Comment Report

Project Name:2017-01 Modifications to BAL-003-1.1 SARComment Period Start Date:6/19/2017Comment Period End Date:7/18/2017Associated Ballots:

There were 17 sets of responses, including comments from approximately 68 different people from approximately 50 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

1. The SAR discusses revising BAL-003-1.1 standard concerning the ratio of Point C to Value B to correct the inconsistency in the ratio identified in the FRAA report. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision.

2. The SAR discusses revising the BAL-003-1.1 standard concerning modifying the Resource Contingency Protection Criteria (RCPC) to help ensure sufficient primary frequency response is maintained. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision.

3. The SAR proposes to review and modify as necessary Attachment A of the standard to remove administrative tasks and provide additional clarity. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision.

4. The SAR proposes to modify the FRS Forms to allow for collection and submission of performance data for Frequency Response Sharing Groups. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision.

5. Based on the scope of the SAR, do you have any other comments for drafting team consideration?

| Organization Name | Name | Segment(s) | Region | Group Name | Group Member Name | Group Member Organization | Group Member Segment(s) | Group Member Region |
|-----------------------------------|--------------------|------------|------------------------|------------------------------------|----------------------|---|-------------------------------|------------------------|
| ACES Power Marketing | Brian Van Gheem | 6 | NA - Not Applicable | ACES Standards Collaborators | Greg Froehling | Rayburn Country Electric Cooperative, Inc. | 3 | SPP RE |
| | | | | | Bob Solomon | Hoosier Energy Rural Electric Cooperative, Inc. | 1 | RF |
| | | | | | Bill Hutchison | Southern Illinois Power Cooperative | 1 | SERC |
| | | | | | Karl Kohlrus | Prairie Power, Inc. | 1,3 | SERC |
| | | | | | Mark Ringhausen | Old Dominion Electric Cooperative | 3,4 | SERC |
| Duke Energy | Colby Bellville | 1,3,5,6 | FRCC,RF,SERC | Duke Energy | Doug Hils | Duke Energy | 1 | RF |
| | | | | | Lee Schuster | Duke Energy | 3 | FRCC |
| | | | | | Dale Goodwine | Duke Energy | 5 | SERC |
| | | | | | Greg Cecil | Duke Energy | 6 | RF |
| Electric | Elizabeth | 2 | | IRC | Elizabeth Axson | ERCOT | 2 | Texas RE |
| Reliability Council of | Axson | | | Standards Review | Ben Li | IESO | 2 | NPCC |
| Texas, Inc. | | | | Committee | Mark Holman | PJM | 2 | RF |
| | | | | | Greg Campoli | NYISO | 2 | NPCC |
| | | | | | Terry Bllke | Midcontinent ISO, Inc. | 2 | MRO |
| | | | | | Ali Miremadi | California ISO | 2 | WECC |
| | | | | | Matthew Goldberg | ISO NE | 2 | NPCC |
| | | | | | Charles Yeung | Southwest Power Pool, Inc. (RTO) | 2 | SPP RE |
| Southern Company - Southern | Marsha Morgan | 1,3,5,6 | SERC | Southern Company | Katherine Prewitt | Southern Company Services, Inc | 1 | SERC |
| Company | | | | | Jennifer Sykes | Southern | 6 | SERC |

| Services, Inc. | | | | | | Company Generation and Energy Marketing | | |
|----------------------------------|-----------|----------------------|------|-----|--------------------|--|------------------------|------|
| | | | | | R Scott Moore | Alabama Power Company | 3 | SERC |
| | | | | | William Shultz | Southern Company Generation | 5 | SERC |
| Northeast | Ruida Shu | 1,2,3,4,5,6,7,8,9,10 | NPCC | RSC | Paul Malozewski | Hydro One. | 1 | NPCC |
| Power Coordinating Council | | | | | Guy Zito | Northeast Power Coordinating Council | NA - Not Applicable | NPCC |
| | | | | | Randy MacDonald | New Brunswick Power | 2 | NPCC |
| | | | | | Wayne Sipperly | New York Power Authority | 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 | Orange & Rockland Utilities | 3 | NPCC |
| | | | | | Michele Tondalo | UI | 1 | NPCC |
| | | | | | Sylvain Clermont | Hydro Quebec | 1 | NPCC |
| | | | | | Si Truc Phan | Hydro Quebec | 2 | NPCC |
| | | | | | Helen Lainis | IESO | 2 | NPCC |
| | | | | | Laura Mcleod | NB Power | 1 | NPCC |

| | | | | | Michael Forte | Con Edison | 1 | NPCC |
|--|--------------------|---|--------|----------------------------------|----------------------|---|---|--------|
| | | | | | Kelly Silver | Con Edison | 3 | NPCC |
| | | | | | Peter Yost | Con Edison | 4 | NPCC |
| | | | | | Brian O'Boyle | Con Edison | 5 | NPCC |
| | | | | | Michael Schiavone | National Grid | 1 | NPCC |
| | | | | | Michael Jones | National Grid | 3 | NPCC |
| | | | | | David Ramkalawan | Ontario Power Generation Inc. | 5 | NPCC |
| | | | | | Quintin Lee | Eversource Energy | 1 | NPCC |
| | | | | | Kathleen Goodman | ISO-NE | 2 | NPCC |
| | | | | | Greg Campoli | NYISO | 2 | NPCC |
| | | | | | Silvia Mitchell | NextEra Energy - Florida Power and Light Co. | 6 | NPCC |
| | | | | | Sean Bodkin | Dominion - Dominion Resources, Inc. | 6 | NPCC |
| Southwest Power Pool, Inc. (RTO) | Shannon Mickens | 2 | SPP RE | SPP Standards Review Group | Shannon Mickens | Southwest Power Pool Inc. | 2 | SPP RE |
| | | | | | Scott Aclin | | | |
| | | | | | Margaret Adams | Southwest Power Pool Inc. | 2 | SPP RE |
| | | | | | Daniel Baker | Southwest Power Pool Inc. | 2 | SPP RE |

| | 1.1 standard concerning the ratio of Point C to Value B to correct the inconsistency in the ratio ree with this proposed revision? If not, please provide specific language on the proposed revision. | | | | | | | | | |
|---|---|--|--|--|--|--|--|--|--|--|
| Marsha Morgan - Southern Company - So | larsha Morgan - Southern Company - Southern Company Services, Inc 1,3,5,6 - SERC, Group Name Southern Company | | | | | | | | | |
| Answer | Yes | | | | | | | | | |
| Document Name | | | | | | | | | | |
| Comment | | | | | | | | | | |
| Southern agrees with correcting the inconsis | stency. | | | | | | | | | |
| Likes 0 | | | | | | | | | | |
| Dislikes 0 | | | | | | | | | | |
| Response | | | | | | | | | | |
| | | | | | | | | | | |
| Joshua Eason - ISO New England, Inc 2 | 2 - NPCC | | | | | | | | | |
| Answer | Yes | | | | | | | | | |
| Document Name | | | | | | | | | | |
| Comment | | | | | | | | | | |
| years when frequency response is improving general trend in most recent years. If the go way is to let Table 1 just serve as a typical e is done for FRAA. With respect to the ratio recent system performance change, but it de each year's measurement may individually of performance of multiple recent years into co using the CBR: (1) does not accurately refle | Table 1 in Attachment A is good demonstration of how IFRO is calculated, but some statistically determined data in the table may appear out-of-date for years when frequency response is improving. Ideally, the parameters used to calculate the current IFRO should be updated to accurately reflect the general trend in most recent years. If the goal is to shape Attachment 1 in such way that it will be modified as little as possible in the future, one feasible way is to let Table 1 just serve as a typical example of calculating IFRO while recording the latest parameters in a separate document, similar to how it s done for FRAA. With respect to the ratio of C-to-B ("CBR" or CB Ratio), it's necessary to update this key syntax according to the overall trend of recent system performance change, but it doesn't have to exactly line up with the ratio from the latest FRAA. The reason for this is that the ratio from each year's measurement may individually contain unexpected random factors that could eventually introduce an abrupt change to IFRO. Taking the beformance of multiple recent years into consideration in determining the ratio can effectively smooth such impact. Additionally, ISO-NE believes that using the CBR: (1) does not accurately reflect that governor response has little to do with arresting frequency in the Eastern Interconnection, and (2) hat the use of the current CBR provides a perverse incentive in that it essentially penalizes improved governor response. | | | | | | | | | |
| Likes 0 | | | | | | | | | | |
| Dislikes 0 | | | | | | | | | | |
| Response | | | | | | | | | | |
| | | | | | | | | | | |
| Laura Nelson - IDACORP - Idaho Power 0 | Company - 1 | | | | | | | | | |
| Answer | Yes | | | | | | | | | |
| ocument Name | | | | | | | | | | |

| Comment | |
|---|--|
| As a member of the NWPP Frequency Res | conse Sharing Group, Idaho Power agrees with the proposed revision. |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Elizabeth Axson - Electric Reliability Cou | Incil of Texas, Inc 2, Group Name IRC Standards Review Committee |
| Answer | Yes |
| Document Name | |
| Comment | |
| The IRC SRC has no comment. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Shannon Mickens - Southwest Power Po | ol, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group |
| Answer | Yes |
| Document Name | |
| Comment | |
| understanding in reference to the component | ends that the drafting team develop some proposed language that will provide more details or give a better nt (CBR - which is the statistically determined ratio of the Point C to Value B) mentioned in Attachment A. mention a reference document that contains the IFRO calculation for informational purposes. |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Dori Quam - NorthWestern Energy - 1 - W | /ECC |
| Answer | Yes |
| Document Name | |
| Comment | |

| See comments in response to Question No. | 5. |
|---|-------------------------------|
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Aaron Cavanaugh - Bonneville Power Ac | ministration - 1,3,5,6 - WECC |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| John Merrell - Tacoma Public Utilities (Ta | acoma, WA) - 1,3,4,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| | |
| Dislikes 0 | |
| Dislikes 0 Response | |
| Response | |
| Response Leonard Kula - Independent Electricity S | |
| Response Leonard Kula - Independent Electricity S Answer | ystem Operator - 2 Yes |
| Response Leonard Kula - Independent Electricity S Answer Document Name | |
| Response Leonard Kula - Independent Electricity S Answer | |
| Response Leonard Kula - Independent Electricity S Answer Document Name Comment | |
| Response Leonard Kula - Independent Electricity S Answer Document Name Comment Likes 0 | |
| Response Leonard Kula - Independent Electricity S Answer Document Name Comment | |

| sean erickson - Western Area Power Ad | |
|--|-------------------------------------|
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| | RCC,SERC,RF, Group Name Duke Energy |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Sean Bodkin - Dominion - Dominion Res | ources, Inc 3,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Rachel Coyne - Texas Reliability Entity, | Inc 10 |
| Answer | Yes |
| Document Name | |
| Comment | |

| Likes 0 | |
|---|--|
| Dislikes 0 | |
| Response | |
| | |
| Kasey Bohannon - APS - Arizona Public | Service Co 1,3,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Amy Casuscelli - Xcel Energy, Inc 1,3,5 | 5,6 - MRO,WECC,SPP RE |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| | ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |

| Brian Van Gheem - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators | | | | | |
|---|-----|--|--|--|--|
| Answer | Yes | | | | |
| Document Name | | | | | |
| Comment | | | | | |
| | | | | | |
| Likes 0 | | | | | |
| Dislikes 0 | | | | | |
| Response | | | | | |
| | | | | | |

| 2 | 2. The SAR discusses revising the BAL-003-1.1 standard concerning modifying the Resource Contingency Protection Criteria (RCPC) to help | | | | | | | | | | | | | | | | | |
|----|---|--|--|--|--|--|--|--|---|------|------|-------|--|------|--|--|--|--|
| е | ensure sufficient primary frequency response is maintained. Do you agree with this proposed revision? If not, please provide specific | | | | | | | | | | | | | | | | | |
| la | language on the proposed revision. | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | - | | | - | | | | | | |

| Brian Van Gheem - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Answer | No | | | | | | | |
| Document Name | | | | | | | | |
| Comment | | | | | | | | |
| | e0@Bastern standard an tection Criteria (RCPC). In the 2016 Frequency Response Annual Analysis Report, NERC identifies that the ised to help ensure sufficient primary frequency response is maintained. We believe this should be clarified | | | | | | | |
| Likes 0 | | | | | | | | |
| Dislikes 0 | | | | | | | | |
| Response | | | | | | | | |
| | | | | | | | | |
| Shannon Mickens - Southwest Power Po | ol, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group | | | | | | | |
| Answer | No | | | | | | | |
| Document Name | | | | | | | | |
| Comment | | | | | | | | |
| understanding in reference to the component | ends that the drafting team develop some proposed language that will provide more details or give a better ht (RCPC) in Attachment A and how the RCC component is associated as well. Also, we recommend that ey intend to address the potential changes of the RCC component and what impacts it will have on the | | | | | | | |
| Likes 0 | | | | | | | | |
| Dislikes 0 | | | | | | | | |
| Response | | | | | | | | |
| | | | | | | | | |
| Dori Quam - NorthWestern Energy - 1 - W | /ECC | | | | | | | |
| Answer | Yes | | | | | | | |
| Document Name | | | | | | | | |
| Comment | | | | | | | | |
| | | | | | | | | |

NorthWestern Energy supports modifying the RCPC for each Interconnection to ensure sufficient primary frequency response is maintained. However,

| | ecommending how events are selected for each Interconnection, the appropriate group in each a for its own Interconnection. In addition, see comments in response to Question No. 5. | | | | |
|---|---|--|--|--|--|
| Likes 0 | | | | | |
| Dislikes 0 | | | | | |
| Response | | | | | |
| | | | | | |
| Elizabeth Axson - Electric Reliability Cou | Incil of Texas, Inc 2, Group Name IRC Standards Review Committee | | | | |
| Answer | Yes | | | | |
| Document Name | | | | | |
| Comment | | | | | |
| The IRC SRC has no comment. SPP does | not join this response. | | | | |
| Likes 0 | | | | | |
| Dislikes 0 | | | | | |
| Response | | | | | |
| | | | | | |
| Laura Nelson - IDACORP - Idaho Power | Company - 1 | | | | |
| Answer | Yes | | | | |
| Document Name | | | | | |
| Comment | | | | | |
| As a member of the NWPP Frequency Res | ponse Sharing Group, Idaho Power agrees with the proposed revision. | | | | |
| Likes 0 | | | | | |
| Dislikes 0 | | | | | |
| Response | | | | | |
| | | | | | |
| Joshua Eason - ISO New England, Inc | 2 - NPCC | | | | |
| Answer | Yes | | | | |
| Document Name | | | | | |
| Comment | | | | | |
| After the proposed revision is made, the same RCC that is currently used in the Eastern Interconnection should continue to be used after August 3, 2017. Strictly following the current RCPC without any change would impose a substantial change in the RCC after August 3, 2017 which would | | | | | |

| drastically impact the IFRO of the Eastern Interconnection. Such sudden change in the IFRO is not desirable, particularly when primary frequency response continues to consistently improve. If the latest system condition implies a scenario where the current RCC used in the Eastern Interconnection appears to no longer be valid, then the new criteria used to establish the RCC must be one that results in minimal impact to IFRO. | | |
|---|--|--|
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Marsha Morgan - Southern Company - Southern Company Services, Inc 1,3,5,6 - SERC, Group Name Southern Company | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| Southern agrees with the proposed change and method of change. | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Ruida Shu - Northeast Power Coordination | ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Amy Casuscelli - Xcel Energy, Inc 1,3,5,6 - MRO,WECC,SPP RE | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |

| Dislikes 0 | | |
|--|--------------------|--|
| Response | | |
| | | |
| Kasey Bohannon - APS - Arizona Public | Service Co 1,3,5,6 | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Rachel Coyne - Texas Reliability Entity, Inc 10 | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Sean Bodkin - Dominion - Dominion Res | ources, Inc 3,5,6 | |
| 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 | | |
| | | |
| sean erickson - Western Area Power Adr | ninistration - 1,6 | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Leonard Kula - Independent Electricity S | ystem Operator - 2 | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| John Merrell - Tacoma Public Utilities (Tacoma, WA) - 1,3,4,5,6 | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |

| Response | | |
|--|-----|--|
| | | |
| Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |

3. The SAR proposes to review and modify as necessary Attachment A of the standard to remove administrative tasks and provide additional clarity. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision.

| Rachel Coyne - Texas Reliability Entity, Inc 10 | |
|---|----|
| Answer | No |
| Document Name | |
| Comment | |

Texas RE is concerned process and timeline specifications in a supplemental document would not be enforceable. Texas RE strongly encourages the SDT to closely evaluate which steps are being moved to ensure they are purely administrative and not reliability tasks that are essential for the reliable operation of the Bulk Electric System (BES).

| Likes 0 | | |
|---|---|--|
| Dislikes 0 | | |
| Response | | |
| | | |
| Shannon Mickens - Southwest Power Po | ool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group | |
| Answer | No | |
| Document Name | | |
| Comment | | |
| of any supporting procedural and process s Additionally, we recommend that the propos | ends that the drafting team develop some proposed language explaining why they recommend the removal teps from the Attachment A in the standard and transferring this information to a Reliability Guideline. sed language clearly states that once the information is removed from the standard and placed into a considered to have compliance/audit implications. | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Brian Van Gheem - ACES Power Marketing - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators | | |
| Answer | No | |
| Document Name | | |
| Comment | | |
| The authors of the SAR failed to uniformly incorporate the relocation of the standard's Attachment A to a NERC Operating Committee-approved | | |

Reference Document or Reliability Guideline. The relocation of Attachment A should be identified upfront in the purpose and objectives of the SAR. We believe Attachment A should be relocated, as its contents identify calculated values that should be periodically reevaluated outside the Standards

| Development Process. | | |
|---|---|--|
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Marsha Morgan - Southern Company - Se | outhern Company Services, Inc 1,3,5,6 - SERC, Group Name Southern Company | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| Southern agrees this allows flexibility to correct the process in the future. | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Joshua Eason - ISO New England, Inc 2 | 2 - NPCC | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| In Attachment A, the Frequency Response Measure section can be made more concise by including only the necessary information such as the basic description of the measurement methodology, the definition of timeframes associated with A, B, and C values, and the typical data sources for measurement. Other details could be removed from the current version of Attachment A to be incorporated to the instruction portion of Forms 1 and 2 or a separate document such as the user manual for Forms 1 and 2 where more detailed instructions and "what if" examples could be added. Preferably, the section on the Timeline for Balancing Authority Frequency Response and Frequency Bias Setting Activities should be retained and remain in Attachment A, because the timelines are important to keep in mind and there's no better place for them. | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Laura Nelson - IDACORP - Idaho Power Company - 1 | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |

| As a member of the NWPP Frequency Response Sharing Group, Idaho Power agrees with the proposed revision. | | |
|---|--|--|
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Elizabeth Axson - Electric Reliability Cou | uncil of Texas, Inc 2, Group Name IRC Standards Review Committee | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| The IRC SRC has no comment. SPP does | not join this response. | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Dori Quam - NorthWestern Energy - 1 - V | VECC | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| NorthWestern agrees with revising Attachment A; however, NorthWestern believes any Reference Documents or Reliability Guidelines developed should be Interconnection specifi — i.e., <i>Consider transferring supporting procedural and process steps from Attachment A into an ERO and NERC Operating Committee approved Interconnection-Specific Reference Document or Reliability Guideline.</i> In addition, see comments in response to Question No. 5. | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Aaron Cavanaugh - Bonneville Power Ad | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |

| Likes 0 | |
|---|------------------------|
| Dislikes 0 | |
| Response | |
| | |
| John Merrell - Tacoma Public Utilities (T | acoma, WA) - 1,3,4,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Leonard Kula - Independent Electricity S | System Operator - 2 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| sean erickson - Western Area Power Ad | ministration - 1,6 |
| 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 | | |
| | | |
| Sean Bodkin - Dominion - Dominion Res | ources, Inc 3,5,6 | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Kasey Bohannon - APS - Arizona Public | Service Co 1,3,5,6 | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Amy Casuscelli - Xcel Energy, Inc 1,3,5,6 - MRO,WECC,SPP RE | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |

| Likes 0 | | |
|--|-----|--|
| Dislikes 0 | | |
| Response | | |
| | | |
| Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |

| 4. The SAR proposes to modify the FRS Forms to allow for collection and submission of performance data for Frequency Response Sharing Groups. Do you agree with this proposed revision? If not, please provide specific language on the proposed revision. | | |
|--|--|--|
| Dori Quam - NorthWestern Energy - 1 - W | IECC | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| See comments in response to Question No. | 5. | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Elizabeth Axson - Electric Reliability Cou | Incil of Texas, Inc 2, Group Name IRC Standards Review Committee | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| The IRC SRC has no comment. | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |
| | | |
| Laura Nelson - IDACORP - Idaho Power Company - 1 | | |
| Answer | Yes | |
| Document Name | | |
| Comment | | |
| As a member of the NWPP Frequency Response Sharing Group, Idaho Power agrees with the proposed revision. | | |
| Likes 0 | | |
| Dislikes 0 | | |
| Response | | |

| Marsha Morgan - Southern Company - Southern Company Services, Inc 1,3,5,6 - SERC, Group Name Southern Company | |
|---|---|
| Answer | Yes |
| Document Name | |
| Comment | |
| Southern agrees the RS needs the ability to ensure that RSG's are performing. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Brian Van Gheem - ACES Power Marketin | ng - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Ruida Shu - Northeast Power Coordination | ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group | |
| Answer | Yes |
| Document Name | |
| Comment | |

| Likes 0 | |
|--|-----------------------|
| Dislikes 0 | |
| Response | |
| | |
| Amy Casuscelli - Xcel Energy, Inc 1,3,5 | 5,6 - MRO,WECC,SPP RE |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Kasey Bohannon - APS - Arizona Public | |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Rachel Coyne - Texas Reliability Entity, | |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |

| Sean Bodkin - Dominion - Dominion Resources, Inc 3,5,6 | |
|--|-------------------------------------|
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Colby Bellville - Duke Energy - 1,3,5,6 - F | RCC,SERC,RF, Group Name Duke Energy |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| sean erickson - Western Area Power Adı | ninistration - 1,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Leonard Kula - Independent Electricity System Operator - 2 | |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |

| Likes 0 | |
|--|--------------------------------|
| Dislikes 0 | |
| Response | |
| | |
| John Merrell - Tacoma Public Utilities (Ta | acoma, WA) - 1,3,4,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Aaron Cavanaugh - Bonneville Power Ac | Iministration - 1,3,5,6 - WECC |
| Answer | Yes |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Joshua Eason - ISO New England, Inc | 2 - NPCC |
| Answer | |
| Document Name | |
| Comment | |
| ISO-NE believes that each FRSG should be treated as one whole entity (<i>i.e.</i> as though it were an intact BA that neglects internal connections) in collection and submission of performance data. This will allow the FRSG to be judged for compliance as a single collective, which is the presumed intent of a Frequency Response Sharing Group. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |

| 5. Based on the scope of the SAR, do you have any other comments for drafting team consideration? | |
|---|--|
| Marsha Morgan - Southern Company - Southern Company Services, Inc 1,3,5,6 - SERC, Group Name Southern Company | |
| Answer | No |
| Document Name | |
| Comment | |
| No other comments at this time. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Elizabeth Axson - Electric Reliability Cou | Incil of Texas, Inc 2, Group Name IRC Standards Review Committee |
| Answer | No |
| Document Name | |
| Comment | |
| The IRC SRC has no comment. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| John Merrell - Tacoma Public Utilities (Ta | acoma, WA) - 1,3,4,5,6 |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Leonard Kula - Independent Electricity S | ystem Operator - 2 |

| Answer | No |
|--|--------------------|
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| sean erickson - Western Area Power Adı | ninistration - 1,6 |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Sean Bodkin - Dominion - Dominion Res | ources, Inc 3,5,6 |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Joshua Eason - ISO New England, Inc 2 - NPCC | |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |

| Dislikes 0 | |
|--|--|
| Response | |
| | |
| Laura Nelson - IDACORP - Idaho Power (| Company - 1 |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Amy Casuscelli - Xcel Energy, Inc 1,3,5 | 5,6 - MRO,WECC,SPP RE |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Ruida Shu - Northeast Power Coordination | ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC |
| Answer | No |
| Document Name | |
| Comment | |
| | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC | |
| Answer | Yes |

| Document Name | |
|--|-------------------------------------|
| Comment | |
| BPA participated with 18 other Balancing Authorities to draft another SAR and technical support document for BAL-003, through the coordination of the Frequency Response Sharing Group (FRSG). If the FRSG SAR is approved, BPA requests that the two SARs are combined. | |
| Likes 1 | NorthWestern Energy, 1, Quam Dori |
| Dislikes 0 | |
| Response | |
| | |
| Colby Bellville - Duke Energy - 1,3,5,6 - F | RCC,SERC,RF, Group Name Duke Energy |
| Answer | Yes |
| Document Name | |
| Comment | |
| Duke Energy agrees with the scope of the SAR, and agrees with the modifications as currently proposed. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Rachel Coyne - Texas Reliability Entity, I | Inc 10 |
| Answer | Yes |
| Document Name | |
| Comment | |
| Texas RE requests a link to the 2016 FRAA report be made available on the project page. | |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Kasey Bohannon - APS - Arizona Public | Service Co 1,3,5,6 |
| Answer | Yes |
| Document Name | |
| Comment | |

AZPS appreciates and agrees that the language in Appendix A would greatly benefit from a thorough review and revision to make the information easier to understand. For example, we note that there is no description of where the Starting Frequency (FStart) for each Interconnection is derived. The current language claims that "detailed descriptions of the calculations used in Table 1…are defined in the *Procedure for ERO Support of Frequency Response and* Frequency Bias Setting Standard." But in actuality, they are not. Additionally, the last sentence of first paragraph of Attachment A (A maximum delta frequency (MDF) is calculated by adjusting a starting frequency) implies that the starting frequency is being adjusted where is it is the delta frequency which is being adjusted.

| Likes 0 | |
|--|---|
| Dislikes 0 | |
| Response | |
| | |
| Brian Van Gheem - ACES Power Marketi | ng - 6 - NA - Not Applicable, Group Name ACES Standards Collaborators |
| Answer | Yes |
| Document Name | |
| Comment | |
| the ratio of Point C to Value B, RCPC, and t does not align with a similar deadline to intr development process unnecessarily. We be | hin the SAR is too broad and appears to have no definite deadlines. The rush to address inconsistencies in frequency nadir point limitations, as identified within the 2016 Frequency Response Annual Analysis Report, oduce Attachment A and FRS Form enhancements. The latter clarifications could delay the standard elieve the SAR should remove references to identify and incorporate all process modifications, and instead A and FRS Forms that are supportive of the 2016 Frequency Response Annual Analysis Report. |
| Likes 0 | |
| Dislikes 0 | |
| Response | |
| | |
| Dori Quam - NorthWestern Energy - 1 - W | VECC |
| Answer | Yes |
| Document Name | |
| Comment | |
| coordination of the Northwest Power Pool (I | other Balancing Authorities to draft a SAR and technical support document for BAL-003, through the NWPP) Frequency Response Sharing Group (FRSG). If the FRSG SAR is approved, NorthWestern Energy the FRSG SAR is not approved, each Interconnection should be allowed to develop its own Frequency adard. |
| Likes 0 | |
| Dislikes 0 | |