. At least two EPRs will begin in 2017 from the following standards and standards families eligible for EPRs: BAL-001, INT-004, INT-006, INT-009, INT-010, EOP-010, FAC-003, FAC-008, NUC-001, and the PRC family of standards. Based on the ongoing efforts of the EPRSRT, which standards and standards families should have the highest priority for EPR in 2017?

Andrea Jessup - 1,3,5,6 - WECC

Answer

Document Name

Comment

BPA proposes that INT-004 and the PRC family of standards be given the highest priority for EPR in 207.

Likes 0

Dislikes 0

Response

Douglas Webb - 1,3,5,6 - SPP RE

Answer

Document Name

Comment

We would award the highest priority to FAC-008 and the PRC Family of Standards for 2017 Enhanced Periodic Review, as discussed below.

FAC-008:

The Standard's Purpose states, "To ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits. "

In summary, based on its stated purpose, the Standard is to ensure a consistent process for rating transmission facilities. The Standard requires Transmission Owners (TO) and Generator Owners (GO) to document facilities and develop facility rating methodologies. The completed facility ratings are provided to the GO/TOs' associated Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s) and Transmission Operator(s).

The expectations of the Standard are straight forward, however the GO/TO facility ratings are applied by the planning function entities in one manner and applied in a different manner by the operating function entities, creating the potential for harm and misoperations on the BES. The Standard is silent on the expectations for Transmission Operators (TOP) who wish to operate their systems in a "flexible" manner with apparent disregard of the planning function and the role it plays in maintaining BES reliability. While transmission planners establish operational flexibility in their studies, a TOP's decision to operate the BES beyond the studied limits may put the reliable operation of the BES in jeopardy. Operation of the BES outside the parameters of the transmission studies should be addressed—whether by FAC-008 or another Standard—to ensure the Standard's purpose of "...reliable planning and operation of the [BES]..." is achieved.

The PRC Family of Standards

The PRC Family of Standards has too many Standards. Sending the PRC Standards through the EPR process will likely identify PRC Standards that may be consolidated, some retired, and others improved with modifications that add clarity.

The need for fewer Standards: There are twenty active PRC Standards and seven future enforceable PRC Standards, not including pending regulatory approvals and regional PRC Standards. This accounting highlights the fact that there are too many PRC Standards. The hope of sending the PRC Family of Standards through EPR would be to identify the opportunities for retirements and consolidation, with an eye toward establishing precise reliability goals and frameworks.

The need for added clarity: The PRC Family of Standards are difficult to craft because they must be general enough to cover the spectrum of facilities and diversity of design across North America electric systems. By the same token, they must provide enough specificity that the Standard is effective, auditable, and enforceable. The EPR process could help identify Standards that would benefit from clear expression of system protection expectations—establishing a framework and validating system protection parameters.

Likes 0

Dislikes 0

Response

Si Truc Phan - 1 - NPCC

Answer

Document Name

Comment

Following a review of the standards included in the EPRSRT exercise, HQT considers that EPRs are justified for the following standards: PRC-025-1, PRC-006-2, PRC-004-5(i), VAR-001-4.1, VAR-002-4 and PRC-023-4. Please consult the excel spreadsheet attached with our comments on the standards.

Likes 0

Dislikes 0

Response

Shannon Mickens - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Document Name

Comment

FAC-008-3 is not clear in several areas. Its relation to the standards FAC-010, FAC-011, and FAC-014 is confusing at best. There is also the ongoing 2015-09 project that is updating these three standards in relation to the TOP/IRO revisions conducted under 2014-03. FAC-008-3 should be updated/reviewed soon so as to stay relevant and correct.

The INT standards are in dire need of updating due to the deregistration of PSEs and IAs. There are many requirements that are no longer applicable and should be removed from the body of standards for clarity.

Likes 0

Dislikes 0

Response

Rachel Coyne - 10

Answer

Document Name

Comment

Texas RE recommends the following as a list of priority for Enhanced Periodic Review:

1. EOP-010
2. FAC Standards
3. BAL Standards
4. NUC and INT Standards

Likes 0

Dislikes 0

Response

Dennis Chastain - 1,3,5,6 - SERC

Answer

Document Name

Comment

No preference.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

The standards and standards families that should have the highest priority for a review in 2017 should be the PRC standards and FAC-008. The PRC family has many standards that soon will be retired based on implementation plans going into effect in 2017. We feel this would be an opportune time to address the remainder of standards from this family. We also feel it is an appropriate time to address the issues identified for FAC-008 to align with ongoing initiatives to mitigate database modeling risks.

Likes 0

Dislikes 0

Response

Michael Puscas - 2

Answer

Document Name

Comment

These comments are on behalf of the ISO RTO Council (IRC) and their Standards Review Committee (SRC). These comments have been reviewed and approved by IESO, ISO-NE, MISO, ERCOT, NYISO, PJM, SPP, and CAISO and are submitted on their behalf.

Please see collective Comments from all ISO's under Question #5 below.

Likes 0

Dislikes 0

Response

Marsha Morgan - 1,3,5,6 - SERC, Group Name Southern Company

Answer

Document Name

Comment

BAL-001 and FAC-008-3 should have the highest priority in 2017.

Likes 0

Dislikes 0

Response

Sean Bodkin - 3,5,6

Answer

Document Name

Comment

These 2 standards should have the highest priority to review in 2017;

INT-004 (address no longer applicable PSE requirements, periodic review appropriate)

FAC-008 (it appears that NERC is concerned with clarity, so review appropriate)

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

-

Likes 0

Dislikes 0

Response

5. Please provide any additional comments you believe would improve the standards grading process, the EPRSRT's approach to standards grading, and any other input you believe would be helpful in instructing the EPRSRT's final grading.

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

Answer

Document Name

Comment

-

Likes 0

Dislikes 0

Response

Sean Bodkin - 3,5,6

Answer

Document Name

Comment

The model used by the SDT should be made available for comment by the stakeholders. At this time, the 'grades' are determined using a 'black box' methodology by NERC and Regional staff. More stakeholder input into the model and stakeholder involvement in the actual grade derivations could lead to a more useful and meaningful grade.

Likes 0

Dislikes 0

Response

Michael Puscas - 2

Answer

Document Name

Comment

These comments are on behalf of the ISO RTO Council (IRC) and their Standards Review Committee (SRC). These comments have been reviewed and approved by IESO, ISO-NE, MISO, ERCOT, NYISO, PJM, SPP, and CAISO and are submitted on their behalf.

General Comments:

The ISO/RTO Council Standard Review Committee (SRC) appreciates the work of the EPRSRT team. The SRC has chosen not to specifically respond to questions 1-4 in lieu of providing general comments on the entire EPRSRT process and ranking/grading tool as noted below. While the enhanced review and scoring is fine in concept, one fundamental consideration is that the review should only be performed on standards that either have been directed to be changed or that are coming up on their 10 year review. Additionally, for those that are on their 10 year review, the Industry should have a vote on whether the standard is acceptable as-is. There should be a vote prior to opening a new project. Give the Industry the opportunity to vote on whether they want to keep the given standard "as-is". If there are minor problems, such as paragraph 81 requirements, they can be handled in compliance.

Additional Comments:

1. The SRC is concerned that this effort has begun with no industry consensus-building process, especially on the criteria, the voting process, and the definitions of criteria. The SRC recognized that the criteria were nearly the same as the 2013 criteria, but this would have been a good opportunity to update or improve on the previous criteria.
2. NERC's EPR idea was good, but the implementation of the idea did not work as effectively as possible, because the industry was not properly consulted. Involving the industry would have taken more time, but the end result would have been a better grading tool. More work should have been done up front before implementation of the EPR process took place by the OC/PC/NERC representatives. The SRC is concerned that the standards grading criteria were not vetted or approved through industry comment before they were applied by the EPRSRT. Other types of criteria could have been used like Technical Accuracy Criteria, Definition and Terminology criteria, and others. Furthermore, because these criteria did not receive industry vetting, the SRC is concerned that it is too late to change methodology.
3. The ranking/grading criteria are not weighted by importance, just given a yes/1 or no/0, such that a non-risk and risk criteria have the same value. Simply tallying "yes's" and "no's" doesn't yield a true or effective result. Taken individually, some of the criteria, if graded poorly, negate the entire quality of the standard. Such criteria as "is it drafted as a results-based standard?" or "are the correct functional categories identified?" are pivotal to judge the effectiveness of a standard. If all other criteria are judged positively, the grading outcome does not accurately reflect the deficiencies of the standard. This process is not a useful tool for this type of analysis. Furthermore, throughout the criteria, "risk" is only mentioned twice, and in the context of types of requirements. Risk to the BES should be measured, in line with the risk-based compliance oversight. These criteria, perhaps more than any other, should be used to help prioritize and improve standards.
4. The ranking/grading by respondents is a flawed methodology. The SRC requests clarity on the reasoning for a quality rating of 5 versus a quality rating of 10. The criteria "can it be practically implemented?" may receive a number of different answers from respondents depending on the capability and definition of "practical" of each respondent, and isn't measureable. How did each individual make their ranking determination? Neither the published content or quality criteria considered topics like:
 - i. Violation statistics
 - ii. Risk-based compliance concepts (focus on High Risk)
 - iii. Consistency with other Reliability Standards
 - iv. Changes in Technology and System Conditions
 - v. Risk and/or Events on the BES system
5. In the end, it appeared that the scores in the "SRT Preliminary Grades" posted on NERC's webpage (<http://www.nerc.com/pa/Stand/Pages/Enhanced-Periodic-Review-Standards-Grading.aspx>) with few exceptions, were remarkably the same for both content and quality criteria. It would have been helpful to see how each OC, PC, Regional Entity and NERC representative originally and individually ranked each Standard and Requirement before they were discussed and leveled. Individual OC, PC, Regional Entity and NERC representative ratings should have been posted on the project page.
6. It is not completely clear to the SRC what the EPRSRT is going to do with the ranking/grading and how the information will be used, especially in light of the existing information contained in the "Periodic Review Template" (See:

7. The Frequently Asked Questions (FAQ) document (See: http://www.nerc.com/pa/Stand/Enhanced%20Periodic%20Review%20%20Standards%20Grading%20DL/EPRSRT_FAQ_document_06302016.pdf) notes in Q1/A1 that “The finalized grading will be appended to the Reliability Standards Development Plan (RSDP), which has been endorsed by the SC.”, but what this means and how it will help determine whether a Standard will be updated or not is still in question.
8. The SRC questions the value to the EPRSRT effort in general. How does it differ or provide more information to the existing Periodic Review Template, which was designed to give a “red, yellow, or green” grading for a particular Standard. Will the new EPRSRT tool replace the “Periodic Review Template”? If not, why not update the template first, with industry review, comment, and approval, and then apply the new tool to the periodic review of Standards?
9. The SRC suggests for future consideration, that when new NERC projects and new initiatives are launched, NERC allow for a longer review period, especially given the fact that a lot of time has already gone into this effort, and there is a large volume of data to review.
10. There is little value of the resulting scores. They should not be used as a trigger to develop a Standard, but should be one of a series of inputs to an eventual decision about whether to update a particular Standard. In that regard, NERC should list all the inputs to the decision-making process about whether to update a particular Standard.
11. The risk-based approach should be the basis for new or revised Standards. The 2016 CMEP, version 2.4, dated June 2016 states, “During 2016 and beyond, CEAs will continue deploying processes and tools used to support risk-based compliance oversight. NERC and the REs are committed to ensuring full transformation to risk-based compliance oversight, and they plan to continue communications, training, and outreach throughout 2016.”
12. Did the EPRSRT explore alternative grading processes or approaches? If so, what alternate grading processes or approaches did they consider?
13. The continued churn from re-opening the standards for low-value changes (and subsequent follow-up FERC directives for additional requirements) is leading to a level of chaos. The 10-year review should only open a standard if it has a clearly identifiable fatal flaw. The SRC believes that the Standards “churn” must slow if not stop. Steady state must be achieved as quickly as possible.
14. The risk triage process performed by Enforcement staff should be transparent and objective (e.g. serious violations are those that are related to “high impact” requirements known to cause system events or where there was an observed material impact on reliability). NERC should use event data and observations from violations (where there was an observed impact on reliability) to identify the true “high impact” requirements that would be the focus of compliance monitoring, and the development/sharing of internal controls. If there is not a clear trend threatening a BES Benchmark, a standard is probably not the correct solution.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

1. Based on the supplemental information provided, it appears the EPRSRT consists of four people who are representative of the entire ERO Enterprise and industry. We feel this is statistically an insufficient sample set to collect data. At a minimum, the process should have incorporated sector representatives from each of the NERC Technical Committees, including the Critical Infrastructure Protection Committee, to establish a sufficient sample set. A larger sample set would provide a better reflection of industry on this process.
2. We believe the burden placed on the EPRSRT was significant, as the supplemental information identifies over 100 requirements with the expectation that each representative answer 19 different questions. With almost 2000 questions to answer, these representatives likely responded on their own without collaboration with their peers or committee members. We believe a smaller number of requirements should have been identified as part of this process.
3. The process appears to disregard responses to the three general questions regarding Reliability Objectives, Paragraph 81 criteria, and appropriateness for guide development. If a requirement is identified as meeting the Paragraph 81 criteria, then a project should be assigned to retire that requirement regardless of other grading identified.
4. We believe some of the questions have identical meanings that unfairly weigh those responses with other questions. For instance, how different is the content question “identifying who does what and when” from the question regarding the identification of the correct functional entity? Likewise, the quality question asking if the requirement is “complete and self-contained” is nearly identical to the question asking if the requirement is “stand-alone” or should it be consolidated with other standards.
5. There are no questions available to identify Violation Risk Factor misalignments or incomplete Violation Severity Limits. For example, we believe requirement R4 of EOP-011-1 could inadvertently place a significant financial burden on a TOP who is required to resubmit its Operating Plans back to its RC, particularly if the RC has identified an unachievable time period (i.e. same day). Under such conditions, the TOP would violate the requirement based on its High Violation Risk Factor and High Violation Severity Level. We feel the failure to update an Operating Plan is administrative in nature, and should have be classified as a low Violation Risk Factor instead.
6. We have concerns that the EPRSRT could modify their initial assessments based on after-the-fact input collected. We believe the process should only allow the participant one opportunity to answer these questions, and let the responses speak for themselves.
7. We thank you for the opportunity to comment.

Likes 0

Dislikes 0

Response

Dennis Chastain - 1,3,5,6 - SERC

Answer

Document Name

Comment

Average Content Question scores and Quality Question scores don't seem to be that different from standard to standard. There seems to be a large number of 3s and 11s. It is difficult to determine which standards need to be updated and looked at with such similar scores. An enhanced method that brings in additional factors like number of violations and reliability risk may help differentiate the scores.

Likes 0

Dislikes 0

Response

Rachel Coyne - 10

Answer

Document Name

Comment

No additional comments.

Likes 0

Dislikes 0

Response

Shannon Mickens - 2 - SPP RE, Group Name SPP Standards Review Group

Answer

Document Name

Comment

We feel that the EPRSRT needs to provide the context of what led them to their lack of consensus in reference to the Standards grading process. In our opinion, this would help industry provide better feedback to the Standards Grading process in the future.

Likes 0

Dislikes 0

Response

Si Truc Phan - 1 - NPCC

Answer

Document Name

HQT comments on standards considered in the NERC EPRSRT.docx

Comment

Value of the EPRSRT

HQT is in favor of improving the quality of existing standards. Therefore, it supports the EPRSRT in theory. Moreover, it is supporting this review by contributing some detailed comments on the standards under review in the attachment at the end of the file. Many of these comments arose during the translation process and its associated interpretations.

In order to improve the EPRSRT process, it also has the following comments.

Identification of standards eligible for EPRSRT evaluation: timing and granularity

During the scoping of the EPRSRT, it would be more helpful to name the specific standards, including versions, up for review at the beginning of the exercise. Naming a family (e.g. the PRC family for 2016) is not helpful, particularly if the family has many standards. Specifying the list of standards and versions in the Reliability Standards Development Plan would make it easier to obtain comments from company stakeholders in due time. If the specific standards are not

specified at the time of the Reliability Standards Development Plan and if the EPR continues to be held during the summer, it would be helpful to have the list of standards (and their versions) up for review in the early spring so that we could have collected comments in the late spring and early summer.

Standards scoring: A tool for reviewing of standards, not the goal of reviewing standards

Finally, while HQT considers the questions on content and quality useful guides, the scoring exercise with its 13 yes-or-no questions cannot replace a considered holistic evaluation of a standard's success in achieving its reliability objective. Even if a standard only has one problem and scores 12 out of 13 points, that problem, if it compromises the standard's reliability objective, would be significant enough to warrant a review of the standard. Moreover, a standard with such a problem should be reviewed in an EPR above before a sloppy standard scoring 6 out of 13 but which is accomplishing its reliability objective.

Scope of review: Standards sections other than Applicability and Requirements

The focus of the standards grading is the Applicability and the Requirements section. This is understandable and even desirable, since the requirements are the foundation of the mandatory compliance regime. Furthermore, industry is mainly interested in the technical component of the standards. As a consequence, the compliance section, notably the VSL, do not seem to be revised for quality. In Québec's regulatory regime, HQT must file the standards and the Régie de l'énergie regularly comments on aspects relating to VSLs. The VSLs could use a thorough review. They are lengthy and often include errors. Furthermore, there does not appear to be a feedback loop from compliance and enforcement into VSLs since they do not seem to capture the different shortcomings that arise in compliance monitoring.

The similar issue arises with the rationales and guidelines. Because these sections are not normative like the requirements, they undergo less scrutiny during quality review. Though their quality is generally high, they contain language that can lead to confusion.

The Implementation Plan of a standard is inherently normative, since it affects the timing of the mandatory requirements and Implementation Plans have been moved off the standard document. We consider the rationales and guidelines less normative than the Implementation Plan and therefore, they should be considered for a treatment parallel to the Implementation Plan (storage on the NERC website, with a link in the one-stop-shop excel).

Conversely, if the guidelines and rationale warrant inclusion in the standard, perhaps the Implementation Plan should be incorporated as well, perhaps as an attachment.

Likes 0

Dislikes 0

Response

Douglas Webb - 1,3,5,6 - SPP RE

Answer

Document Name

Comment

No Comment.

Likes 0

Dislikes 0

Response

Additional attachment received from Si Truc Phan of Hydro Quebec Transenergie

HQT comments on standards considered in the NERC EPRSRT

Standards that will be inactive in the next year were excluded.

Standard	Our comments
BAL-001-2	<p>Section 4.1.2 .. Balancing Authority is not in active status ...= Could be clearer ('when a BA is active in a Reserve Sharing group')</p> <p>R1 vs R2: Requirement 1 is for the responsible entity, which, in contrast to other standards, is not defined, whereas requirement 2 is for the Balancing Authority. The apparent distinction is unclear.</p> <p>Section 1.2: Data required for the calculation of Regulation Reserve Sharing Group Reporting ACE, or Reporting ACE, CPS1, and BAAL. We have had to interpret for our translators that the intended meaning is : Data required for the calculation of :</p> <p>Regulation Reserve Sharing Group Reporting Ace or Reporting ACE; CPS1, and BAAL. It would have been clearer to write Data required for the calculation of BAAL, CPS1 and Regulation Reserve Sharing Group Reporting Ace and/or Reporting ACE. (Since a single entity could be a BA or member of a RSG in a period).</p> <p>End of attachment 2: the 30-minute clock is reset if data is missing. This could be misused to make non-compliances disappear.</p> <p>R1 VSL - whereas the requirement requires monthly evaluation, the VSLs are on an annual basis. Therefore, 12 consecutive months of below spec performance between 95% and 100% would generate a light severity. The basis for this could be difficult to argue when filing with the Régie de l'énergie du Québec, the regulator in Québec.</p>
EOP-011-1	<p>The purpose of the standard focuses on the development and coordination of the Operating Plans. The requirements require that the entities must implement the Operating Plans. The purpose should reflect the implementation aspect. This would align the language of EOP-011's purpose with the language of EOP-010's purpose.</p>

	<p>'Background: Emergency Operations not in Glossary of term = should be 'Emergency operations'.</p> <p>2.2.6. Reduction of internal utility energy use = 'utility' is ambiguous.</p> <p>VSL R4: correct 'tis' by 'its'.</p> <p>3.3.1 ',it will be immediately...' = 'it' should be remove.</p> <p>R1, R2 - the notion of maintenance is not framed so as to be checked in a compliance environment. No delays are prescribed.</p> <p>R3 - the notion of 'between Operating plans' is ambiguous. Is the idea to identify</p> <ul style="list-style-type: none"> • risks common to different plans? • risks that plans are inconsistent with one another? • risks that could arise after the submission of an Operating plan but before the submission of a subsequent plan? • risks not addressed in the plans submitted? <p>The rationale suggests that the RC should review for risks in a general sense. However, the requirement and rationale do not set expectations for what kind of risks should be considered (in-plan, in between different plans at the same time, in between plans in a temporal sense, out-of-plan, or all of the above).</p>
FAC-008-3	<p>R7, R8 The use of 'associated' entity is slightly ambiguous (is the 'association' with the Facility or the entity? furthermore, association is a bit weak compared to 'responsible' or 'relevant' entity) and as a consequence, its translation to French is not straightforward. However, in Québec, it does not cause ambiguity (aside from the translation difficulty), since there is only one relevant or 'associated' RC, PC, TP and TOP in the Québec Interconnection.</p> <p>R2.3 A statement that a Facility Rating shall respect the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility. = Ambiguous.</p>
INT-004-3.1	<p>M2 '...the deviation met the criteria in</p> <p>Requirement R2, Parts 2.1- 2.3. (R2)' should probably read "the deviation met one of the criteria in ... ". Similarly for the VSL.</p> <p>VSL R2: missing 'and Real Times Operations'.</p> <p>'loads' , 'curtailments', 'tags' should be Capitalized. 'Signal' should be lower case.</p>
INT-006-4	<p>M2: 'curtailed confirmed Interchange' should be in capitalized.</p>
INT-009-2	<p>R3 HVDC 'tie' : any tie? = should connect to the standard more directly. A Pseudo-Tie that is over a HVDC line, for example.</p>

INT-010-2.1	<p>Purpose: 'provide guidance' is inappropriate for a standard.</p> <p>Suggestion rewording R1 as: 'The Balancing Authority that experiences a reliability need (loss of resources or other) covered by an energy sharing agreement shall ensure that a Request for Interchange (RFI) is submitted with a start time no more than 60 minutes beyond the beginning of the need. If the use of the energy sharing agreement does not exceed 60 minutes from the time of the beginning of the need, no RFI is required.'</p> <p>'Dynamic Schedule Tags', 'Dynamic Schedule signals': correction?</p>
PER-003-1	<p>Could be combined with PER-005, but there is value in distinguishing the necessary certificates and the training programs.</p>
PER-004-2	<p>Is R2 redundant to IRO standards?</p>
PRC-004-5(i)	<p>With the new NERC definition of Misoperation, the title of the standard is redundant and a bit incoherent. Protection System Misoperation, where Misoperation is the failure of a Comprehensive Protection System to operation. It would have been better to define Misoperation in the context of this standard as a defined term or to define Protection System Misoperation as the NERC term.</p> <p>R1.2 The Composite Protection System is poorly integrated. 1.2 should refer to 1.1 explicitly rather than implicitly or the requirement should make the CPS explicit in the misoperation (i.e. protection system component of a Composite Protection System). Also, 1.2 is redundant to 1.3 and therefore unnecessary.</p> <p>R1.3 Bad grammar. the 'was caused by' has the wrong subject. 'The BES interrupting device owner identified that the BES interrupting device(s) operation was caused by its Protection System component(s) or by manual intervention in response to its Protection System failure to operate.'</p> <p>R4 requires that an entity non-comply with R1 and R3 for R4. The guidance explains that R4 is intended to provide an escape. However, the guidance is not normative. R1 and R3 should allow the use of R4 to explicitly escape the 120 day deadline to identify a misoperation cause.</p>
PRC-005-6	<p>Current Sensing, Station, Path are capitalized in Table 1-3 (leftmost column).</p> <p>4.2.2 Reference to ERO underfrequency requirements seems an inappropriate reference. Those requirements should be made explicit within the standard. If this is impossible (they change too much), it should be an explicit reference.</p>
PRC-006-2	<p>R1 - 'select' vs 'identify' - nuance unknown</p> <p>R2 - Each planning coordinator shall design its UFLS program with respect to the following islands:' what is the basis of a program?</p> <p>R3 - The imbalance scenario is not clearly specified. Is it peak? off-peak? the worst case in the year? QC is proposing a regional variant because specific scenarios have wildly different dynamics than assumed in the requirement.</p>

R6 Using 'maintenance' to mean 'update' is misleading. R6 does not require the PC to make a schedule and communicate it to UFLS entities, but R8 implies that it must. There should be a requirement or subrequirement that more clearly establishes expectations for R6 and R8.

R9 (and R10) Use of 'Provide' is ambiguous (translation is difficult) since provides has both notions of capacity and execution. The measure indicates that only execution is intended (automatic tripping is verified by 'tripping' not capacity) but the VSL suggests that capacity is intended. , OTOH, the VSL does not address execution at all. The requirement should clarify the obligation. Perhaps it could read ' The entity must assure that Load is automatically tripped as specified...' or The entity is responsible for assuring that *Load* is automatically tripped as specified in '. If the entity must demonstrate that it 'can' trip load as specified, then the measure should be updated 'The entity must demonstrate it has the capacity to automatically trip *Load* as per ... and, if a tripping event happened, that the *Load* tripped automatically as specified...' The VSL can be updated to include execution.

R11, R12, R13 and M13 refer to 'BES islanding event results in system frequency excursions below the initializing set points of the UFLS program'. The restricting term 'islanding' should be removed.

R14 'finalizing' the program is a new term, separate from the term 'developing' in R3. There is no timeline necessarily to 'finalizing' the program and therefore no timeline to responding to comments. Therefore not easily enforceable.

R15 The 'identified in Requirement Rx' language is confusing. R4 offers 5 years to assess the program. If the assessment is done in year 4, then this language, if not redundant, suggests that the CAP must be done in the period identified, which means in the 1 year following. This seems unduly short. On the other hand, 5 years to fix the problem seems like a long time. If the 5-year evaluation finds at 4.5 yrs that the program is flawed, the program can be in a flawed state for 9.5 years.

D1.2 'The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.' The sentence is self-contradictory.

D1.2 Current evidence and evidence since the last audit is either redundant or ambiguous. With a NERC audit cycle of 6 years, 7 years should cover availability unambiguously. Or, 'Evidence since the last date included in the scope of an audit of these requirements.'

R7 Severe VSL, 2nd clause should be did not provide to PC following their request. Preferably, the VSL should be rewritten as a single clause as 'did not provide its database within 60 days following a request'.

VSLs for D.B.2 do not match D.B.R2 text.

UFLS Entity is not defined in the glossary. It should probably be UFLS entity.

PRC-006-NPCC-1

This standard requires a review but since a review of this standard is already under way at NPCC, a NERC-level EPR does not seem necessary.

R1: We presume the 'required by the NERC...' refers to the islanding criteria but grammatically it refers to the load shedding, except that compensatory load shedding is not required by a NERC standard.

	Section 20.4: 'amount' should be changed to 'number'
PRC-010-2	<p>The references to the FAQ document ('This document') are misleading. This FAQ section is based on an FAQ document developed for PRC-010-1.</p> <p>In FAQ.Q6, the following sentence is perhaps accurate in intention but if so, the logic of the sentence is inaccurate.: "The [RAS] definition revisions specifically excluded UVLS Programs, therefore including centrally controlled undervoltage-based shedding." The definition excludes 'Schemes for automatic underfrequency load shedding (UFLS) and automatic undervoltage load shedding (UVLS) comprised of only distributed relays'.</p>
PRC-019-2	R1.1.1 is quite clear with respect to coordination - in-service limiter vs Protection system. R1.1.2 does not clearly identify its coordination purpose. In particular, in-service Protection System appears to combine the two notions that are supposed to be coordinated?
PRC-023-4	The operator in 'operator established emergency rating' (R1.criteria 10) is ambiguous. If it is the system operator (as opposed to a generic equipment operator, a generic equipment operator being an unlikely reading textually) then this is distinct from the owner established emergency rating from FAC-008-3. If the operator can establish the Emergency rating, why is the 15% margin required? Even if intention of the 15% margin is to reflect industry practice with respect to equipment margins, it is inappropriate here with an operator-established rating.
PRC-024-2	VSLs for R3 are not consistent with R3. It refers to 'non protection equipment limitation' and the non-protection part is not in R3.Also there is no reference to regulatory limitations.
PRC-025-1	HQT has significant technical comments regarding the application of this standard to generators connected to the BES through long transmission lines. HQT has presented these comments to NPCC with a view to requesting a SAR. NPCC has suggested that HQT raise this issue in the EPRSRT process.
VAR-001-4.1	<p>Purpose: There is a word missing in the purpose: "To ensure that voltage levels, reactive flows, and reactive resources are monitored, controlled, and maintained within limits in Real-time to protect equipment and maintain the reliable operation of the Interconnection." This correction is consistent with the purpose of VAR-002-4.</p> <p>R1 semantic inconsistency between R1 and R1.1 regarding 1 schedule specified in R1 and multiple schedules in R1.1. Either the TOP has 1 schedule for its zone, or many...</p> <p>R3 does not define 'as necessary'. (to maintain the schedule?) The VSL establishes the necessity as respecting SOL and IROL, respectively, as does the guidance. It would be cleaner to specify it in the requirement.</p> <p>R5 leaves the scope of generators open, suggesting rather than specifying that all non-exempt BES generators are subject to the TOP. It would be cleaner to specify clearly that all BES generators must be included in the scope of TOP's application (in R4 and R5). As it is, the VSL is clear that all generators must be included. The two components in the critical VSL do not</p>

	<p>appear to be similar in severity. The second component seems more in line with the High component. Notably, the WECC regional variance defines the application scope clearly (all generation resources in its Area)</p> <p>R6 does not define 'necessary' and therefore the purpose of the changes required of the GO by the TOP are not defined. i.e. why does the TOP impose tap changes on the GO rather than allowing the GO to conform himself to the schedule. The guidance rationale is not helpful for defining 'necessary'. Furthermore, the requirement assumes that the GO owns the transformer. The requirement should align with other similar standard requirements which include TO as a functional entity to cover the different possibilities of transformer ownership. As written, this could require some TOs that own such transformers to register as GOs for the requirement to properly apply.</p>
VAR-002-4	<p>R1. The notification required for the first bullet is unclear. The second sentence of M1, which could clarify the required notification, is also unclear. One could presume that the intention is that a properly notified start-up, shutdown or test need not also specify the AVR is off. However, the text is ambiguous. The second sentence of M1 appears to introduce a new notion - "procedure for placing the unit in AVR as required in R1" - which is not specified in R1.</p> <p>R4 and R5 give the TOP GOP/GO responsibilities. The TOP is not responsible for transformer tap settings and therefore should not be micro-managing them. The GOP is responsible for meeting the schedule. Furthermore, the requirements presume that the GO owns the transformer, which is not always the case. The rationale says that no other standard imposes transformer tap settings. This should be fixed not poorly patched.</p> <p>R2 High VSL - One must assume that if the conversion methodology does not exist, the entity is matching a schedule without any evidence that the schedule is actually being matched in reality. If the conversion shows that their schedule is not being matched at the real point, then this is an error without consequence and yet remains a high severity, whereas if the conversion is such that the schedule is not respected, the severity should be bumped to severe. A lack of rigor that is without consequences could be lower severity than 'high', with the understanding that if the lack of rigor caused a mismatch of schedule, it is severe.</p> <p>Rationale for R1: (minor) misquote of FERC (and also missing quote marks) - FERC requested "more detailed and definitive requirements" not more "detailed and definitive requirements", i.e. more detail and definiteness, not more requirements.</p> <p>Rationale for R2: Rationale says it is important that the TOP should adjust for the conversion methodology: however, nothing in the requirements requires the communication of the methodology to the TOP.</p> <p>As in VAR-001, the nature of the schedule is a bit ambiguous because it is sometimes singular, sometimes plural. e.g. R5.3 voltage schedules and Reactive power schedule.</p>