

Comment Report

Project Name: 2017-01 Modifications to BAL-003-1.1
Comment Period Start Date: 12/4/2018
Comment Period End Date: 1/17/2019
Associated Ballots: 2017-01 Modifications to BAL-003-1.1 BAL-003-2 IN 1 ST
2017-01 Modifications to BAL-003-1.1 BAL-003-2 Non-Binding Poll IN 1 NB
2017-01 Modifications to BAL-003-1.1 Implementation Plan IN 1 OT

There were 23 sets of responses, including comments from approximately 93 different people from approximately 69 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

- 1. The SDT proposes to replace Resource Contingency Criteria (RCC) with the Resource Loss Protection Criteria (RLPC). This criterion will be applied consistently across all Interconnections, and is designed to produce adequate reliability for each Interconnection. The RLPC determination methodology is detailed for this posting in the *Resource Loss Protection Criteria* Section of the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard* document and further in the *Resource Loss Protection Criteria* document. Is this methodology appropriate for determining the magnitude of the resource loss events that each Interconnection should protect against to assure an adequate level of reliability? If not, please provide an alternative proposal and any comments to the *Resource Loss Protection Criteria* document, which has been revised based on industry comment.**
- 2. The SDT proposes fixing IFROs for a period that will continue until Phase 2 of the Project 2017-01 is completed. Do you agree with keeping IFROs as scheduled in Attachment A during the remainder of Project 2017-01? If you do not agree, please provide an alternative. Or, if you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.**
- 3. The SDT is proposing to move items not related to entity compliance from BAL-003-1.1, Attachment A to the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard* document. Changes to this document will be subject to approval by the NERC Board of Trustees and informational filing to FERC. Do you agree that the SDT's proposed changes are appropriate? If not, please provide an alternative. Or, if you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.**
- 4. Please provide any additional comments for the SDT to consider that have not already been provided in the questions above.**

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
MRO	Dana Klem	1,2,3,4,5,6	MRO	MRO NSRF	Joseph DePoorter	Madison Gas & Electric	3,4,5,6	MRO
					Larry Heckert	Alliant Energy	4	MRO
					Amy Casucelli	Xcel Energy	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jodi Jensen	Western Area Power Administration	1,6	MRO
					Kayleigh Wilkerson	Lincoln Electric System	1,3,5,6	MRO
					Mahmood Safi	Omaha Public Power District	1,3,5,6	MRO
					Brad Parret	Minnesota Power	1,5	MRO
					Terry Harbour	MidAmerican Energy Company	1,3	MRO
					Tom Breene	Wisconsin Public Service Corporation	3,5,6	MRO
					Jeremy Voll	Basin Electric Power Cooperative	1	MRO
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
PPL - Louisville Gas and Electric Co.	Devin Shines	3,5,6	RF,SERC	Louisville Gas and Electric Company and Kentucky Utilities	Charles Freibert	PPL - Louisville Gas and Electric Co.	3	SERC
					JULIE	PPL -	5	SERC

				Company	HOSTRANDER	Louisville Gas and Electric Co.		
					Linn Oelker	PPL - Louisville Gas and Electric Co.	6	SERC
Southwest Power Pool, Inc. (RTO)	Jim Williams	2	MRO,SERC	SPP Standards Review Group	Jim Williams	SPP	2	MRO
					Shannon Mickens	SPP	2	MRO
ACES Power Marketing	Jodirah Green	6	NA - Not Applicable	ACES Standard Collaborations	John Shaver	Arizona Electric Power Cooperative, Inc.	1	WECC
					Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	1	SERC
					Greg Froehling	Rayburn Country Electric Cooperative, Inc.	3,6	Texas RE
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Jenny Knernschild	Old Dominion Electric Cooperative	3,4	SERC
DTE Energy - Detroit Edison Company	Karie Barczak	3		DTE Energy - DTE Electric	Jeffrey Depriest	DTE Energy - DTE Electric	5	RF
					Daniel Herring	DTE Energy - DTE Electric	4	RF
					Karie Barczak	DTE Energy - DTE Electric	3	RF
PJM Interconnection, L.L.C.	Mark Holman	2		SRC	Brandon Gleason	Electric Reliability Council of Texas, Inc.	2	Texas RE
					Charles Yeung	Southwest Power Pool, Inc. (RTO)	2	SERC
					Ali Miremadi	California ISO	2	WECC
					Helen Laines	Independent Electric	2	NPCC

						System Operator		
					Kathleen Goodman	ISO New England	2	NPCC
					Mark Holman	PJM Interconnection	2	RF
					Terry Bilke	Midcontinent Independent System Operator	2	RF
					Gregory Campoli	New York Independent System Operator	2	NPCC
Manitoba Hydro	Mike Smith	1		Manitoba Hydro	Yuguang Xiao	Manitoba Hydro	5	MRO
					Karim Abdel-Hadi	Manitoba Hydro	3	MRO
					Blair Mukanik	Manitoba Hydro	6	MRO
					Mike Smith	Manitoba Hydro	1	MRO
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	RSC no Dominion	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Brian Robinson	Utility Services	5	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					David Burke	Orange & Rockland Utilities	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Helen Lainis	IESO	2	NPCC
					Michael Jones	National Grid	3	NPCC
					Sean Cavote	PSEG	4	NPCC
					Kathleen	ISO-NE	2	NPCC

Goodman			
David Kiguel	Independent	NA - Not Applicable	NPCC
Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	6	NPCC
Paul Malozewski	Hydro One Networks, Inc.	3	NPCC
Gregory Campoli	New York Independent System Operator	2	NPCC
Caroline Dupuis	Hydro Quebec	1	NPCC
Chantal Mazza	Hydro Quebec	2	NPCC
Michael Forte	Con Edison	1	NPCC
Laura McLeod	NB Power Corporation	5	NPCC
Nick	Kowalczyk	1	NPCC
Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1	NPCC
John Hastings	National Grid	1	NPCC
Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC
Sofia Gadea-Omelchenko	Con Edison	5	NPCC
Joel Charlebois	AESI - Acumen Engineered Solutions International Inc.	5	NPCC
Quintin Lee	Eversource Energy	1	NPCC
Mike Cooke	Ontario Power Generation, Inc.	4	NPCC
Salvatore Spagnolo	New York Power Authority	1	NPCC

					Shivaz Chopra	New York Power Authority	5	NPCC
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1. The SDT proposes to replace Resource Contingency Criteria (RCC) with the Resource Loss Protection Criteria (RLPC). This criterion will be applied consistently across all Interconnections, and is designed to produce adequate reliability for each Interconnection. The RLPC determination methodology is detailed for this posting in the *Resource Loss Protection Criteria* Section of the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard* document and further in the *Resource Loss Protection Criteria* document. Is this methodology appropriate for determining the magnitude of the resource loss events that each Interconnection should protect against to assure an adequate level of reliability? If not, please provide an alternative proposal and any comments to the *Resource Loss Protection Criteria* document, which has been revised based on industry comment.

Michelle Amarantos - APS - Arizona Public Service Co. - 1

Answer No

Document Name

Comment

AZPS appreciates the changes that were made that largely address our concerns and many others in the industry. AZPS now largely supports the RLPC with one important distinction. We believe the description of the RLPC is inaccurately described in the first bullet of Chapter 3 of the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard*.

“The two largest Balancing Contingency Events due to a single contingency identified using system models in terms of loss measured by megawatt loss in a normal system configuration (N-0). (An abnormal system configuration is not used to determine the RLPC.)”

We do not believe the intent is two events that are caused by a single contingency, which would be an N-2. Perhaps a better way to state what is intended is the language used in the proposed BAL-003-2, “the two largest potential Balancing Contingency Events that exist within a Balancing Authority identified using system models in terms of loss measured by megawatt loss in a normal system configuration (N-0). (An abnormal system configuration is not used to determine the RLPC.)”

Likes 0

Dislikes 0

Response

Thomas Foltz - AEP - 5

Answer Yes

Document Name

Comment

The proposed methodology does appear to produce consistent results; however it represents a resource loss that may not actually manifest itself in practice. It does appear to provide a reasonable margin to reduce the potential for triggering UFLS operation due to insufficient frequency response. We appreciate the efforts of the SDT, however we believe it needs to be recognized that the proposed methodology is based-on (as well as highly dependent-on) the current resource mix and configuration.

Likes 0

Dislikes 0

Response

Richard Vine - California ISO - 2

Answer Yes

Document Name

Comment

The California ISO supports the comments of the ISO/RTO Council Standards Review Committee (SRC) and has one additional comment under item 4 below.

Likes 0

Dislikes 0

Response

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

BPA supports replacing the Resource Contingency Criteria (RCC) with the Resource Loss Protection Criteria (RLPC). BPA agrees this methodology is appropriate for determining the magnitude of the resource loss events that each Interconnection should protect against to assure an adequate level of reliability.

BPA suggests that the SDT review the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard* to ensure that the language regarding RLPC matches the *Resource Loss Protection Criteria* document.

Likes 0

Dislikes 0

Response

Devin Shines - PPL - Louisville Gas and Electric Co. - 3,5,6 - SERC, Group Name Louisville Gas and Electric Company and Kentucky Utilities Company

Answer Yes

Document Name

Comment

Louisville Gas and Electric Company and Kentucky Utilities Company (LG&E/KU) generally agree with the proposed methodology. However, Page 1 of the RLPC document contains the statement: "The MSSC calculation is done in Real-time operations based on actual system configuration." However,

not every BA or RSG determines MSSC in real time – many do not. We recommend the SDT delete this statement for accuracy.

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 6, Group Name ACES Standard Collaborations

Answer

Yes

Document Name

Comment

We believe replacing the RCC with the RLPC will bring consistency across all interconnections and will eliminate the need of having a higher expectation from the Eastern Interconnection. Additionally, revising the verbiage associated with the MSSC, as one the basis for IFRO, has improved the overall technicality of the RPLC.

Likes 0

Dislikes 0

Response

Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Neil Swearingen - Salt River Project - 1,3,5,6 - WECC

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

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

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2, Group Name SRC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric

Answer

Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Preston Walker - PJM Interconnection, L.L.C. - 2 - SERC,RF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ozan Ferrin - Tacoma Public Utilities (Tacoma, WA) - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Diana Torres - Imperial Irrigation District - 1,3,5,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	Yes
Document Name	
Comment	
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	
Likes	0
Dislikes	0

Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0

Response	
Douglas Webb - Douglas Webb On Behalf of: Allen Klassen, Westar Energy, 6, 3, 1, 5; Bryan Taggart, Westar Energy, 6, 3, 1, 5; Derek Brown, Westar Energy, 6, 3, 1, 5; Grant Wilkerson, Westar Energy, 6, 3, 1, 5; Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Shaffer - Berkshire Hathaway - PacifiCorp - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jim Williams - Southwest Power Pool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Kevin Salsbury - Berkshire Hathaway - NV Energy - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

2. The SDT proposes fixing IFROs for a period that will continue until Phase 2 of the Project 2017-01 is completed. Do you agree with keeping IFROs as scheduled in Attachment A during the remainder of Project 2017-01? If you do not agree, please provide an alternative. Or, if you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.

Michelle Amarantos - APS - Arizona Public Service Co. - 1

Answer No

Document Name

Comment

AZPS questions the logic that the newly proposed methodology for IFRO would only be valid to apply this one time until after Phase Two is completed. If it is believed that this IFRO methodology is technically valid, then it should be valid until an approved alternative is determined and approved. AZPS would also suggest leaving the currently determined values based on this methodology out of the actual standard since all of the contributing elements are subject to change based on the procedure and could quickly become inaccurate. It may be more appropriate to publish the currently determined values in the procedure, which can be updated often as necessary, and not in the standard.

Likes 0

Dislikes 0

Response

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

There are several reasons that BPA cannot agree with keeping IFROs as scheduled in the revised Attachment A during the remainder of Project 2017-01.

- - The IFRO First Step for the Western Interconnection includes a Load Credit of 120 MW. There is no Load Credit for a PDCI RAS event.

Alternative approach: BPA asks that the First Step for WECC be recalculated without the Load Credit applied.

- - It is apparent that the First Step IFRO in the BAL-003 redline was calculated as $(RLPC - Load Credit) / 10 * MDF$

However, it is not apparent how the Max Delta Frequency (MDF) was determined since the tables with subcomponents such as the CBR (C to B ratio) are missing from the standard or a supporting document. The standard does say: "Detailed descriptions of the calculations used in Table 1 below are defined in the Procedure for *ERO Support of Frequency Response and Frequency Bias Setting Standard*." But the *ERO Support of Frequency Response and Frequency Bias Setting Standard* does not detail at all how the calculations used in Table 1 are defined, because the calculations were removed from that document.

Alternative approach: BPA recommends that the methodology for determining IFRO and MDF be detailed in Attachment A and that Table 1 be moved to

a NERC document that can be updated yearly. The IFRO and MDF are key components of the current standard and the methodology for calculating it must be in Attachment A so that it cannot change without industry vote and FERC approval. BPA supports a change in the IFRO methodology through Phase II of Project 2017-01, at which point Attachment A should be updated.

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- The revised standard states that “**To reduce risk, the Eastern Interconnection IFRO will be stepped down annually from the 2017 value of -1,015 MW/0.1 Hz in -100 MW/0.1 Hz increments. If during the step down process, Interconnection Frequency Response Measure (FRM) declines by more than 10% percent, the ERO will halt the reduction in IFRO until such times that a determination can be made as to the cause of the degradation.”

BPA believes that this is not adequate for reliability.

Alternative approach: BPA recommends that if the Interconnection Frequency Response Measure (FRM) declines by more than 10% percent, the ERO raise the IFRO back to the previous step.

Likes 0

Dislikes 0

Response

Jim Williams - Southwest Power Pool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group

Answer

Yes

Document Name

Comment

The SPP Standards Review Group (“SSRG”) agrees with the proposal to fix the IFRO while the drafting team works on Phase 2. The 2017 FRAA dynamics study and subsequent filing to FERC confirmed the -1,015 MW/0.1Hz IFRO value to be the reliability limit. Without another dynamics study, we do not support the lowering of the IFRO to the values listed in Attachment A. Additionally, the issue may not be the actual determination of the RLPC, but rather how the IFRO is calculated (considering that formula results in an IFRO recommendation below previously established limits).

Likes 0

Dislikes 0

Response

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer

Yes

Document Name

Comment

The MRO NSRF agrees with fixing the IFROs in Attachment A during the remainder of Project 2017-01 assuming the SDT is talking about the minor changes that arise from NERC’s annual frequency analysis, and not that the SDT is precluding the three step change in the East’s IFRO.

Likes 0

Dislikes 0

Response

Devin Shines - PPL - Louisville Gas and Electric Co. - 3,5,6 - SERC, Group Name Louisville Gas and Electric Company and Kentucky Utilities Company

Answer Yes

Document Name

Comment

LG&E/KU agrees with keeping IFROs as scheduled in Attachment A, but we recommend the Drafting Team specify that IFROs will be as shown in **Table 1** of Attachment A. Additionally, Table 1 should specify the applicable OY for the changes in EI IFRO, rather than the "First, Second, and Final Steps."

Likes 0

Dislikes 0

Response

Mark Holman - PJM Interconnection, L.L.C. - 2, Group Name SRC

Answer Yes

Document Name

Comment

The SRC agrees with fixing the IFROs in Attachment A during the remainder of Project 2017-01 assuming the SDT is talking about the minor changes that arise from NERC's annual frequency analysis, and not that the SDT is precluding the three step change in the East's IFRO.

Likes 0

Dislikes 0

Response

Richard Vine - California ISO - 2

Answer Yes

Document Name

Comment

The California ISO supports the comments of the ISO/RTO Council Standards Review Committee (SRC) and has one additional comment under item 4

below.

Likes 0

Dislikes 0

Response

Kevin Salsbury - Berkshire Hathaway - NV Energy - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 6, Group Name ACES Standard Collaborations

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sandra Shaffer - Berkshire Hathaway - PacifiCorp - 6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

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

Likes 0

Dislikes 0

Response

Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response**Diana Torres - Imperial Irrigation District - 1,3,5,6****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Ozan Ferrin - Tacoma Public Utilities (Tacoma, WA) - 5****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Preston Walker - PJM Interconnection, L.L.C. - 2 - SERC,RF****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

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

Neil Swearingen - Salt River Project - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Thomas Foltz - AEP - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

3. The SDT is proposing to move items not related to entity compliance from BAL-003-1.1, Attachment A to the *Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard* document. Changes to this document will be subject to approval by the NERC Board of Trustees and informational filing to FERC. Do you agree that the SDT's proposed changes are appropriate? If not, please provide an alternative. Or, if you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

BPA believes that the IFRO and MDF calculation methodology should be established and detailed in Attachment A so that it is transparent to all parties. The Table 1 of values, that can change yearly, should be moved to another NERC document that is not subject to the NERC standard development process. Any subsequent IFRO and MDF calculation methodology as determined in Phase II of Project 2017-01 should also reside in Attachment A.

Likes 0

Dislikes 0

Response

Thomas Foltz - AEP - 5

Answer Yes

Document Name

Comment

While beneficial, the procedure document is not sufficiently complete to be considered a procedure. For completeness' sake, the document should contain a revision record, a section covering rolls and responsibilities, and a section describing the methods that should be used to limit the reduction of IFRO. While we agree with keeping the document outside the defined process for standards development and balloting, we believe there should still be a rigorous mechanism for when changes are developed, proposed, and potentially adopted.

More specificity is needed in "Chapter 1: Event Selection Process", as it is not clear what criteria is to be used going forward. The statistical relevance driver used results in a large portion of events selected for the EI, where neither the BAs nor the GO/GOP has had any appreciable influence on frequency response.

Our comments in this section notwithstanding, we acknowledge that our concerns may eventually be addressed as part of Phase 2.

Likes 0

Dislikes 0

Response

Richard Vine - California ISO - 2

Answer Yes

Document Name

Comment

The California ISO supports the comments of the ISO/RTO Council Standards Review Committee (SRC) and has one additional comment under item 4 below.

Likes 0

Dislikes 0

Response

Michelle Amarantos - APS - Arizona Public Service Co. - 1

Answer Yes

Document Name

Comment

AZPS agrees with the moving of these administrative items from the standard to the procedure. AZPS asks the Drafting Team to provide clarity on whether Form 2s are also required to be submitted and if so, please include in the procedure. And as mentioned in response to Question 2, please consider moving the table which demonstrates what the currently calculated values are for RLPC, CLR, and IFRO for the coming years out of the standard and into the procedure as well.

Likes 0

Dislikes 0

Response

Diana Torres - Imperial Irrigation District - 1,3,5,6

Answer Yes

Document Name

Comment

IID believes that this will simplify the FRO and FR settings. Indirectly this can also reduce risk when the FRM is reduced dramatically.

Likes 0

Dislikes 0

Response

Devin Shines - PPL - Louisville Gas and Electric Co. - 3,5,6 - SERC, Group Name Louisville Gas and Electric Company and Kentucky Utilities Company

Answer Yes

Document Name

Comment

LG&E/KU recommends that the Event Selection Criteria include a consideration for load level at the time of the event. Load provides a frequency response benefit that is proportional to the amount and type of load on-line at the time of the event. Therefore, events occurring during light load realize less of this benefit, and such events will exhibit greater volatility in frequency excursions. Selection of too many events during low load periods can skew the results, which will not provide the most accurate view of an interconnection's "normal" FR capability.

Likes 0

Dislikes 0

Response

Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Neil Swearingen - Salt River Project - 1,3,5,6 - WECC

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	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Holman - PJM Interconnection, L.L.C. - 2, Group Name SRC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Preston Walker - PJM Interconnection, L.L.C. - 2 - SERC,RF

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ozan Ferrin - Tacoma Public Utilities (Tacoma, WA) - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro

Answer Yes

Document Name

Comment

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	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Douglas Webb - Douglas Webb On Behalf of: Allen Klassen, Westar Energy, 6, 3, 1, 5; Bryan Taggart, Westar Energy, 6, 3, 1, 5; Derek Brown, Westar Energy, 6, 3, 1, 5; Grant Wilkerson, Westar Energy, 6, 3, 1, 5; Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion	
Answer	Yes
Document Name	
Comment	

Likes 0

Dislikes 0

Response

Jim Williams - Southwest Power Pool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 6, Group Name ACES Standard Collaborations

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Kevin Salsbury - Berkshire Hathaway - NV Energy - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

4. Please provide any additional comments for the SDT to consider that have not already been provided in the questions above.

Kevin Salsbury - Berkshire Hathaway - NV Energy - 5

Answer

Document Name

Comment

The original SAR that brought about the SDT discussed the need for application of governor standards to the GO's. NV Energy recognizes that no reference to this item from the SAR is addressed in Phase 1, or in the proposed changes coming in Phase 2. In its Notice of Proposed Rulemaking (NOPR) on Primary Frequency Response (Docket No. RM16-6-000), FERC stated that proposed modifications to Generator Interconnection Agreements for both large and small generating facilities (both synchronous and non-synchronous) would require new generators to install, maintain, and operate equipment capable of providing primary frequency response as a condition of interconnection. FERC recognized that "[w]hile NERC Reliability Standard BAL-003-1.1 establishes requirements for balancing authorities, it does not include any requirements for individual generator owners or operators," and that "[w]hen considered in aggregate, the primary frequency response provided by generators within an Interconnection has a significant impact on the overall frequency response." NV Energy would like to see additional information from the SDT on why this FERC-identified, and SAR objective, is not currently being addressed in either Phase of the revisions to BAL-003.

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 6, Group Name ACES Standard Collaborations

Answer

Document Name

Comment

We believe adding 1) a revision history section to the Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard and 2) an informative section describing the method that industry receives the information regarding the changes associated with the procedure or RLPC; would improve the overall effectiveness of this procedure.

Likes 0

Dislikes 0

Response

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

Answer

Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	
Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RF, Group Name Duke Energy	
Answer	
Document Name	
Comment	
Duke Energy's "Affirmative" vote for Phase 1 of this Project, is based in large part on our support for the continuation of the Project into Phase 2. We appreciate the work performed by the drafting team thus far, and look forward to Phase 2 of the Project.	
Likes 0	
Dislikes 0	
Response	
Devin Shines - PPL - Louisville Gas and Electric Co. - 3,5,6 - SERC, Group Name Louisville Gas and Electric Company and Kentucky Utilities Company	
Answer	
Document Name	
Comment	
LG&E/KU believes the Frequency Response Standard Background Document goes beyond explaining "the rationale and considerations for the Requirements of this standard and their associated compliance information."	
As written, the Background Document promotes the concept of frequency responsive reserves, as detailed in the Good Practices and Tools section. We believe that the Drafting team should remove the Good Practices and Tools section from the Background Document, as it strays from the document's intended purpose. If necessary, the Good Practices and Tools section could be included in the Reliability Guideline Primary Frequency Control.	
Likes 0	
Dislikes 0	
Response	

Diana Torres - Imperial Irrigation District - 1,3,5,6

Answer

Document Name

Comment

IID, a relatively small BA in the western interconnection does not see major issues with the proposed SDT changes.

Likes 0

Dislikes 0

Response

Preston Walker - PJM Interconnection, L.L.C. - 2 - SERC,RF

Answer

Document Name

Comment

PJM thanks and supports the BAL-003-1 Standard Drafting Team's draft revisions to BAL-003-1 in Phase 1; and supports the development of the Standards Authorization Request in Phase 2 information as it pertains to correcting the applicable entity that controls and provides frequency response, and other related information. PJM believes generators providing primary frequency response is an essential reliability need for both real-time and restoration conditions. A generator requirement across the Interconnections can ensure the necessary frequency response. PJM conducted a stakeholder process in 2018 for primary frequency response requirements for generators, however was unable to reach stakeholder consensus. One of the concerns raised from our members was that this is an Interconnection product, and as such PJM encourages NERC to continue this discussion in the Standard Drafting Team process.

Likes 0

Dislikes 0

Response

Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric

Answer

Document Name

Comment

Any further reduction in frequency response is not acceptable.

Likes 0

Dislikes 0

Response

Michelle Amarantos - APS - Arizona Public Service Co. - 1

Answer

Document Name

Comment

AZPS would like to point out that the changes made to the Violation Severity Levels for R1 unintentionally created multiple outcomes based on certain criteria. The way the Moderate, High, and Severe VSLs are described, a Balancing Authority could have a less negative FRM than its FRO reflected in MW/0.1 Hz that qualifies for multiple levels. For example, if a BA had a deficiency between 31-45 MW, it could qualify as both Moderate and High. Deficiencies of 46 MW or greater could qualify as both Moderate and Severe. The use of the word "or" allows for this dilemma. AZPS does not recommend removing the word "or," but rather completing the ranges with the levels to eliminate this confusion.

Likes 0

Dislikes 0

Response

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Document Name

Comment

BPA noticed in review of the revised standard that the Violation Severity Levels are less restrictive. This change was not in the list of modifications at the start of this document. BPA cannot agree with less restrictive VSLs in combination with the current median FRM score utilized for compliance.

BPA feels that if an entity does not meet the median it should be at the severe VSL. However, in order to move onto Phase II of the 2017-01 project, BPA suggests the following approach until Phase II can be completed

Alternative Approach: BPA suggests that the VSLs for R1 be made more restrictive. Lower Level between 1% and 5%, moderate 5% to 10%, high 10% to 15% and Severe greater than 15%.

In WECC, the majority of selected frequency events have loss of less than 1000 MW with a nadir of 59.9 Hz or greater (less than or equal to 100 mHz deviation.) If an entity cannot comply with the median FRM, that entity has high probability of never being able to respond adequately to an event the size of the RLPC. If multiple entities have an FRM less than the median, the interconnection is at a high risk of underfrequency load shed when a loss as great as the RLPC occurs. Therefore, BPA believes the VSLs must be more restrictive than the proposed to support interconnection reliability.

Likes 0

Dislikes 0

Response

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

Answer

Document Name	
Comment	
<p>Xcel Energy would like to ensure that the proposed change to the C point to 20 seconds instead of 12 seconds (as specified on Page 1 of the <i>Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard</i> document is consistently changed throughout the document. For example, it is not clear if the language on page 1 in 3b needs modification (“18 seconds”), and page 2 item 5 (“18 seconds”).</p> <p>Also, we would like to understand how proposed changes to the <i>Procedure for ERO Support of Frequency Response and Frequency Bias Setting Standard</i> document will gather input from industry and also any approved changes publicized, if not through the standards process (ie standards development distribution lists).</p>	
Likes	0
Dislikes	0
Response	
Richard Vine - California ISO - 2	
Answer	
Document Name	
Comment	
<p>Table 1, which starts on page 12 and ends on page 13 of the proposed standard reflects a value of 120MW as “Credit for Load Resources” for the Western Interconnection. The California ISO suggests that this number be validated as accurate at this point in time.</p>	
Likes	0
Dislikes	0
Response	
Neil Swearingen - Salt River Project - 1,3,5,6 - WECC	
Answer	
Document Name	
Comment	
<p>SRP supports the proposed revisions and does not have additional comments for the SDT.</p>	
Likes	0
Dislikes	0
Response	

