

Individual or group. (23 Responses)

Name (12 Responses)

Organization (12 Responses)

Group Name (11 Responses)

Lead Contact (11 Responses)

IF YOU WISH TO EXPRESS SUPPORT FOR ANOTHER ENTITY'S COMMENTS WITHOUT ENTERING ANY ADDITIONAL COMMENTS, YOU MAY DO SO HERE. (3 Responses)

Comments (23 Responses)

Question 1 (19 Responses)

Question 1 Comments (20 Responses)

Question 2 (15 Responses)

Question 2 Comments (20 Responses)

Question 3 (18 Responses)

Question 3 Comments (20 Responses)

Question 4 (18 Responses)

Question 2 Comments (20 Responses)

Group
Northeast Power Coordinating Council
Guy Zito
No
No additional comments.
Individual
Michael Falvo
Independent Electricity System Operator
Yes
Yes
We appreciate the Project Review Team’s effort to post a draft SAR, provide a detailed assessment of and propose specific changes to each requirement in the two standards. However, we urge the drafting team to not regard support for the proposed project scope to mean that the industry agrees with all the details in the SAR or the proposed changes to individual requirements and the proposed revised standards. The need and content of each

requirement will have to be assessed from a holistic viewpoint when the SAR is posted for formal comment, and two standards are revised and posted for public comment.
Yes
The proposed revision to the term Reporting ACE appears to have been based on the previous version but not the version that was adopted along with BAL-001-2 by the Board of Trustees at its August 2013 meeting. Using the previous definition as the starting point may be inappropriate since the industry has already approved a revised definition to be filed with the regulatory authorities for approval shortly. On the other hand, using the revised definition is premature until the regulatory authorities act on it. We urge the drafting team to defer making changes to the definition until after the proposed revised definition has been approved (or otherwise).
Individual
Catherine Wesley
PJM Interconnection
No
PJM does not support the draft standard for the following reasons: <ul style="list-style-type: none"> • Applicability should remain with GOP and TOP to ensure metering is maintained. PJM is not a party to most tie line interconnection agreements and removing the applicability could have impacts to tie line coordination. Minimally, Applicability should remain for the GOP, LSE and TOP with Dynamic Transfers. • In R1 and R2, there needs to be clarification for the use of the term “Adjacent BA”. Does this term imply there cannot be a Pseudo-Tie/Dynamic Schedule beyond Adjacent BA? • In R3, PJM recommends removal of “even when primary source data is not available” due to concerns of being able to implement the requirements for a backup data source. Also, the sub-requirements for R3 do not support applicability to a backup data source. • In R3.4, recommendation to delete the term “Adjacent” for reasons included above. The last sentence should be revised as follows: These values shall be provided hourly to the Adjacent BA. • In R.3.5.2, should read NIA instead of NAI? • In R7, recommend AGC be replaced with BA control.
Yes
PJM supports the draft standard and recommends the following revision to R2. Adjacent Balancing Authorities that cannot mutually agree upon their respective Net Actual Interchange or Net Scheduled Interchange quantities by the 15th calendar day of the following month shall submit a report to their respective Regional Reliability Organization Survey Contact. The report shall describe the nature and the cause of the disagreement as well as a process for correcting the discrepancy
No
PJM does not support the proposed Applicability for BAL-005 and therefore cannot support the full SAR.
Individual

Greg Travis
Idaho Power Co.
Yes
Yes
Yes
No
Individual
Thomas Foltz
American Electric Power
Yes
Yes
No
Group
MRO NERC Standards Review Forum
Joe DePoorter
Yes
a) While we are OK with changing the title of the standard, we have concerns about removing the term "Automatic Generation Control". This term is or its acronym is used well over 50 times in the standards and is commonly understood in the industry (tens of thousands of references to it on the internet). Given the intent of the FERC directive, we propose changing the exiting definition in the NERC glossary to: Equipment that automatically adjusts generation and other resources in a Balancing Authority Area from a central location to maintain the Balancing Authority's interchange schedule plus Frequency Bias. AGC may also accommodate automatic inadvertent payback and time error correction. b) We agree with removing all entities other than Balancing Authorities in the applicability section, but disagree with moving some of the requirements to a FAC standard (reasons explained below). c) On the current R1 (and R3), we agree with removing the requirements about generation, load and transmission be within the metered bounds of a BA. These requirements also should not

be punted to a FAC standard. These were “control area criteria” (i.e. concepts) that were swept into the V0 standard. The proof that all load, generation and transmission is within metered bounds is achieved via Inadvertent Accounting. There is no need for a different explicit requirement. BAs should be the only applicable entity in this standard. d) On the current R3 and R4: We believe these requirements are important and generally should remain as-is (although they could be consolidated). We also believe that avoidance of Burden (a defined and understandable term) is a reasonable objective for the requirement(s). e) The current R5 would not be necessary if all BAs had to report their control performance. The problem is the current practice whereby BAs who receive overlap regulation don’t have to report their performance. Thus, we believe this requirement should stay. It only applies to a relatively small proportion of BAs. f) With regard to the redline R2, the team appears to be duplicating requirements in the INT standards. A BA should not be subject to multiple non-compliances for missing a schedule. g) With regard to the redline R3, R3.1 is a piece of information and not a requirement. R3.4 is redundant with the parent requirement. There is no requirement today to swap hourly values, and this should not be added. h) The redline R3.5 should be simplified to “ACE source data shall be acquired and ACE calculated at least every 6 seconds). R3.5.2. is redundant with R3.2 and should be eliminated.

Yes

a) On the PRT recommendation for R1, we disagree with the proposal to add a performance metric with regard to inadvertent interchange. The other balancing standards adequately address the reliability impact of imbalance. b) On the PRT recommendation for R2, we disagree with the need to change the definition of Inadvertent Interchange to add the complexity mentioned. If both parties to a transaction agree to a common number and have operated against common points in real time, it makes no difference to the Interconnection. c) On the PRT recommendation for R3, we disagree with the need to “swap” hourly values. There are many tools in place to detect significant and persistent metering and balancing errors. There has not been a need to call an AIE survey for at least 5 years. At most, we would suggest a requirement in BAL-005 for each BA to share in real time its NIa with each adjacent BA and its RC as well as share its NIs with its RC. This would accommodate the “cross check” the PRT appears to be seeking. If this requirement were added, the other proposed “granular” requirements in BAL-005 on pseudo-ties and dynamic schedules could likely be simplified. This adjacent information is already an implied requirement in Attachment 1-TOP-005. d) On the PRT recommendation for R4 and its sub-requirements, we disagree with the suggestion of adding complexity to the definition of Inadvertent Interchange and of performing and reporting more frequently as well as the suggestion again for a performance requirement. e) On the PRT recommendation for R5, we believe the current requirement is acceptable as-is. f) The proposed changes to definitions look acceptable. g) On the redline R1.3 and R1.4, these should be changed to reflect the current practice that monthly data is to be submitted and agreed to with counterparties in the Inadvertent Interchange reporting portal.

Yes

Yes

a) The PRT proposes to change the definitions associated with NIa and NIs, yet the redlines intermix the longhand of these two terms (e.g. Net Actual Interchange, Actual Net Interchange). Don't forget to check the compliance elements.

Individual

Michelle D'Antuono

Ingleside Cogeneration LP

No

Ingleside Cogeneration agrees that the title and purpose of BAL-005-0.2b should be generalized to account for the fact that balancing performance is not just dependent on AGC. We expect that other virtual interconnections such as Pseudo-Ties and Dynamic Interchange will proliferate over time, and the standard should reflect that trend. On the other hand, we only saw one reference to Demand Response in the PRT's recommendations – and none in the SAR. We expect the use of these resources by Balancing Authorities to increase significantly over the next decade, and probably deserves an appropriate level of consideration during the standards development process. Secondly, we will be directly affected by the transition of the GOP metering requirements to the FAC standards. There is no doubt that metering additions are a natural part of a new installation/major modification and should be addressed there. Frankly, we are not even sure the requirements are even necessary as the Balancing Authority is heavily incented economically to ensure that metering is connected and operating properly. This may be the appropriate time to retire these mostly administrative requirements – which never make the “ten most violated” lists and do little if anything to serve BES reliability.

Yes

Ingleside Cogeneration LP agrees that the PRT has found an elegant solution to address FERC's directive to develop criteria that indicates when Inadvertent Interchange transitions from an economic issue to a reliability issue. Since the parameter “BAAL” has already been vetted by the industry as part of the development of BAL-001-2, it is an excellent candidate for measuring Inadvertent Interchange performance as well. As such, BAL-006-2 can incorporate BAAL without driving new data collection and reporting mechanisms needed to demonstrate compliance

Yes

No

Individual

David Jendras

Ameren

Agree

We support MISO's comments on Project 2010-14.2 Periodic Review of BAL-005 and BAL-006.

Individual
Daniela Hammons
CenterPoint Energy
Yes
Yes
Yes
CenterPoint Energy appreciates and thanks the BARC 2 periodic review team for its efforts. CenterPoint Energy agrees with the review team’s recommendation to remove “Generator Operators”, “Transmission Operators”, and “Load Serving Entities” as applicable entities in BAL-005. Additionally, CenterPoint Energy believes that Transmission Operators already appropriately cover the loads interconnected to their facilities, and that a requirement for a Load-Serving Entity to include its load within the metered boundaries of a Balancing Authority Area is duplicative and can be retired altogether.
Group
Southern Company: Southern Company Services, Inc; Alabama Power Company; Georgia Power Company; Gulf Power Company; Mississippi Power Company; Southern Company Generation; Southern Company Generation and Energy Marketing
Marcus Pelt
Yes
We noticed that the word ‘adequate’ still appears in R3. Adjacent Balancing Authorities shall ensure that adequate metering, communications, and control equipment are employed between them to ensure that common and agreed-upon values are communicated to both Balancing Authorities for all Tie-Lines, Pseudo-Ties, and Interchange Schedules including Dynamic Schedules, even when primary source data is not available’. R6 - Southern suggest that ‘covering the loss of the ability to calculate Reporting ACE should remain in BAL-005 instead of EOP-008. Southern suggest clarification of R3.2 and R3.5.2 as they seem to restate the same thing. Southern suggest leaving R13 as written. Southern agrees with the SERC OC in that Situation awareness is already covered in other standards as well as the RC, TOP, and BA responsibilities. It is recommended that this item be removed from the SAR. If situation awareness remains in this SAR then clarification should be made to clearly note that it is not the BES but the BA Balancing Authority Area that situation awareness is being discussed. Southern believes that R15 is already covered in EOP-008 and that R7 can be retired.
Yes
Yes

No
Individual
Tammy Porter
Oncor Electric Delivery
Yes
Yes
No
Group
Louisville Gas and Electric Company and Kentucky Utilities Company ("LKE")
Brent Ingebrigtsen
Yes
LKE supports the PTR's goal of improving the clarity and eliminating redundancies in BAL-005 and BAL-006. However, as the existing BAL-005 and BAL-006 seem to be working quite well and do not seem to be problematic or a threat to BES reliability, we would be hesitant to agree to changes that increase the complexity or compliance burden associated with these standards.
No
While LKE agrees with the PRT's recommendation to revise BAL-006-2 and some of the PRT's proposed changes to the standard, LKE notes that some of the recommendations (e.g., the need to include Inadvertent Interchange in a reliability metric and PRT recommendations involving interchange checkout and metering validations) require further vetting/clarification
No
: Please see the comments of the SERC OC Standards Review Group
Yes
We fully support the PTR's goal of improving the clarity and eliminating redundancies in BAL-005 and BAL-006. But, as the existing BAL-005 and BAL-006 seem to be working quite well and do not seem to be problematic or a threat to BES reliability, we would be hesitant to agree to changes that increase the complexity or compliance burden associated with these standards.
Group
ACES Standards Collaborators
Ben Engelby

Yes

(1) We agree with the SDT that the standard should be revised to incorporate the two interpretations into the requirements. We also agree with the drafting team's approach to simplify the standards by providing clear and measurable expected outcomes, such as: (1) a stated level of reliability performance; (2) a reduction in a specified reliability risk; or (3) a necessary competency. We hope that the drafting team will consolidate the 17 requirements of BAL-005 into clear and concise requirements that are easily understood to reach these expected outcomes. (2) We believe that the review team's recommendation of removing the TOP, GOP, and LSE from the applicability section of BAL-005 is appropriate. (3) Finally, we appreciate the effort to identify Paragraph 81 (P81) criteria and recommend retirement of administrative and redundant requirements. For example, we agree with the proposal to retire the requirements regarding generation, transmission, and load being contained in the metered boundaries of a BA. From a practical perspective, it is highly unlikely that any of these facilities could connect outside a BA and there are several other mechanisms (e.g. tariffs, interconnection agreements, generation interconnection processes) that would prevent it from happening.

Yes

(1) We agree that limited portions of the content of BAL-006 has a link to reliability and it merely serves a bookkeeping function. We support the drafting team's recommendations to retire many of these requirements as meeting P81 criteria. (2) We support the recommendation to revise the definition of Inadvertent Interchange by including all applicable components necessary for the calculation. This is a reasonable recommendation and would eliminate the need for requirement R2 to contain this detail. (3) We agree that AGC and Reporting ACE should be revised. We may have additional comments on the details of these recommended changes during the standard development phase, but for the purposes of the SAR we support the recommendation to revise the terms.

Yes

No

Thank you for the opportunity to comment.

Group

Duke Energy

Colby Bellville

No

Though refinements by the SDT are needed, Duke Energy agrees with the general recommendations provided in the documentation, however not all recommendations are included within the SAR. Duke Energy suggests that all relevant points from the other documentation should be placed within the content of the SAR or clarify that the other documents may serve as additional references for the SDT to include within its scope. Also, much refinement is still need to the redlined BAL-005, which does not reflect all of the

recommendations of the PRT, such as refining the requirements specific to metering accuracy for MW metering equipment. Below are other comments related to the PRT work on BAL-005: Duke Energy agrees with changing the title of the standard, however we believe that AGC should remain as a defined term and broadened as suggested by the PRT in its comments on the FERC directives: AGC: Equipment that automatically adjusts resources utilized in a Balancing Authority Area from a central location to maintain the Balancing Authority's Reporting ACE within the bounds required under the NERC Reliability Standards. Resources utilized under AGC may include conventional generation, variable energy resources, storage devices and loads acting as resources, such as Demand Response. Regarding the recommendation to remove the LSE, TOP and GOP from the applicability section, Duke Energy supports the recommendation for the SDT to consider placing a comparable requirement in a FAC Standard. The change to make the Standard only applicable to the BA should not change the obligation of the LSE, TOP or GOP to be within the metered boundaries of a BA prior to operation of their associated facilities. Duke Energy agrees with combining the requirements applicable to metering of Tie Lines, Dynamic Schedules and Pseudo-Ties; however, as Adjacent BAs have a vested interest in making sure the data representing their real-time operation is accurate, we believe that the requirements in the draft R3 may be overly-prescriptive. We suggest that the revised requirements should focus on Adjacent BAs identifying the common metering point for each Tie Line, Pseudo-Tie and Dynamic Schedule, and having the capability to identify when the value differs between them. Duke Energy disagrees with placing all Interchange Schedules under the scope of the proposed R3 in the redlined BAL-005. As the INT Standards should address all aspects of coordination of tagged Interchange Transactions, we had the understanding from the PRT discussions that the proposed R3 is intended to cover requirements specific to the similar aspects of metering, communications and control equipment common to Tie Lines, Pseudo-Ties and Dynamic Schedules. Duke Energy suggests the following revisions including removing the word "adequate": R3. Adjacent Balancing Authorities shall ensure that metering, communications, and control equipment are employed between them to ensure that common and agreed-upon values are communicated to both Balancing Authorities for all Tie-Lines, Pseudo-Ties, and Dynamic Schedules, even when primary source data is not available. Though redundancy is not mentioned, the proposed R3 is worded such that it could be implied. Does R3 preclude Adjacent BAs from having a single meter and a process followed for verbally coordinating a common value when that primary source data is not available? The proposed R3.1 (old R9.1) should be removed as recommended by the PRT, as it provides information that is included in the Reporting ACE definition. We believe the proposed R3.2 should be captured as a good business practice, however we struggle with how compliance would be demonstrated by retaining it in the Standard – an hourly log that we checked information? To the extent that the proposed R3 achieves its goal, Adjacent BAs should be operating to a common value in a manner where it should not matter if minor adjustments are needed to more accurately reflect the hourly interchange after-the-fact, nor should it matter from a reliability perspective how each BA's measured performance is affected. With BAAL as a mandatory standard, we believe that Adjacent BAs will have a mutual interest in ensuring that the real-time values operated to will best reflect their actual performance. No BA will want to incur a

penalty for violating the BAAL 30-minute requirement because of a 2 MW meter error that went undetected. We struggle as well with how compliance would be measured for the proposed R3.3 – the PRT noted its concern that requiring correction of a component of ACE when in error (no matter how negligible) would be problematic, in that not all errors require correction. We understand the intent to have a place to describe proper use of the IME term, and suggest the following: “The Balancing Authority shall maintain an IME equal to zero in its Reporting ACE except during times needed to compensate for any data or equipment error affecting a component of the Reporting ACE calculation (Interchange or frequency).” Compliance would confirm the basis used for placing a non-zero value in the IME so that its use could not be gamed. The requirement would not preclude a BA from having a non-zero value, but it would have to be able to provide the basis for adjustments entered, such as a process where the sum of MWh meters is compared against the hourly-integrated metering to estimate the real-time metering error. We believe that the proposed R3.4 is redundant with R3. We believe the proposed R3.5 and R3.5.1 (old R8) should be reworded to reflect the PRT recommendation that it clarify how frequently all components must be factored into the Reporting ACE equation under normal operation. We support that any proposed revisions should accommodate abnormal and emergency operations, including the possibility that the EMS or supporting telemetry may not be available, such as during an evacuation to a backup site. We believe the proposed R3.5.2 is somewhat redundant with the proposed R3.2, which we suggest should be considered as a business practice. The redlined BAL-005 does not reflect the PRT recommendation that the SDT address the accuracy requirements for frequency and megawatt metering devices, while considering moving MVAR, voltage, and other transmission-specific device accuracy requirements to a TOP or FAC standard. Regarding the proposed R5 (old 8.1) that each Balancing Authority shall provide redundant and independent frequency metering equipment, our questions are: a) How much time is allowed to pass if the redundancy is lost before it must be restored? b) Does the PRT believe it is acceptable for the second and independent frequency device to be one used by another Balancing Authority? We believe the proposed R7 needs significant revision. “Continuous” operation of AGC does not leave room for the types of events that can affect AGC not associated with the power supply, and we question why such a prescriptive requirement is necessary.

No

Though refinements by the SDT are needed, Duke Energy agrees with the general recommendations provided in the documentation with the exception of the PRT recommendation that the SDT to look further into whether there is merit in having an after-the-fact measure of performance where the Inadvertent Interchange calculation may be of value. We agree with the PRT statement in its consideration of issues and directives document that Inadvertent Interchange on its own is not an good indicator of good or bad BA performance. For the most part, the industry has not viewed after-the-fact revision of interchange values to be significant enough to warrant a measure in either the BAL or INT Standards. Missed energy schedules were problematic years ago before e-tagging and other electronic scheduling options were available, however that is a time past. With respect to metering, Adjacent BAs operating to common values and then revising them to be more accurate after-the-fact is not a concern; an Inadvertent Interchange measure would miss that

point, and make it more difficult for Adjacent BAs to mutually agree on such revisions. As suggested by the PRT, the proposed R1.4 (old R4.3) should be reviewed by the SDT to determine what elements of the requirement are necessary to support reliability. As written, the requirement could be misinterpreted to not allow a BA to correct scheduled or actual interchange after-the-fact if it wasn't operated to.

No

As stated previously, not all recommendations of the PRT are included within the SAR. Duke Energy suggests that all relevant points from the other documentation drafted should be placed within the content of the SAR or added as attachments so they may serve as additional references for the SDT to include within its scope.

Yes

As much has changed over the years within tariffs and other practices since the FERC directives were issued, Duke Energy agrees with the PRT's response on how the FERC directives are addressed or may not be applicable given the revision recommendations. Duke Energy agrees that the SDT should review the use of all actual and scheduled Interchange terms in the Standards to determine what changes may be needed to ensure there are no conflicts between the NERC-defined terms and their use in the Standards.

Group

SERC OC Review Group

Philip D'Antonio

Yes

While the team supports the Automatic Generation Control ("AGC") definition concern was expressed about changing the title of the standard, and removing the term "Automatic Generation Control". This term or its acronym are used well over 50 times in the standards and are commonly understood in the industry. R1. Each Balancing Authority shall implement only those Tie-Lines and Pseudo-Ties with Adjacent Balancing Authorities shall be implemented as Actual Net Interchange Actual in the Reporting ACE. Clarification on whether it is permissible to have a Pseudo-Tie to a non-adjacent BA. Comment: Clarification requested on R1: The current recommended R1 seems to imply that Pseudo-Ties can only be with Adjacent Balancing Authorities. The question is whether a Pseudo-Tie would be possible from a non-adjacent BA provided the necessary transmission service has been arranged for the Pseudo-Tie? Existing R2. Each Balancing Authority shall implement only those Interchange Schedules including Dynamic Schedules with Adjacent Balancing Authorities, as Scheduled Net Scheduled Interchange in the Reporting ACE. Comment: Clarification requested on R2: The current recommended R2 seems to imply that Dynamic Schedule can only be with Adjacent Balancing Authorities. The question is whether a Dynamic Schedule would be possible from a non-adjacent BA provided the necessary transmission service has been arranged for the Dynamic Schedule? Respectfully recommend that a coma be inserted after Adjacent Balancing Authorities. Existing R3.4. Adjacent Balancing Authorities shall ensure that each Tie-Line, Pseudo-Tie, and Dynamic Schedule between them is equipped with an agreed-upon common source to determine hourly megawatt-hour values. These values shall be provided hourly to

each of the Adjacent Balancing Authorities. Comment: Clarification requested for R3.4: It is requested that the PRT further clarify its intention on “providing hourly to each of the Adjacent Balancing Authorities”. Is this requirement intended to address real time data exchange or back-office practices? If the intent is real-time operations, we respectfully request that the use of hourly net numbers be clarified as an acceptable practice.

Yes

Existing R1.1. The hourly values of Net Interchange Schedule. (Violation Risk Factor: Lower) Comment: Clarification requested for R1.1: It is respectfully requested that the PRT clarify that the term “hourly values” refers to the “hourly net value (delivered and received)” with the adjacent Balancing Authority. Existing R1.2. The hourly integrated megawatt-hour values of Net Actual Interchange. (Violation Risk Factor: Lower) Comment: Clarification requested for R1.2: It is respectfully requested that the PRT clarify that the term “hourly integrated megawatt-hour values” refers to the “hourly integrated megawatt-hour values (delivered and received)” with the adjacent Balancing Authority. Current Existing R2. Adjacent Balancing Authorities that cannot mutually agree upon their respective Net Actual Interchange or Net Scheduled Interchange quantities by the 15th calendar day of the following month shall, for the purposes of dispute resolution, submit a report to their respective Regional Reliability Organization Survey Contact. The report shall describe the nature and the cause of the dispute as well as a process for correcting the discrepancy. Edits to Existing R2. Adjacent Balancing Authorities that cannot mutually agree upon their respective Net Actual Interchange or Net Scheduled Interchange quantities by the 15th calendar day of the following month shall, DELETE: “for the purposes of dispute resolution,” submit a report to their respective Regional Reliability Organization Survey Contact. The report shall describe the nature and the cause of the DELETE: dispute ADD: disagreement as well as a process for correcting the discrepancy. Proposed R2. Adjacent Balancing Authorities that cannot mutually agree upon their respective Net Actual Interchange or Net Scheduled Interchange quantities by the 15th calendar day of the following month shall, submit a report to their respective Regional Reliability Organization Survey Contact. The report shall describe the nature and the cause of the disagreement as well as a process for correcting the discrepancy. Comment: The recommended modifications reflect the concerns of the commenting team that the 15th calendar day does not automatically indicate that dispute resolution is necessary. Additionally, the review team questions the appropriateness of submitting a report to their respective Regional Reliability Organization Survey Contact. The commenting team seeks PRT clarification whether the requirements should reflect the current practice that monthly data is to be submitted and agreed to with counterparties in the Inadvertent Interchange reporting portal. If the reference to the Regional Reliability Organization (RRO) is removed then Section D. Compliance should be reviewed and modified as 1.3, and 1.5 references the RRO.

No

BAL-005 Current SAR Requirement R6: The PRT recommends that the sentence “Single Balancing Authorities operating asynchronously may employ alternative ACE calculations such as (but not limited to) flat frequency control” be captured in the definition of “Reporting ACE.” The SDT should explore whether covering the loss of the ability to calculate Reporting ACE is more appropriate in EOP-008. The terms used in the Requirement R6 need to be

consistent with those used in Reporting ACE if the Requirement is retained. The SDT should consider whether the 30-minute requirement for RC notification is sufficient or excessive, and whether communication under such circumstances could be better addressed elsewhere in the standards, including EOP-008. The PRT recommends that if a timing requirement remains in the standard that it be structured in a manner to not require communication with the RC if the capability to calculate Reporting ACE is restored within the defined notification period

Comment: The commenting team feels that the requirements should remain within the BAL standard unless there is a significant reason for moving requirements to an EOP or FAC standard. The comment team is also concerned that the retention of the 30-minute notification of the RC inadvertently transfers responsibility to the RC but does not place the responsibility to “fix” the failure to collect data on the responsible party. The PRT and SDT are requested to carefully review to ensure that the BA or responsible entity has language in other standards to “fix” the failure to collect data. Current SAR Requirement R10 and R11: The PRT recommends the retirement of these requirements, as the basics of both requirements are factored into the definition of Scheduled Net Interchange (NIs) used in the Reporting ACE calculation as defined in the NERC Glossary. Comment: The commenting team recommends that the PRT and SDT review definitions for consistent use in other standards. Current SAR Requirement R12: The PRT took a holistic approach for common information similar to the approach EOP-008-1 has taken with respect to describing the manner in which the BA continues to meet its functional obligations with regard to the reliable operations of the BES. The PRT recommends a new requirement where each respective Adjacent Balancing Authority has agreed to common measuring points that produce an agreed-to common value to be included in the calculation of Reporting ACE. Accuracy and review of the agreed-to common value is reflected in the new requirement requiring comparison of hourly megawatt-hour values against the integrated data operated to for Tie-Lines, Dynamic Schedules, and Pseudo-Ties. Comment: The PRT is requested to add language that current practices are the intent of this Requirement. Additionally, further clarification and consistent application in using the terms “common measuring points versus agreed-to common values is used. Current SAR Requirement R13: The PRT suggests moving elements of R13 as reflected on the attached suggested redline. Specifically, for the first sentence of R13, the PRT has suggested a redline change to address performing hourly error checks of the NIA operated to for the hour against an end-of-the-hour reference. The PRT also recommends a separate requirement specific to adjustments as needed to the Reporting ACE to reflect the meter error adjustment. However, the PRT is concerned that requiring correction of a component of ACE when in error (no matter how negligible) would be problematic in that not all errors require correction. Comment: The commenting team agrees with the PRT concern that requiring correction of a component of ACE when in error (no matter how negligible) would be problematic in that not all errors require correction We suggest removing this item from the SAR. Current SAR Requirement R14: The PRT made the recommendation reflected in the proposed redline to define minimum expectations for situational awareness of the BES. The PRT also recommends that the individual components of actual and scheduled interchange with each Adjacent Balancing Authority also be captured (Tie-Lines, Pseudo-Ties, Dynamic Schedules, block schedules as needed for coordination, and real-time schedules). Comment: Situation

awareness is already covered in other standards as well as the RC, TOP, and BA responsibilities. It is recommended that this item be removed from the SAR. If situation awareness remains in this SAR then clarification should be made to clearly note that it is not the BES but the BA Balancing Authority Area that situation awareness is being discussed.

Current SAR 17) Requirement R15: The PRT struggled with developing a recommendation on this requirement, as one would assume that the need to calculate Reporting ACE and the expectation of the BA maintaining situational awareness of the BES would not require a prescriptive requirement for redundancy of power supply to ensure continuous calculation of Reporting ACE and operation of vital data acquisition and recording equipment. Conversely, should the NERC requirements define the minimum expectations for such functionality for a BA to demonstrate that it meets the minimum expectations under EOP-008? The SDT should consider placing a requirement in FAC with respect to supporting infrastructure or functionality, or review EOP-008 to determine if additional requirements should be considered for primary control center functionality. Comment: Situation awareness is already covered in other standards as well as the RC, TOP, and BA responsibilities. It is recommended that this item be removed from the SAR. If situation awareness remains in this SAR then clarification should be made to clearly note that it is not the BES but the BA Balancing Authority Area that situation awareness is being discussed.

BAL-006-2: Current SAR Requirement R1: The PRT recommends removing Requirement R1 as written and recommends that the SDT determine if there is merit in including the calculation of Inadvertent Interchange in reliability metric to measure performance to certain requirements under BAL-005. In development of any metric, the PRT recommends that the SDT determine the appropriate time-frame for reliability (as close to real-time as possible). Similar to how BAL-001-2 has CPS1 and BAAL measures dependent upon the BA calculating its Reporting ACE without a stated requirement that "Each BA shall calculate its Reporting ACE", the PRT felt that if the industry supports a measure being developed that uses Inadvertent Interchange in the measure of performance, that the BA would calculate Inadvertent Interchange as needed to comply. Also, similar to the approach taken for defining Reporting ACE in the Glossary with all of the components necessary for the calculation, the PRT is recommending in Requirement R2 below that the definition of Inadvertent Interchange also be updated so that all components necessary for the calculation are identified. Comment: The commenting team is very support of the PRT activities and recommends that guidelines be developed for managing the Inadvertent Interchange balance in near real time. Edits to Proposed SAR Requirement R1: The PRT recommends removing Requirement R1 as written and recommends that the SDT determine if there is merit in including the calculation of Inadvertent Interchange in a reliability metric guideline to measure performance to certain requirements under BAL-005. DELETE: "In development of any metric, the PRT recommends that the SDT determine the appropriate time-frame for reliability (as close to real-time as possible). Similar to how BAL-001-2 has CPS1 and BAAL measures dependent upon the BA calculating its Reporting ACE without a stated requirement that "Each BA shall calculate its Reporting ACE", the PRT felt that if the industry supports a measure being developed that uses Inadvertent Interchange in the measure of performance, that the BA would calculate Inadvertent Interchange as needed to comply. Also, similar to the approach taken for defining

Reporting ACE in the Glossary with all of the components necessary for the calculation, the PRT is recommending in Requirement R2 below that the definition of Inadvertent I” Proposed SAR Requirement R1: The PRT recommends removing Requirement R1 as written and recommends that the SDT determine if there is merit in including the calculation of Inadvertent Interchange in a reliability metric guideline to measure performance to certain requirements under BAL-005 Requirement R4, Part 4.2: The SDT should evaluate whether this requirement is addressed in the new definition of Inadvertent Interchange by the proposed reference to On-Peak Accounting and Off-Peak Accounting. Comment: As part of the SDT review we respectfully recommend that the question of how a BA would resolve inadvertent after-the-fact when the standards state accounting practices will not create inadvertent be discussed. Current SAR Requirement R4.3: The PRT recommends that the SDT review this requirement to determine what elements of the requirement are necessary to support reliability. The SDT also should investigate whether it can close the loop to ensure that operations personnel are provided information on the comparison of monthly revenue class meters to meters used for real-time operation. Comment: The commenting team requests that the PRT and SDT clarify whether this requirement is a “best practice” and not a requirement. Further, is the PRT considering the use of revenue class meters for control? If so, the PRT and SDT, in the future, should clearly state the expectations. Current SAR Requirement R5: With respect to Requirement R5, the PRT recommends that the SDT review whether the practice that requires BAs to mutually agree by the 15th calendar day is needed for reliability. The PRT believes there may be merit in requiring BAs to identify the cause of the dispute, and to either correct it within a prescribed number of days, or require dispute resolution. The language as written may not be sufficiently compulsory. Edits to SAR Requirement R5: With respect to Requirement R5, the PRT recommends that the SDT review whether the practice that requires BAs to mutually agree by the 15th calendar day is needed for reliability. The PRT believes there may be merit in requiring BAs to identify the cause of the dispute, and to either correct it within a prescribed number of days, or require dispute resolution. DELETE: The language as written may not be sufficiently compulsory. Proposed SAR Requirement R5: With respect to Requirement R5, the PRT recommends that the SDT review whether the practice that requires BAs to mutually agree by the 15th calendar day is needed for reliability. The PRT believes there may be merit in requiring BAs to identify the cause of the dispute, and to either correct it within a prescribed number of days, or require dispute resolution. Comment: Besides striking the last sentence the commenting team is concerned that the redline draft standard seems to imply that on the 15th calendar day is the trigger to commence a dispute resolution. The commenting team recommends that the references to “dispute resolution” be removed.

Yes

Comments: The PRT proposes to change the definitions associated with NIa and NIs, yet the redlines intermix the longhand of these two terms (e.g. Net Actual Interchange, Actual Net Interchange). See the compliance elements for example. There were concerns expressed in Order No. 693 with regard to the size of Inadvertent Interchange balances. Inadvertent Interchange is primarily a NAESB responsibility. Some time back there was an effort within NAESB that would give BAs tools to draw down their balances while simultaneously reduces

the impact of and the number of Time Error Corrections (other 693 concerns). Time error and Inadvertent Interchange balances are two intertwined phenomenon. The NAESB proposal was based on things that the industry used to do prior to CPS as well as practices in Europe. In short, the NAESB proposal was to allow unilateral Inadvertent payback via one of the following two methods whenever the BA Inadvertent Interchange Balance and Time Error have the same sign: • An offset of scheduled frequency of +/- 0.01 Hz, or (+ for slow time, - for fast time) • If the scheduled frequency setting cannot be offset, a Net Interchange Schedule (MW) equal to 10% of the BA Bias. This unilateral Inadvertent payback ends when the time error is zero or has changed signs, the accumulation of inadvertent interchange has been corrected to zero, or a scheduled time error correction begins, which takes precedence over offsetting frequency schedule to pay back inadvertent. If this were combined with a change to the current Time Error Correction process: • Widening the window for calling TECs to +/- 30 seconds. • Implementing TECs with a smaller offset (+/- 0.01Hz), This would significantly reduce the number of TECs, the size of Inadvertent Interchange balances and the impact of TECs on frequency (all Order No. 693 concerns) if these recommendations were implemented. The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Review Group only and should not be construed as the position of the SERC Reliability Corporation, or its board or its officers.

Group

ISO/RTO Standards Review Committee

Terry Bilke

No

We agree with the comments of the MRO NSRF.

No

We agree with the comments of the MRO NSRF.

Yes

Yes

With regard to BAL-005, there are several requirements that appear to be design criteria (scan rate, availability, and accuracy). For example, there is a lack of specificity with regard to the measurement period (e.g. is the 99+% availability by day, by year, etc.). The measurement period, if used, should be for a long period of time (annually). But rather than a hard-coded requirement on design specifications, recommend that these specifications be put in an attachment to the standard that is confirmed on the certification and coupled with a simple requirement that the BA not be a Burden to the Interconnection due to metering flaws. The PRT proposes to change the definitions associated with NIa and NIs, yet the redlines intermix the longhand of these two terms (e.g. Net Actual Interchange, Actual Net Interchange). See the compliance elements for example. There were concerns expressed in Order No. 693 with regard to the size of Inadvertent Interchange balances. Inadvertent Interchange is primarily a NAESB responsibility. Some time back there was an effort within NAESB that would give BAs

tools to draw down their balances while simultaneously reduce the impact of and the number of Time Error Corrections (other 693 concerns). Time error and Inadvertent Interchange balances are two intertwined phenomenon. The NAESB proposal was based on things that we used to do prior to CPS as well as practices in Europe. In short, the NAESB proposal was to allow unilateral Inadvertent payback via one of the following two methods whenever the BA Inadvertent Interchange Balance and Time Error have the same sign: An offset of scheduled frequency of +/- 0.01 Hz, or (+ for slow time, - for fast time) If the scheduled frequency setting cannot be offset, a Net Interchange Schedule (MW) equal to 10% of the BA Bias. This unilateral Inadvertent payback ends when the time error is zero or has changed signs, the accumulation of inadvertent interchange has been corrected to zero, or a scheduled time error correction begins, which takes precedence over offsetting frequency schedule to pay back inadvertent. If this were combined with a change to the current Time Error Correction process: Widening the window for calling TECs to +/- 30 seconds. Implementing TECs with a smaller offset (+/- 0.01Hz). We would significantly reduce the number of TECs, the size of Inadvertent Interchange balances and the impact of TECs on frequency (all Order No. 693 concerns) if these simple recommendations were implemented.

Individual

Jo-Anne Ross

Manitoba Hydro

Yes

BAL 005-3: R3 is phrased as a joint obligation on “Adjacent Balancing Authorities”. The Requirement should be rephrased as an obligation on a Balancing Authority to have adequate metering, etc. in place with Adjacent Balancing Authorities .In this requirement it is also not clear if “communications” refers to equipment or processes, given the background information. In R7 the period of testing should be specified if it is to be enforceable.

Yes

BAL-006-2: R1- It is legally unenforceable to require parties to agree, so this requirement should be revised to require a BA to compare values with its Adjacent BA in order to determine if they are the same. Agreement on the values cannot be compelled. R1.3 does not take into account that there may not be agreed to data. R2 appears to assume that there is a legally authorized dispute resolution mechanism between disputing BAs. This is not the case for Manitoba Hydro. There is no authorized dispute resolution process for the MRO to resolve such disputes under Manitoba law. Moreover, for Manitoba Hydro one of its Adjacent BAs is in a different Regional Entity. Those that are members of the same Regional Entity are governed by different law.

Yes

No

Individual

Richard Vine
California ISO
Agree
ISO/RTO Standards Review Committee
Group
Arizona Public Service Company
Janet Smith
Yes
The revised BAL-005 Requirement 3 states “Adjacent Balancing Authorities shall ensure that adequate metering, communications, and control equipment are employed between them to ensure that common and agreed-upon values are communicated to both Balancing Authorities for all Tie-Lines, Pseudo-Ties, and Interchange Schedules including Dynamic Schedules, even when primary source data is not available.” The language, “common and agreed-upon values,” used in this revised requirement has been improperly incorporated from the previous requirements as there is no “common and agreed upon values” communicated. Rather, these values come from a “common and agreed-upon SOURCE”. Once the values are received, they are confirmed or adjusted to “agreed upon”. The revised BAL-005 Requirement 3.4 states “Adjacent Balancing Authorities shall ensure that each Tie-Line, Pseudo-Tie, and Dynamic Schedule between them is equipped with an agreed-upon common source to determine hourly megawatt-hour values. These values shall be provided hourly to each of the Adjacent Balancing Authorities.” This requirement is a repeat of Requirement 3; however requirement 3.4 has the correct language “common and agreed-upon SOURCE”. Either Requirement 3 or Requirement 3.4 needs to be omitted and revised with the correct language. The revised BAL-005 Requirement 3.5.2. states “Each Balancing Authority shall perform hourly error checks of NAI using clock-hour accumulations or integrations of Tie-Line megawatt-hour meter readings. The time synchronization of the meters shall use a common and agreed upon source (e.g., Coordinated Universal Time (UTC)).” This requirement is repeating the new Requirement 3.2, but states the intention better. One or the other needs to be omitted, preferably delete R3.2. The current BAL-005 Requirement 17 looks to have been completely omitted in the revised version of BAL-005. We would like clarification as to why this requirement was removed, when the recommendation was to rewrite this requirement, not delete. Lastly, providing a mapping guide of the changes would be very useful going forward. As we reviewed the revisions made to both BAL-005 and BAL-006, the requirement numbers didn’t match up and it was very difficult to follow the changes being

made. Providing a mapping guide would be of great use when reviewing the proposed changes, especially when such extensive changes are being completed.

Group

SPP Standards Review Group

Robert Rhodes

Yes

Realizing that the redlined version of the standard is for illustrative purposes only, we do note the following typos/grammatical errors for the PRT's consideration in future postings. R3.5 – '...Reporting ACE occurs at least every six seconds.' R6. – Capitalize Real-time here and throughout all the documentation. R7. – Capitalize Control Center.

Yes

Yes

While we basically concur with the draft SAR, we do note the following typos/grammatical errors for the PRT's consideration in future postings. In the Bold-face sentence at the end of the last paragraph in the SAR Information section on Page 2, 'feedback' in lieu of 'feeback'. In the 3rd line of the Identify the Objectives... section on Page 2, delete one of the duplicate 'defines'. In the last line of the same paragraph, replace 'the' with 'their' in front of Interconnection. In the 1. BAL-005 section, be sure to capitalize Real-time. Capitalize Tie Line Bias in the last sentence under 2) Purpose on Page 4. Capitalize Control Center in the Requirement R7 section on Page 6. Capitalize Control Center in the Requirement R8, Part 8.1 section on Page 6. Capitalize Real-time in the Requirement R9, Part 9.1 section on Page 7. Delete the 's' on 'meets' in the 1st paragraph under Requirement R12 on Page 7. Capitalize Pseudo-Ties, capital 'T', in the last line of the last paragraph under Requirement R12 on Page 7. Capitalize Real-time in the last line of Requirement R14 on Page 8. Capitalize Control Center in the last line of Requirement R15 on Page 8. Capitalize Real-time in the last line of the 1st paragraph under BAL-006 on Page 9. Capitalize Real-time in the parenthical in the Requirement R1 section on Page 10. For consistent formatting, use bold-faced type for Requirement R4 on Page 10. In the 2nd line of the Requirement 4 section replace 'for' with 'of'. The line would then read 'currnet practices for confirmation of interchange after-the-fact to determine and justify a'. Insert a space between 'is' and 'addressed' in the 1st line of the paragraph under the Requirement R4, Part 4.2: section. Capitalize Real-time in the next to last line in the Requirement R4.3 section.

Yes

We thank you for the opportunity to review and comment on the PRT's recommendations for BAL-005 and BAL-006 and the associated SAR. We believe that you are moving down the right track with this project and await a more polished product to comment and vote on in the future. We would ask the PRT to schedule their next webinar a little closer to the end of the comment period. This will give stakeholders more time to consider your proposals and be ready to discuss them when the webinar does occur.

Individual
Matthew Beilfuss
Wisconsin Electric Power Company
Agree
MISO
Individual
Cheryl Moseley
Electric Reliability Council of Texas
No
<p>Title Section – ERCOT believes the title, Balancing Authority Control, is not clear. It has to be relevant to something, i.e. control of what? The SDT should consider what the standard is trying to do and title it appropriately. It seems that BA ACE Responsibilities is more appropriate and accurate with what’s established in the standard. Purpose Section – Similar to the title section, the purpose statement doesn’t seem to really align with the substance of the standard, which does impose specific obligations on BAs, which should relate to data collection and actually establish particular performance requirements. Conversely, a standard that establishes data collection obligations typically imposes affirmative obligations on entities to supply data to another entity, which is given the absolute or discretionary right to receive the data. That is not what this standard does. ERCOT believes the purpose statement should be revisited to align it with what the standard is actually doing. Applicability Section – This section should explicitly exclude BAs that only have DC ties with other BAs from all requirements that apply to BA to BA interactions. For example, “Balancing Authorities that only have DC ties with other Balancing Authorities are not Adjacent Balancing Authorities. Accordingly, Requirements under this Reliability Standard that apply to interactions between Adjacent Balancing Authorities shall not apply to Balancing Authorities that only have DC tie interconnections with other Balancing Authorities.” Definition of Adjacent Balancing Authority: ERCOT believes that the definition of Adjacent Balancing Authority should be modified as follows: A Balancing Authority Area that is interconnected to another Balancing Authority Area within an Interconnection either directly or via a multi-party agreement or transmission tariff. This clarification to the definition is part of the approved interpretation for EOP-001 and better suited within the definition itself and with BAL-005 and BAL-006 extensive use of the term, it would be appropriate to modify the definition as a part of this SAR. R1 – The word “implement” should be changed to “include”, which is better. R2 – The same comment as R1. Also, “including Dynamic Schedules” should be in a parenthetical after “Interchange Schedules”, or it should be separated with commas. R3 – ERCOT believes the term “adequate equipment” is ambiguous, and unnecessary. All the requirement needs to say is “Adjacent Balancing Authorities shall use common and agreed-upon values for all Tie-Lines, Pseudo-Ties, and Interchange Schedules including Dynamic Schedules. These values shall be communicated to relevant Balancing Authorities even when primary source data is not available.” It is up to the entity to determine what they need to do to meet the requirement, including having the equipment necessary to meet the requirement. This also seems like it</p>

can be combined with R3.4. As noted in the following comments, the rest of the R3 sub-bullets don't really seem to fit under R3. R3.1 doesn't seem to fit under R3, but rather seems like a caveat to R1 or R2. R3.2 seems like a stand-alone requirement and should make clear that it only applies to adjacent BAs and therefore, does not apply to BAs that only have DC ties with other BAs. It could be further clarified to indicate that this only applies to BAs that have AC Ties within an Interchange/ Interconnection. R3.3 seems like a stand-alone requirement. R3.4 seems like a stand-alone requirement, and as noted above, it could be combined with the suggested revised version of R3. R3.5, R3.5.1 and R3.5.2 all seem like stand-alone requirements. R4 – ERCOT is fine with the way the requirement is written and is not suggesting any revision, but what is the RC going to do with the information? Does the BA providing the information serve some reliability value, or is it just FYI with no substantive benefit? If it is the latter, the requirement should be removed. If the RC can do something valuable with the information that the BA is unable to calculate ACE for more than 30 minutes, and it is a straightforward notice requirement then the requirement could be retained. R5 – ERCOT believes it would be better if the redundant equipment was already operating so that it mitigated the risk that it wouldn't activate upon failure of the primary source. Also, is the level of redundancy within the discretion of the entity, subject only to meeting the 99.95% performance obligation? That should be clear, but any chance that could create audit confusion, (an auditor saying an entity's level of redundancy isn't adequate) is not acceptable. R6 – The requirement should begin with "At" instead of "As". Replace "flag" with "identify" or "document". Also, what does "archival purposes" mean? Revise the requirement to say "The BA shall identify bad data. Bad data shall be identified as such for operator displays. Bad data shall also be documented by the BA." The SDT should suggest a retention timeframe for this data, e.g. such as "Data shall be retained by the BA for a period of one year". This could be included in 1.3 Data Retention Section. R7 – Remove the words "adequate and reliable". This is ambiguous and unnecessary. The requirement should just say the BA has to have back-up power supplies/sources. Also, what does periodically test mean? The standard should establish an outer limit/timeframe to give some context for the audit to mitigate ambiguity/disagreement on this issue. Also, what does "other critical locations" mean? Again, this is ambiguous and should be mitigated by removing this and just limiting the requirement to control centers, or revising the requirement to explicitly state that the locations are determined solely within the discretion of the applicable entity, e.g. "as determined by the BA". Finally the part of the sentence that states "to ensure continuous operation of AGC and vital data recording equipment during loss of the normal power supply" should be revised. Are both AGC and vital data modified by "data recording equipment"? What is "vital data recording equipment"? This is ambiguous and should be mitigated by removing this and just limiting the requirement to AGC data recording equipment, or revising it to explicitly state that vital data is determined solely within the discretion of the applicable entity, e.g. "as determined by the BA".

No

Purpose Section – The standard does not ensure anything with respect to inter-BA reliance on meeting demand or interchange obligations. It merely establishes informational exchange/transparency requirements that may have the effect of facilitating the desired

result – i.e. mitigating inter-BA reliance for the stated purposes. This standard defines a process for monitoring Balancing Authorities in a multi-BA Interconnection to ensure that, over the long term, Balancing Authority Areas do not excessively depend on other Balancing Authority Areas in the Interconnection for meeting their demand or Interchange obligations. ERCOT believes the purpose section should be revised accordingly. Applicability Section – The purpose section explicitly states that the standard is intended to mitigate the inter-BA reliance concern between BAs in the same interconnection. Accordingly, Single BA Interconnections that are connected to other interconnections through DC ties only should not be subject to this standard. ERCOT believes the Applicability Section should be revised to reflect this. Even assuming the issue applied to BAs in different interconnections, for single BA interconnections that are connected to other interconnections through DC ties only, the DC ties have limited capabilities, and they allow for more specific accounting of the flows across the ties, which mitigates the potential for inadvertent interchange. Accordingly, the purpose of this standard does not apply to those circumstances, and the application of the requirements to single BA interconnections that only have DC ties serves no purpose other than to create unnecessary obligations and accompanying compliance and penalty exposure risk with no corresponding reliability benefit. Granted, single BA interconnections that are connected to other interconnections through DC ties only can perform the accounting for scheduled and actual interchange across the ties, but that exercise is somewhat meaningless relative to the purpose / goal of this standard because such BAs don't have synchronous AC connections, and, therefore, the potential for inadvertent interchange relative to the purpose of the standard is unimportant. Since the purpose of accounting for scheduled and actual is to calculate inadvertent for BA informational use to mitigate undue inter-BA reliance in the same interconnection, this exercise is relatively meaningless for single BA interconnections that only have DC ties.

Group
Bonneville Power Administration
Andrea Jessup
Yes
Yes
Yes
No