Name (15 Responses) Organization (15 Responses) Group Name (13 Responses) Lead Contact (13 Responses) Question 1 (25 Responses) Question 1 Comments (28 Responses) Question 2 (23 Responses) Question 2 Comments (28 Responses) Question 3 (24 Responses) Question 3 Comments (28 Responses) Question 4 (18 Responses) Question 4 Comments (28 Responses) Question 5 (19 Responses) Question 5 Comments (28 Responses) Question 6 (0 Responses) Question 6 Comments (28 Responses) Question 7 (0 Responses) Question 7 Comments (28 Responses)

#### Individual

Karen Webb

City of Tallahassee

Yes

No

While the Purpose Statement adequately captures the intent of the standard, the City of Tallahassee (TAL) questions the need for this standard. Policy 1, section B introduction stated: "Because generator failures are far more common than significant losses of load and because CONTINGENCY RESERVE activation does not typically apply to the loss of load, the application of the Disturbance Control Standard is limited to the loss of supply and does not apply to the loss of load." TAL questions whether loss of load is not already properly measured in the BAL-001-1, R2, 30-minute criterion. No

Policy 1, section B introduction stated: "Because generator failures are far more common than significant losses of load and because CONTINGENCY RESERVE activation does not typically apply to the loss of load, the application of the Disturbance Control Standard is limited to the loss of supply and does not apply to the loss of load." TAL questions whether loss of load is not already properly measured in the BAL-001-1, R2, 30-minute criterion. TAL further questions how a Reserve Sharing Group can assist an individual BA experiencing a Large Loss of Load Event. It appears that the entity would have to shed generation (with potential impact to the reliability of the Bulk Electric System), or maintain sufficient downward generation room on the on-line units to be able to ramp down the MSSC or 500MW. This would be problematic with economic dispatch and meeting other BAL standards. Yes

No

TAL is unclear as to the distinction/purpose of this standard. While the background document addresses policies dating to 2002, Policy 1, section B introduction stated: "Because generator failures are far more common than significant losses of load and because CONTINGENCY RESERVE activation does not typically apply to the loss of load, the application of the Disturbance Control Standard is limited to the loss of supply and does not apply to the loss of load." TAL questions whether loss of load is not already properly measured in the BAL-001-1, R2, 30-minute criterion.

1. Section D.1.2. (Data Retention): While TAL prefers the verbiage in this standard over that in the other three BAL standards up for comment, TAL is unclear of the reason for the difference. TAL suggests modifications on each to ensure consistency throughout the Compliance Information

sections of the NERC standards. 2. The Comment Form in the Background Information states that the primary objective of BAL-013-1 is to measure the success of implementing a Contingency Reserve Plan. TAL is unclear as to how the application of Contingency Reserves would mitigate a Large Loss of Load Event.

Individual

Chris Mattson

Tacoma Power

No

Tacoma Power does not agree with the need for this standard about the loss of load and therefore the definition as proposed. A loss of load event already has economic incentives for the generation to be adjusted downward to match the new load requirements as soon as possible. Even if the generation remains high, other generation in the interconnection is allowed to under-generate through the CPS1 standard in BAL-001. Additionally, the definition's use of the terms "Balancing Authority" and "BA" should be clarified. Tacoma Power suggests that the term be replaced with "Reserve Sharing Group or a Balancing Authority not in a Reserve Sharing Group." The definition should only apply to a Balancing Authority when the Balancing Authority is not a member of a Reserve Sharing Group.

No

Tacoma Power does not agree with the need for this standard about the loss of load. A loss of load event already has economic incentives for the generation to be adjusted downward to match the new load requirements as soon as possible. Even if the generation remains high, other generation in the interconnection is allowed to under-generate through the CPS1 standard in BAL-001.

No

Tacoma Power does not agree with the need for this standard about the loss of load. A loss of load event already has economic incentives for the generation to be adjusted downward to match the new load requirements as soon as possible. Even if the generation remains high, other generation in the interconnection is allowed to under-generate through the CPS1 standard in BAL-001. Additionally, the requirement's use of the term "Balancing Authority" should be clarified. Tacoma Power suggests that the term be replaced with "Reserve Sharing Group or a Balancing Authority not in a Reserve Sharing Group." The requirement should only apply to a Balancing Authority when the Balancing Authority is not a member of a Reserve Sharing Group.

Yes

Tacoma Power does not have any comment at this time.

No

Tacoma Power does not agree with the need for this standard about the loss of load. A loss of load event already has economic incentives for the generation to be adjusted downward to match the new load requirements as soon as possible. Even if the generation remains high, other generation in the interconnection is allowed to under-generate through the CPS1 standard in BAL-001.

Tacoma Power does not have any comment at this time.

Tacoma Power does not agree with the need for this standard about the loss of load. A loss of load event already has economic incentives for the generation to be adjusted downward to match the new load requirements as soon as possible. Even if the generation remains high, other generation in the interconnection is allowed to under-generate through the CPS1 standard in BAL-001. Thank you for the opportunity to comment on this proposed standard.

Individual

Anthony Jablonski

ReliabilityFirst

No

ReliabilityFirst offers the following comment for consideration: 1. Definition of Large Loss Of Load Event a. ReliabilityFirst questions why unexpected loss of Load qualifier of 500 MW is not consistent with the 300 MW reportable disturbance loss of load qualifier within the EOP-004-1 standard and the associated DOE OE-417 form. For consistency, ReliabilityFirst recommends modifying the definition to reflect the 300 MW value.

Individual

Greg Travis

Idaho Power Company

No

"No, I interpret one Clock Minute as xx:xx:00 through xx:xx:59 not a sliding 60 second time window. If we are going to define a single event loss of load it should be a sliding 60 second window."

Yes

No

No, I don't believe that over generation is a significant issue. We should be allowed at least the same response time with RBC.

No

No, again I don't think this should be "15 Clock Minutes" just 15 Minutes

No

It does not add much.

No

No Individual

Michael Falvo

Independent Electricity System Operator

No

We do not have any real issue with the proposed definition but there does not appear to be any technical basis provided to support the 500 MW threshold. MSSC as defined in BAL-002-2 relates to generation loss or loss of load management. MSCC used in this definition is implied to be load loss as it results in a positive change to ACE. The definition is not clear since is uses the defined term MSCC which is not related to large load loss.

Yes

Yes

res

Yes

No

We do not have any concerns with the document, but there is no mention of the basis for the 500 MW threshold, which we would normally expect to be provided in a background document.

Individual

Michael Goggin

American Wind Energy Association

No

A potential concern is that, at times of minimum load when conventional generators are already backed down to near their minimums, a requirement to hold additional down contingency reserves on generation (to accommodate an unexpected loss of load) could require holding conventional generators at higher output levels, thus increasing the amount of wind that would have to be

curtailed. A potential solution is to add a requirement to the standard that any loss of load contingency being covered should be of the same probability as is being covered by BAL-002, the generation contingency reserve standard. Another potential solution would be to clarify that down contingency reserves can come from any technology that is physically capable of responding, including conventional generators, wind generators, solar generators, demand response, storage, and any other technology, as many of these non-conventional resources are able to provide down contingency reserves at almost zero cost.

Yes

Yes

Group

progress Energy

Jim Eckelkamp

No

The basis for the 500 MW amount is unclear and is not discussed in the Background document.

No

The target should be to return the ACE to zero if the pre-event ACE value was positive. The target should be to return ACE to at least the pre-event ACE value if the pre-event ACE value was negative. If there must be a change to existing recovery criteria PE's suggestion would be to make the target for ACE recovery zero. It is unreasonable and unnecessary to recover ACE to a positive value.

Individual

Thad Ness

American Electric Power

Yes

No

The requirement appears reasonable for a single identified loss of load event, but in some scenarios, such as in cases of cascading outages, it would not be feasible to expect the Balancing Authority to react within this timeframe since coordination with the RC and neighboring BAs would be needed. We encourage the SDT to modify the Standard in order to distinguish more simplified events as opposed to large-scale emergencies, and recognizing that 15 minutes is unreasonable in some instances. Also, there is concern that a BA reacting unilaterally might exacerbate the situation by their required actions if units were to trip off due to frequency issues.

Group

Northeast Power Coordinating Council

Guy Zito

No

"Clock minutes" should be changed to "minutes" as was agreed to by BARC.

standards such as BAL-001, and BAL-002 for example, and not be stand alone.

## John Tolo

Individual

Tucson Electric Power

No

There is no technical basis for the 500 MW loss of load component.

Yes

While I feel every BA should recognize the need and importance of recovering from every type of disturbance, there has not been a demonstrated reliability issue with regards to loss of load.

This Standard was written in response to a FERC Directive. It does not address a significant reliability issue because operator and system responses to system events of this magnitude are addressed in other standards. If it is felt that this event must be addressed, it should be included in other

No

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No

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no

While I feel every BA should recognize the need and importance of recovering from every type of disturbance, there has not been a demonstrated reliability issue with regards to loss of load. Individual

Kathleen Goodman

ISO New England Inc.

No

We know of no known reliability concerns with the current status of not requiring any type of "recovery" for load loss events. Actually, we believe there could be adverse reliability affects from dispatching off generation in response to loss of load and not having the generation available for restoration of said load. We encourage the SDT to eliminate this proposed standard as part of their project.

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Given the rampant need in the industry for Requests for Interpretations, Rapid Revisions, and CANs, we believe that future Standards need to be written so that they can "stand alone" upon scrutiny.

Group

Southern Company

Antonio Grayson

No

Southern suggest that a MW value that would more greatly impact the frequency in each interconnection replace the 500 MW value as stated in the definition of 'Large Loss of Load Event'. Unexpected should be clarified, for example – impending hurricane or large storm, where loss of load is likely.

No

Southern suggestion replacing "following the loss of a large load" with "following a Large Loss of Load Event" because the current purpose implies a single load.

No

There is no limit to recovery expectations for loss of load specified in this Requirement, however a recovery expectation of at least the MSSC value is stated in the proposed BAL-002-2 standard Would BAAL not be sufficient to achieve desired results of this requirement? Loss of load presents a positive change in ACE and could be the result of various causes; therefore, validating the event as loss of load could impede into recovery time.

We question the reliability need for this standard in light of the proposed BAAL requirement, which deals with high frequency as well as low frequency.

Group

Arizona Public Service Company

Janet Smith, Regulatory Affairs Supervisor

No

No – the addition of the reporting requirement for the loss of a 500MW unit is not addressed in any of the documentation.

Yes

No

No – The loss of multiple units was addressed in BAL-002-2 but not in this standard. Also, the ACE recovery requirements are different from BAL-002-2. The first bullet in R1 states that if ACE is negative or zero, then return ACE to zero and the second bullet has you returning a positive ACE to its pre-trip value, exactly opposite of BAL-002-2.

Yes

No

No – The 500MW unit reporting requirement is not addressed in the background document.

No conflicts

No comments

Group

LG&E and KU Services

Brent ingebrigtson

No

Loss of load does not need to be addressed by new Reliability Standards. Loss of load is currently sufficiently addressed by existing BAL Reliability Standards. LG&E and KU Services suggest removing this Standard. If this Standard is mandated: It is unclear whether "unexpected loss of load" includes load losses due to forecasted/monitored/impending conditions such as hurricanes, ice storms, etc. During such events load loss is generally expected, even if the timing and magnitude of the load loss may be unknown. It appears that in situations where the load loss is expected, BAL-013 does not apply, but this is not entirely clear. The LLLE definition should not be based on the definitions of MSSC or RSG. These parameters may be totally unrelated. A threshold of 500MW/minute loss seems low (especially for a large BA). The loss of a % (e.g. 20%) of current load might have more meaning. RSG is a NERC Glossary defined term related to the sharing of Contingency Reserves. Contingency Reserves apply only to the loss of resources, not load. The proposed definition is an improper application of the RSG definition – RSG should be removed from the LLLE definition. During a large event (hurricane, ice storm, etc.) where large amounts of load are lost over several minutes or hours - it is unclear whether each loss of load triggers BAL-013 or whether the losses are aggregated together. During a large event, operators will be very busy – they should not be burdened by additional compliance concerns if there is not a BES reliability issue.

No

As proposed, the Purpose applies to the loss of a single load. Suggest Purpose be re-worded as: To ensure the Balancing Authority is able to balance resources and demand and return the Balancing Authority's Area Control Error within the defined limits following a large loss of load.

No

Comments: RSG is a NERC Glossary defined term related to the sharing of Contingency Reserves following the loss of a resource. The application of the term RSG in R1 is not consistent with the current RSG definition.

No

RSG is a NERC Glossary defined term related to the sharing of Contingency Reserves following the loss of a resource. The application of the term RSG in M1 is not consistent with the current RSG definition

If no alternative is available to the BA to reduce ACE within 15 minutes, it is unclear whether the BA would be expected to trip a generating unit to comply with BAL-013. BES reliability is not enhanced if a BA trips a generating unit to resolve an intermittent, short-term over-generation problem. LG&E and KU Services suggest either 1) providing the BA more than 15 minutes to reduce ACE (e.g. 30 minutes), or 2) not mandating unit tripping unless ACE remains above a certain threshold for an extended period. The term RSG should not be used in BAL-013.

Group

Arizona Public Service Company

Janet Smith, Regulatory Affairs Supervisor

res
Yes
No conflicts
No comments
Group
Bonneville Power Administration

Chris Higgins

No

BPA believes there is no need for this standard. Furthermore, it should be interconnection dependant based on 100 mHz change in frequency.

No

BPA believes this standard is not necessary as there has not been a demonstrated need that recovering from load loss is a reliability issue, and BPA does not support the purpose statement.

No

BPA believes this standard is not necessary as there has not been a demonstrated need that recovering from load loss is a reliability issue, and BPA does not support the Requirement.

No

BPA believes this standard is not necessary as there has not been a demonstrated need that recovering from load loss is a reliability issue, and BPA does not support the Measures.

No

BPA does not believe there is a reliability impact. After reviewing the background document, BPA did not find any supporting evidence showing a legitimate need for this standard.

Group

SPP Standards Review Group

Robert Rhodes

No

We suggested changing the reporting requirements in BAL-002 from 500 MW to 600 MW to be consistent with current reporting requirements within SPP. We suggest a corresponding change here with loss of load and request that the reporting criteria be changed to 600 MW.

Yes

No

As we commented in Question 3 for BAL-002, the term Reserve Sharing Group ACE needs to be defined.

No

Similar to our response to Question 3 for BAL-002, we are unsure what the specific reporting requirements are in M1. The SDT needs to provide more detailed information on reporting. No

The document only contains an introductory paragraph, the requirements themselves and another brief paragraph consisting of only a few lines of background and rationale material. The document contains no helpful information that provides any further clarity to the standard.

Not aware of any conflicts.

We have concerns over the need for this standard. Frequency deviations associated with loss of generation which cause frequency to drop are a concern from a loss of integrity of the BES standpoint as well as a loss of load perspective if UFLS is involved. Yet on the other hand in a loss of load situation, what exactly is the impact or threat to the reliability of the BES. It doesn't appear to us that a similar threat exists on this end of the spectrum. There is currently an effort underway at NERC, with FERC's blessing, that unnecessary requirements and standards which have little or no impact on the reliability of the BES be retired. We feel that this standard, while addressing what appears to be a 'paper' reliability gap does nothing to improve the reliability of the BES. Rather than going forward with this standard and retiring it at a later date, we suggest stopping all activity related with this standard now. In the event that the SDT and NERC don't agree with our above request and the standard goes forward, we suggest that the effective date in the standard be changed from 6 months following regulatory approval to 12 months following that approval. This is a new standard that will require new operational processes as well as additional compliance documentation. A 12-month lead-time in this situation is much more practical.

Group

ACES Power Marketing Standards Collaborators

Jason Marshall

No

What is the technical justification of the 500 MW load loss being considered a large load loss? There is nothing in the background document to support this.

No

A BA is always "able" to balance resources and demand. It has to demonstrate this ability in the certification process. The purpose appears to be that the BA recovers ACE after a "large" load loss. No

No

There is no need for this requirement for a myriad of reasons. First, there are no requirements today for a "large" load loss. Given that there have been no citations provided where a "large" load loss contributed to a system event (beyond a weather event), there appears to be no justification for this requirement. Second, "Large" load losses are typically caused by extreme weather. BAs and TOPs have proven repeatedly that they work well together to match generation and load while operating within transmission equipment constraints during these difficult operating times. Third, the proposed BAAL limits create a backstop that will prevent a BA from operating with a significant negative ACE. The frequency component of the BAAL limits will further restrict the ACE if the load loss impacts frequency. Fourth, high frequency is rarely a problem. Thus, concern about "large" load losses is simply not warranted given the other mitigating factors described above.

No

Please see our comments on question 3.

No

The background document provides no technical justification. It only states that it is mirroring the DCS requirement for loss of generation. Creating a requirement for symmetry is simply unnecessary. Reliability is served well today without a "large" load loss ACE recovery requirement. In the introductory section, "loss of large loss of load" needs to be fixed.

The opening paragraph of the boiler plate language for the data retention section is missing. We disagree with the data retention requirements of up to four years. First, it is not consistent with NERC Rules of Procedure. Section 3.1.4.2 of Appendix 4C – Compliance Monitoring and Enforcement Program states that the compliance audit will cover the period from the day after the last compliance audit to the end date of the current compliance audit. The "current year, plus three calendar years" exceeds the compliance audit period of three years for the BA. Second, because the stated purpose of this requirement is intended to mirror the DCS requirement, its data retention period should align with the existing BAL-002-1 standard. That period is one year.

Individual

RoLynda Shumpert

South Carolina Electric and Gas

No

South Carolina Electric and Gas supports the comments submitted by the SERC OC Standards Review Group.

Yes

No

South Carolina Electric and Gas supports the comments submitted by the SERC OC Standards Review Group.

No

Yes

No

South Carolina Electric and Gas supports the comments submitted by the SERC OC Standards Review Group.

#### Group

Associated Electric Cooperative, Inc., JRO00088

### David Dockery

No

AECI agrees with SERC comments regarding this question. In addition, while AECI was encouraged to see that our industry cited a load-loss value other than the too-often cited 300 MW "tell DOE, so they won't get caught flat-footed before our President or Congress?", but we were equally disappointed to discover there was no technical reliability-related justification for the 500 MW value drafted within this "Large loss of Load Event" definition. AECI believes that technical studies should be performed on each Interconnection's system and the threshold assigned accordingly. Current standards, and earlier guidelines, allow for 20% safety-margins, and so assignment of 80% the study-determined threshold, would seem consistent with long-held conservative industry margins. To AECI's knowledge, the only study in this class of credibility, is that of PNNL for the Western Interconnection, a system that seems most susceptible to dynamic instability because of the "western doughnut". While guarded in that study's findings presented at the February 2012 CSO 706 SDT meeting in Phoenix, AZ, the presenter did note a surprising generality to those who ran the study. That "surprising" finding was that a loss-of-load event impact appears to consistently have less reliability impact than a loss-of-generation event of equal MW magnitude. As such, the 80% threshold for loss-of-unit may in fact be sufficient, ie those who preceded us may have inherently considered loss-of-load events as well.

Yes

No

AECI agrees with SERC comments posted for this question.

No

AECI agrees with SERC comments posted for this question.

No

See AECI comments to Question 1, pertaining to the cited 500 MW threshold for loss of load events. Yes, various Reserve Sharing Group agreements may be affected by this standards' inclusion of lossof-load events, whereas they were originally written toward loss of generation events.

While AECI would like to see a better defined Loss of Load Event term, this Standard's inclusion of such events appears unnecessary in light of the BAAL Standard requirement drafted within BAL-001, which includes consideration and bounding of Interconnection high frequency conditions as well as low frequency conditions.

Individual

Don Jones

Texas Reliability Entity

No

Is the definition intended to cover operation of UVLS or SPS relay systems that shed load, sometimes unexpectedly, for specific contingencies? Does it matter whether the load loss is consequential or non-consequential? Should an unplanned interruption of an export (interruptible or non-interruptible) be considered a Large Loss of Load Event? Should some large load loss events taking more than 1 minute (such as load lost due to a hurricane) be included in this definition? For example, what if 450 MW of load is lost in one minute, and another 450 MW is lost in the next minute? Reserve Sharing Group should be referenced in the MSSC definition, and here the MSSC could be that of an RSG instead of a BA.

Group

ISOs Standards Review Committee

Terry Bilke

No

We would agree that the loss of 500MW would be a large loss of load, but we don't necessarily agree that there needs to be a separate standard to evaluate what a BA does when these rare events occur. There is no technical basis provided for the 500MW threshold.

No

1) This standard is intended to address directives in Order No. 693. Order No. 693 predates the proposed BAAL standard, which addresses these issues more effectively than BAL-013-1. If the standard is maintained, the purpose statement should just say that the standard is intended to address FERC specific FERC directives (and list them). 2) The original DCS was intended to be a performance measure with regard to contingency reserves. Losses of load on the order of 500MW are rare. To our knowledge, there never has been the case where following the loss of load, the corresponding ACE and higher frequency have caused a reliability problem. Finally, the proposed BAAL standard makes this standard redundant and unnecessary.

No

See our comments regarding the purpose of the standard.

No

See our comments regarding the purpose of the standard.

No

1) The document discusses the use of contingency reserves to balance load and resources. Ramping units quickly down has nothing to do with contingency reserves. 2) Further, there is no basis provided for the 500 MW threshold, which we would normally expect to be provided in a background document.

If a large system event occurs that causes the loss of 500MW or more of load, we believe that the primary reliability issue is transmission. To implement a standard that triggers kneejerk operator action will likely cause more problems than the standard's benefit.

Individual

Joe Tarantino

Sacramento Municipal Utility District

Yes

Yes

No

Though the Background Document states otherwise, this requirement is not similar to BAL-002-2 requirements as it requires the recovery from load loss events equal to or greater than MSSC or 500mw whichever is less. Practically, this means a BA is obligated to return it's ACE to zero within 15 minutes for any conceivable load loss, up to system shutdown, within the BA greater than the requirement.

Yes

No

The document is insufficient in presenting the technical justification for the standard. The document does not state what reliability impact is being mitigated that isn't mitigated by another standard (CPS1, CPS2, RBC on approval) and the document is incorrect in it's statements that the standard mirrors the BAL-002-2 reporting thresholds.

We feel that the proposed BAL-001-1, if approved, provides the necessary safeguards to the interconnections from these types of load contingencies, therefore the requirement is unnecessary.

We believe that Balancing Areas should have the regulating and capacity capabilities to recover from N-1 (or credible >N-1s) in a reasonable time frame (15 minutes) regardless of whether they are

generation or load contingencies. We believe that the standard should direct BAs to evaluate their credible contingencies and plan to deploy resources to recover from them. We don't believe a BA should be required to recover from any conceivable load loss in 15 minutes. We also don't believe that any credible N-1 load loss has the potential to impact the interconnection that wouldn't already be covered with a BA's BAL-001-1 proposed requirements. We don't believe that cascading load losses can be reasonably incorporated into a next day plan as they cannot be objectively assessed and are beyond all planning criteria currently in place.

Individual

Brett Holland

KCP&L

Is this standard necessary? Can the loss of load be addressed in BAL-002 under Disturbance Control? Group

MISO Standards Collaborators

Marie Knox

No

As outlined above, the proposed standard is intended merely to address certain discrete issues raised in Order No. 693; MISO submits that the proposed BAL-001-1, which was developed after the issuance of Order No. 693, addresses these issues more effectively than BAL-013-1. Furthermore, MISO notes that loss of load events on the order of 500 MW are rare and, to MISO's knowledge, there never has been a case where such a loss of load, and the corresponding ACE and higher frequency, have caused a reliability problem. For these reasons, MISO respectfully suggests that this standard and its proposed new definition are redundant and unnecessary.

No

As outlined above, the proposed standard is intended merely to address certain discrete issues raised in Order No. 693; MISO submits that the proposed BAL-001-1, which was developed after the issuance of Order No. 693, addresses these issues more effectively than BAL-013-1. Furthermore, MISO notes that loss of load events on the order of 500 MW are rare and, to MISO's knowledge, there never has been a case where such a loss of load, and the corresponding ACE and higher frequency, have caused a reliability problem. For these reasons, MISO respectfully suggests that this standard is redundant and unnecessary.

No

MISO respectfully reiterates its comments made in response to No. 3 above regarding the redundancy and necessity of this standard.

No

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No

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As outlined above, the proposed standard is intended merely to address certain discrete issues raised in Order No. 693; MISO submits that the proposed BAL-001-1, which was developed after the issuance of Order No. 693, addresses these issues more effectively than BAL-013-1.

Individual

Alice Ireland

Xcel Energy

No

Xcel Enery does not agree with the proposed Large Loss of Load definition. It is not clear why this standard is needed given the BAL-001-1 standard has performance criteria for each BA. Additionally, the MW threshold that would trigger this definition could simply be the result of cycling loads with each BA (e.g. steel mills). It would be needlessly burdensome to have to track and document recovery for each instance this occurs.

No

If this standard is kept separate from the other standards in this project, the purpose statement should be revised to read "... following a Large Loss of Load Event." To clarify that the loss of a single large load (defined as most by a single industrial customer) is not what this standard is addressing.

Similar to Xcel Energy's comments on BAL-002-2, this requirement needs to be coordinated with the BAL-001-1 Requirement R2. If the event does not take the BA ACE outside of the limits set by BAL-001-1 R2, then why is there a recovery requirement that is significantly different than that allowed by normal operations? It is unclear whether this standard requires existing Reserve Sharing Groups to respond to an event or not. As currently structured, most RSGs respond to the loss of generation and has nothing in their governing documents related to loss of loads. Has the drafting team considered whether it is appropriate for an RSG to respond to the loss of load or if it is more appropriate for just the BA to respond?

No

Please refer to our comments related to the requirement.

No

No, the document does not provide support for the discrepancies between the proposed BAL-013 and BAL-001 operating parameters.

Refer to the comments to question 3 above.

Individual

Laura Lee

Duke Energy

No

There has been no articulated technical basis for the 500 MW value, and loss of this amount of load would not be detrimental to reliability of the Eastern Interconnection. The definition should be changed to an unexpected loss of load greater than or equal to 80 percent of the Balancing Authority's Most Severe Single Contingency.

Yes

No

The requirement should have concepts similar to those in R1 of BAL-002-2, namely including the concept of subtracting the sum of the magnitudes of all subsequent events that occur within the 15 minute recovery period.

Yes

No

: If R1 is not folded into BAL-002 this document should explain why not. The current content does not seem to add useful information and the purpose of the document is unclear. Duke Energy would support deletion of this document.

No.

There is not a demonstrated need for a standard to specifically "ensure the Balancing Authority is able to balance resources and demand and return the Balancing Authority's Area Control Error (ACE) within the defined limits following the loss of a large Load." This is already encompassed by the purpose of BAL-001-1 to control Interconnection frequency within defined limits. The directives specifying changes to BAL-002-0 in FERC Order 693 did not account for the fully realized development of the Balancing Authority Ace Limit (BAAL) concept. The BAAL concepts contained in R2 of BAL-001-1

constitute an alternative approach to address the Commission's concerns in an equally effective and efficient manner. Therefore, standard defining requirements specifically to recover from the loss of a large load (BAL-013-1) should not be developed. In the alternative, it would be an improvement to fold this single requirement into the BAL-002-2 standard and make the concepts for large loss of load recovery consistent with those specified for sudden loss of generation, loss of non-interruptible import and unexpected failure of generation to perform. This would facilitate use of common terminology, such as Contingency Event Recovery Period, for similar concepts used in both standards. Editorial revision – the number of the standard posted in section A is BAL-013-0 but BAL-013-1 in the header.

Group

Western Electricity Coordinating Council

Steve Rueckert

No

The definitino refers to an unexpected loss of load greater than or equal to the lesser of the "Balancing Authorities" MSSC.... by an individual BA or RSG. If a small BA in an RSG loses load equivalent to their MSSC, but less than the RSG's MSSC, is this an LLOLE for the BA or for the RSG? Does loss of a small BA's LLOLE require the RSG to meet the requirement, or just the BA?

No

Is the loss of a single large load, such as a manufacturing or mining operation, that meets the size specifications in the definition considered an LLOLE. If not, the purpose should be revised to include the words "following a LLOLE to clarify that the loss of a single large load is not part of this standard. No

Each BA or RSG should not be requirement to meet this requirement but only the BA or RSG that experience the Large Loss of Load event should be required to return it's ACE within 15 minutes. As worded it appears that each BA in an RSG would have to meet the requirement if a single BA experiences and LLOLE.

1. The implementation plan in the standard says six months after regulatory approval but the document "Implementation Plan" states 12 months. The SDT must clarify this discrepancy. 2. Why is a separate standard necessary for this single requirement? Could this be combined with BAL-002?



# **Comment Form**

Project 2010-14.1 Balancing Authority Reliability-based Control BAL-013-1 – Large Loss of Load Performance standard

Please **do not** use this form to submit comments on the proposed BAL-013-1 Large Loss of Load Performance standard. Comments must be submitted on the <u>electronic comment form</u> by 8 p.m. July 3, 2012. If you have questions please contact <u>Darrel Richardson</u> (email) or by telephone at (609) 613-1848.

### **Background Information:**

Since losses of large loads occur and impact all Balancing Authorities' throughout an Interconnection, BAL-013-1 was created to specify recovery actions and time-frames. The original Standards Authorization Request (SAR) approved by the Industry presumed there is presently sufficient Contingency Reserve in all the North American Interconnections. The underlying goal of the SAR was to update the Standard to make the measurement process more objective and to provide information to the Balancing Authority or Reserve Sharing Group such that the parties would better understand the use of Contingency Reserve to balance resources and demand and return Interconnection frequency within defined limits following a Large Loss of Load Event. The primary objective of BAL-013-1 is to measure the success of implementing a Contingency Reserve plan.

### You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

### 1. The BARC SDT has developed two new terms to be used with this standard.

Large Loss Of Load Event:

A unexpected loss of load greater than or equal to the lesser of the Balancing Authority's Most Severe Single Contingency or 500 MW within one clock minute by an individual BA or Reserve Sharing Group (RSG) that results in a positive change to Area Control Error (ACE).

Do you agree with the proposed definitions in this standard? If not, please explain in the comment area below.

	Yes
$\bowtie$	No

Comments:

## NERC

The definition as written is a little awkward and seems to be missing a timeframe. Would suggest the following: An unexpected loss of Load by an individual Balancing Authority or Reserve Sharing Group that is greater than or equal to the lesser of: (i) the Balancing Authority's Most Severe Single Contingency, or (ii) 500 MW, within one clock-minute [of what?] that results in a positive change to Area Control Error.

### 2. The proposed Purpose Statement for the draft standard is:

To ensure the Balancing Authority is able to balance resources and demand and return the Balancing Authority's Area Control Error within the defined limits following the loss of a large load.

Do you agree with this purpose statement? If not, please explain in the comment area below.

$\boxtimes$	Yes
-	

\_\_\_ No

Comments:

# **3.** The BARC SDT has developed Requirement R1 to determine if the BA or Reserve Sharing Group corrected its Area Control Error (ACE) in recovering from a Large Loss of Load Event.

R1. Each Balancing Authority or Reserve Sharing Group shall correct its ACE following each Large Loss of Load Event within 15 clock minutes of the initiation of that event, as follows: [Violation Risk Factor: ][Time Horizon: ]

- If the Balancing Authority or Reserve Sharing Group's ACE value just prior to a Large Loss of Load Event is negative or equal to zero, the Balancing Authority or Reserve Sharing Group shall return its ACE to zero
- If the Balancing Authority or Reserve Sharing Group's ACE value just prior to a Large Loss of Load Event is positive, the Balancing Authority or Reserve Sharing Group shall return its ACE to it pre-event value.

Do you agree with this Requirement? If not, please explain in the comment area below.

$\boxtimes$	Yes
	No

Comments:

4. The BARC SDT has developed Measures for the proposed Requirements within this standard. Do you agree with the proposed Measures in this standard? If not, please explain in the comment area.

## NERC

$\boxtimes$	Yes
	No
Co	mments:

5. The BARC SDT has developed a document "BAL-013-1 Large Loss of Load Performance Standard Background Document" which provides information behind the development of the standard. Do you agree that this new document provides sufficient clarity as to the development of the standard? If not, please explain in the comment area.

	Yes
$\boxtimes$	No

Comments:

This document provides very little support to the Standard.

6. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement, or agreement please identify the conflict here.

Comments:

7. Do you have any other comment on BAL-013-1, not expressed in the questions above, for the BARC SDT?

Comments:

See comments related to 5. Effective Date provided in the BAL-001 comment form.

Compliance 1.2 – capitalize the S on Sharing Group. Insert 'previous' before three calendar years.



# **Comment Form**

Project 2010-14.1 Balancing Authority Reliability-based Control BAL-013-1 – Large Loss of Load Performance standard

Please **do not** use this form to submit comments on the proposed BAL-013-1 Large Loss of Load Performance standard. Comments must be submitted on the <u>electronic comment form</u> by 8 p.m. July 3, 2012. If you have questions please contact <u>Darrel Richardson</u> (email) or by telephone at (609) 613-1848.

### **Background Information:**

Since losses of large loads occur and impact all Balancing Authorities' throughout an Interconnection, BAL-013-1 was created to specify recovery actions and time-frames. The original Standards Authorization Request (SAR) approved by the Industry presumed there is presently sufficient Contingency Reserve in all the North American Interconnections. The underlying goal of the SAR was to update the Standard to make the measurement process more objective and to provide information to the Balancing Authority or Reserve Sharing Group such that the parties would better understand the use of Contingency Reserve to balance resources and demand and return Interconnection frequency within defined limits following a Large Loss of Load Event. The primary objective of BAL-013-1 is to measure the success of implementing a Contingency Reserve plan.

### You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

### 1. The BARC SDT has developed two new terms to be used with this standard.

Large Loss Of Load Event:

A unexpected loss of load greater than or equal to the lesser of the Balancing Authority's Most Severe Single Contingency or 500 MW within one clock minute by an individual BA or Reserve Sharing Group (RSG) that results in a positive change to Area Control Error (ACE).

Do you agree with the proposed definitions in this standard? If not, please explain in the comment area below.

	Yes
$\boxtimes$	No



Comments: RSG is a NERC glossary defined term related to the sharing of contingency reserves. Contingency reserves apply to the loss of resources and not load. The proposed LOLE definition is an improper use of the RSG definition and should be removed. MSSC has no relation to loss of load and should be removed. We suggest replacing the 500 MW value with an amount that would significantly impact frequency in each interconnection. Unexpected should be clarified, for example – impending hurricane or large storm, where loss of load is likely.

### 2. The proposed Purpose Statement for the draft standard is:

To ensure the Balancing Authority is able to balance resources and demand and return the Balancing Authority's Area Control Error within the defined limits following the loss of a large load.

Do you agree with this purpose statement? If not, please explain in the comment area below.

$\boxtimes$	Yes

\_\_\_ No

Comments:

# **3.** The BARC SDT has developed Requirement R1 to determine if the BA or Reserve Sharing Group corrected its Area Control Error (ACE) in recovering from a Large Loss of Load Event.

R1. Each Balancing Authority or Reserve Sharing Group shall correct its ACE following each Large Loss of Load Event within 15 clock minutes of the initiation of that event, as follows: [Violation Risk Factor: ][Time Horizon: ]

- If the Balancing Authority or Reserve Sharing Group's ACE value just prior to a Large Loss of Load Event is negative or equal to zero, the Balancing Authority or Reserve Sharing Group shall return its ACE to zero
- If the Balancing Authority or Reserve Sharing Group's ACE value just prior to a Large Loss of Load Event is positive, the Balancing Authority or Reserve Sharing Group shall return its ACE to it pre-event value.

Do you agree with this Requirement? If not, please explain in the comment area below.

	Yes
$\boxtimes$	No

Comments: RSG is a NERC glossary defined term related to the sharing of contingency reserves. Contingency reserves apply to the loss of resources and not load. The proposed R1 is an improper use of the RSG definition and should be removed.

## NERC

The proposed BAL-002-2 specifies a recovery expectation of at least the MSSC value. There is no limit to recovery expectations for loss of load specified here. Would BAAL not be sufficient to achieve desired results of this requirement?

Metering to quickly recognize loss of load events is problematic. Loss of load presents a positive change in ACE. This positive change in ACE could be from a number of other causes. It may take a significant amount of the recovery period to validate the event as loss of load.

4. The BARC SDT has developed Measures for the proposed Requirements within this standard. Do you agree with the proposed Measures in this standard? If not, please explain in the comment area.

	Yes
$\square$	No

Comments: RSG is a NERC glossary defined term related to the sharing of contingency reserves. Contingency reserves apply to the loss of resources and not load. The proposed measure is an improper use of the RSG definition and should be removed.

5. The BARC SDT has developed a document "BAL-013-1 Large Loss of Load Performance Standard Background Document" which provides information behind the development of the standard. Do you agree that this new document provides sufficient clarity as to the development of the standard? If not, please explain in the comment area.

$\boxtimes$	Yes
	No

Comments:

6. If you are aware of any conflicts between the proposed standard and any regulatory function, rule order, tariff, rate schedule, legislative requirement, or agreement please identify the conflict here.

Comments: No

7. Do you have any other comment on BAL-013-1, not expressed in the questions above, for the BARC SDT?

Comments: We question the reliability need for this standard in light of the proposed BAAL requirement, which deals with high frequency as well as low frequency.

## NERC

"The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review group only and should not be construed as the position of SERC Reliability Corporation, its board or its officers."

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