

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

The Reliability-based Control SAR Drafting Team thanks all commenters who submitted comments on the second draft of the SAR. This SAR was posted for a 30-day public comment period from September 10, 2007 through October 9, 2007. The drafting team asked stakeholders to provide feedback on the standard through a special SAR Comment Form. There were 21 sets of comments, including comments from more than 80 different people from more than 40 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

Based on the comments received, the drafting team has modified the SAR to insert "transmission loading relief" (no capital letters) in place of "TLR" within the text of the SAR, consistent with the SAR Purpose Statement D. The SAR DT has also modified the SAR Purpose Statements to provide further clarity on the SAR purpose. The revised Purpose Statements are:

"A) To maintain Interconnection frequency within predefined frequency limits under all conditions (i.e., normal and abnormal), to manage frequency-related issues such as frequency oscillations, instability, and unplanned tripping of load, generation or transmission, that adversely impact the reliability of the Interconnection. (Work brought into this SAR from Draft BAL-007 though BAL-011)

B) To support corrective action by the BA when its excessive Area Control Error, as determined by this standard, may be contributing to or causing action to be taken to correct an SOL or IROL problem.

C) To prevent Interconnection frequency excursions of short-duration attributed to the ramping of Interchange Transactions.

D) To support timely congestion relief by requiring the Balancing Authority to employ corrective load/generation management within a defined timeframe when participating in transmission loading relief procedures.

E) To address the directives of FERC Order 693:

1. Add data retention requirements to all standards.
2. Require a continent-wide contingency reserve policy.
3. Modify BAL-003 – Frequency Response and Bias.
4. Require minimum Regulating Reserves for a Balancing Authority."

The SAR was also modified to indicate that HQT has indicated it may request an interconnection-wide regional variance to proposed BAL-007-1.

The RBC SAR DT is recommending that the SAR be approved as revised above and that the SAR move forward to Standards Drafting.

In this "Consideration of Comments" document stakeholder comments have been organized so that it is easier to see the responses associated with each question. All comments received on the standards can be viewed in their original format at:

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http://www.nerc.com/~filez/standards/Reliability-Based_Control_Project_2007-18.html

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Gerry Adamski, at 609-452-8060 or at gerry.adamski@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

¹ The appeals process is in the Reliability Standards Development Procedures: <http://www.nerc.com/standards/newstandardsprocess.html>.

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The Industry Segments are:

- 1 – Transmission Owners
- 2 – RTOs, ISOs
- 3 – Load-serving Entities
- 4 – Transmission-dependent Utilities
- 5 – Electric Generators
- 6 – Electricity Brokers, Aggregators, and Marketers
- 7 – Large Electricity End Users
- 8 – Small Electricity End Users
- 9 – Federal, State, Provincial Regulatory or other Government Entities
- 10 – Regional Reliability Organizations, Regional Entities

	Commenter	Organization	Industry Segment										
			1	2	3	4	5	6	7	8	9	10	
1.	Robert Blohm										✓		
2.	Tim Hattaway (G3)	Alabama Electric Coop., Inc.	✓		✓	✓	✓						
3.	Jeffrey V. Hackman	Ameren	✓		✓		✓						
4.	Dan Boezio (G3)	American Electric Power	✓		✓		✓						
5.	Thad K. Ness	American Electric Power	✓				✓	✓					
6.	Danny McDaniel (G3)	CLECO											
7.	Ed Thompson (G1)	Con Edison	✓										
8.	Michael Gildea (G1)	Constellation Energy						✓					
9.	Doug Hils (G9)	Duke Energy	✓										
10.	Sam Holeman (G9)	Duke Energy	✓										
11.	Gregory D. Rowland (G9)	Duke Energy	✓		✓								
12.	Gary Davidson (G3)	East Kentucky Power Cooperative	✓		✓		✓						
13.	Howard F. Illian	Energy Mark, Inc.								✓			
14.	John Bonner (G1)	Entergy Nuclear					✓						
15.	Ed Davis	Entergy Services						✓					
16.	Steve Myers (G6)	ERCOT		✓									✓
17.	Sam Ciccone (G10)	First Energy	✓										
18.	Doug Hohlbaugh (G10)	First Energy	✓										
19.	Dave Folk (G10)	First Energy	✓										
20.	Wayne Pourciau (G3)	Georgia System Operations Corp.	✓		✓		✓						
21.	David Kiguel (G1)	Hydro One Inc., Ontario	✓										

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Commenter		Organization	Industry Segment											
			1	2	3	4	5	6	7	8	9	10		
22.	Roger Champagne (I) (G1)	Hydro Québec TransÉnergie	✓											
23.	Ron Falsetti (I) (G1)	IESO		✓										
24.	Kathleen Goodman (G1)	ISO New England		✓										
25.	Mike Gammon (G3)	Kansas City Power & Light	✓		✓		✓							
26.	Jason Atwood (G3)	Kelson Eenergy						✓						
27.	Timmy Lejeune (G3)	Louisiana Generating LLC	✓		✓	✓	✓							
28.	Donald Nelson (G1)	MA Dept. of Public Utilities											✓	
29.	Craig McLean	Manitoba Hydro	✓		✓		✓	✓						
30.	Danny Dees (G3)	Municipal Electric Authority of GA	✓		✓	✓	✓							
31.	Ron Gunderson	Nebraska Public Power District												
32.	Randy MacDonald (G1)	New Brunswick System Operator	✓											
33.	Greg Campoli (G1)	New York ISO												
34.	Ralph Rufrano (G1)	New York Power Authority	✓											
35.	Mike Ranalli (G1)	NGrid US		✓										
36.	Mike Schiavone (G1)	NGrid US	✓											
37.	Murale Gopinathan (G1)	Northeast Utilities	✓											
38.	Guy V. Zito (G1)	NPCC												✓
39.	Ryan Johnson (G3)	NRG							✓					
40.	Al Adamson (G1)	NY State Reliability Council												✓
41.	Don Hargrove (G3)	Oklahoma Gas & Electric	✓		✓		✓							
42.	Pete Kuebeck (G3)	Oklahoma Gas & Electric	✓		✓		✓							
43.	Ron Gooder (G1)	Ontario Power Generation Inc.					✓							
44.	Sammy Roberts (G3)	Progress Energy Carolinas	✓		✓		✓							
45.	Bret Koelsch (G3)	Progress Energy Carolinas	✓		✓		✓							
46.	Randy Wilkerson (G3)	Progress Energy Carolinas	✓		✓		✓							
47.	Phil Riley (G2)	PSC of SC											✓	
48.	Mignon L. Clyburn (G2)	PSC of SC											✓	

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Commenter		Organization	Industry Segment											
			1	2	3	4	5	6	7	8	9	10		
49.	Elizabeth Fleming (G2)	PSC of SC											✓	
50.	G. O'Neal Hamilton (G2)	PSC of SC											✓	
51.	John E. Howard (G2)	PSC of SC											✓	
52.	Randy Mitchell (G2)	PSC of SC											✓	
53.	Robert Moseley (G2)	PSC of SC											✓	
54.	David A. Wright (G2)	PSC of SC											✓	
55.	Carter Edge (G3)	SERC Reliability Corp.												✓
56.	Pat Huntley (G3)	SERC Reliability Corp.												✓
57.	John Troha (G3)	SERC Reliability Corp.												✓
58.	Troy Blalock (G3)	South Carolina Electric & Gas	✓		✓		✓							
59.	Gene Delk (G3)	South Carolina Electric & Gas	✓		✓		✓							
60.	J. T. Wood (G4)	Southern Company Services	✓											
61.	Jim Griffith (G3)	Southern Company Services, Inc.	✓		✓		✓							
62.	Raymond Vice (G3) (G4)	Southern Company Transmission	✓		✓		✓							
63.	Robert Rhodes (G3)	Southwest Power Pool		✓										
64.	Jason Smith (G3)	Southwest Power Pool		✓										
65.	Bill Grant (G3)	SPS	✓		✓		✓							
66.	Larry Akens (G3)	Tennessee Valley Authority	✓		✓		✓						✓	
67.	Bob Dalrymple (G3)	Tennessee Valley Authority	✓		✓		✓						✓	
68.	Allen Klassen (G3)	Westar	✓		✓		✓							
69.	Perpetuo S.V. Tan (G7)	Los Angeles Dept. of Water & Pwr.	✓											
70.	Bart McManus (G7)	Bonneville Power Administration	✓											
71.	Don Badley (G7)	Northwest Power Pool												✓
72.	Paul Morland (G7)	CSU	✓		✓									
73.	John Tolo (G7)	TEP	✓											
74.	David Hawkins (G7)	CAISO		✓										
75.	Raymond Vodjani (G7)	WAPA	✓											

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Commenter		Organization	Industry Segment														
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76.	Steve Rueckert (G7)	WECC															✓
77.	Nancy Bellows (G8)	WACM															✓
78.	Terry Baker (G8)	Platte River Power Authority															✓
79.	Paul Bleuss (G8)	CMRC															✓
80.	Tom Botello (G8)	Southern California Edison															✓
81.	Mike Gentry (G8)	Salt River Project															✓
82.	Greg Tillitson (G8)	CMRC															✓

I – Indicates that individual comments were submitted in addition to comments submitted as part of a group

G1 – NPCC Reliability Standards Committee (NPCC RSC)

G2 – Public Service Commission of South Carolina (PSC SC)

G3 – SERC OC Standards Review Group (SERC OC SRG)

G4 – Southern Company Services, Inc. (SOCO)

G5 – SPP Reliability Working Group (SPP RWG)

G6 – ERCOT ISO

G7 – WECC Performance Work Group (WECC PWG)

G8 – WECC Reliability Coordination Comments Work Group (WECC RCCWG)

G9 – Duke Energy

G10 – FirstEnergy

Index to Questions, Comments, and Responses

- 1. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement B to read as shown below. Do you think that there is a reliability-related reason to support developing a requirement to address this? 8
- 2. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement D to read as shown below. Do you think that there is a reliability-related reason to support developing a requirement to address the following?13
- 3. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement E as shown below to identify the specific FERC directives from Order 693 that will be addressed as part of this project. Do you agree that the drafting team has identified all relevant directives?18
- 4. Questions 1 through 3 addressed the modifications made to the SAR Purpose to clarify the scope of the SAR. Are you aware of any other reliability concerns associated with load-resource balancing that this SAR should consider that are not addressed by another SAR, Standard under Development, or approved Standard? Please provide comments in support of your answer in the comment area.23
- 5. If there any other comments you wish to provide to the SAR Drafting team that you have not already provided in response to the questions above, please provide them here.27

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1. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement B to read as shown below. Do you think that there is a reliability-related reason to support developing a requirement to address this?

“B) To support corrective action by the BA when excessive Area Control Error (as determined by this standard) may be contributing to or causing action to be taken to correct an SOL/IROL problem.”

Summary Consideration: The majority of commenters agreed with the purpose statement. Two commenters suggested wording changes that solidified the intent of the purpose statement. The RBC SAR DT has modified the purpose statement based on these comments. Section ‘B’ of the purpose statement was revised as follows:

B) To support corrective action by the BA when its excessive Area Control Error, (as determined by this standard,) may be contributing to or causing action to be taken to correct an SOL/IROL problem.

Question #1			
Commenter	Yes	No	Comment
AEP		<input checked="" type="checkbox"/>	We already have sufficient Standards that, if enforced correctly or applicability is expanded, would have optimal results.
Response: The RBC SAR DT thanks you for your comment. The development of these standards will complement existing standards and increase the overall reliability of the Interconnections.			
Entergy		<input checked="" type="checkbox"/>	We are of the opinion that ACE, high or low, would not itself contribute to an SOL/IROL violation. The concept being presented is not an ACE problem. It is a generation location and transmission loading problem. Therefore, this part of the scope should be deleted as the issues discussed are SOL/IROL issues and correction of those issues are contained in the requirements of TOP-008, Response to Transmission Limitations, and IRO-005, Reliability Coordination - Current Day Operations. If not deleted, then this SAR should include TOP-008, Response to Transmission Limitations, and IRO-005, Reliability Coordination - Current Day Operations, as part of this standard for revision during this standard development.
Response: The RBC SAR DT thanks you for your comment. The DT acknowledges that these standards should address these issues in many circumstances, however it is our understanding that existing tools for managing transmission congestion do not take real-time ACE into consideration. Existing analysis tools for projecting network congestion assume that the system will be balanced and that no large ACE values will be present. The development of these standards will complement existing standards and increase the overall reliability of the Interconnections.			
IESO		<input checked="" type="checkbox"/>	We agree that the BA needs to assist the RC and TOP in correcting SOL/IROL problems when such actions are deemed effective and as instructed by these entities, however, the BA has no direct responsibility for tie line flow performance.

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Question #1			
Commenter	Yes	No	Comment
			<p>As such, the BA is only required to respond to the directions of TOPs and RCs, and the BA has no obligation to monitor tie flows. In addition, a BA does not and is not required to have transmission monitoring capability to identify if any tie lines are being overloaded or approaching/exceeding their operating limits. We therefore do not agree with the development of the proposed requirement.</p> <p>We understand that this proposal has been revised in response to industry comments on the previous SAR which opposed to the original wording on the purpose related to SOL and IROL, and that in the drafting team's view the commenters misinterpreted that the intent was in fact to require additional limits or alternative limits on ACE to help address SOL/IROL violations. We support the addition or alternative limits on ACE to limit parallel flows, but do not support corrective actions by the BA when excessive ACE may be contributing to or causing actions to be taken to correct a SOL/IROL problem. The way it is written leads readers to interpret that the requirements in the BAL standard are intended to correct SOL/IROL violations.</p> <p>The objective of this standard and the associated filed test is to ensure and demonstrate that new BAL requirements do not result in an increase in parallel flows. The requirements should focus on the BAAL limits to satisfy this condition, and not on SOL/IROL or tie line flow monitoring. Limiting parallel flow is a condition that needs to be demonstrated, not a requirement to be included in the standard.</p> <p>As we indicated in our previous comments, while it is a worthwhile exercise to conduct field tests to assess whether any proposed BAL requirements (on frequency, etc.) can result in increased parallel flows or aggravated transmission loading to address WECC's and NPCC's concerns, developing requirements to support eliminating SOL/IROL violations appear to be outside of the scope of any proposed BAL standards.</p>
<p>Response: The RBC SAR DT thanks you for your comment. ACE error for some BAs may not be strongly correlated with SOL/IROL conditions in adjacent BAs. These standards will set technically justified ACE limits that aid in the prevention of network congestion. The SAR DT agrees that the BA may not have the ability to monitor transmission – and as envisioned, the BA will not need to monitor transmission to meet the proposed requirements.</p>			
WAPA		<input checked="" type="checkbox"/>	<p>The previous version of this standard was defeated not once but twice. It seems the BRD standard keeps rising from the ashes and gets repackaged every six months. Elimination of CPS2 and establishing BAAL is not going to enhance reliability no matter how many times it gets repainted and sent back.</p>
<p>Response: The RBC SAR DT thanks you for your comment. We do not agree that retaining CPS2 is the best course of action</p>			

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Question #1			
Commenter	Yes	No	Comment
to improve operation of the interconnections. Many BAs found operations under BAAL were simplified yet had an increased focus on ACE, frequency and their impact on the interconnection. We believe that a better result may be obtained by looking into more technically justified and problem specific solutions to the transmission loading problems aggravated by ACE.			
BPA	<input checked="" type="checkbox"/>		Without this as part of the standard, one of the primary reasons it failed in the last rounds of balloting would not be addressed. By allowing the ACE to drift as far as this standard allows, it is critical that the standard take into account the transmission loading it may cause.
Response: The RBC SAR DT thanks you and concurs with your comment.			
Duke Energy	<input checked="" type="checkbox"/>		We recognize that getting agreement on exactly what constitutes "excessive ACE" may be difficult, but we agree with the development of this requirement. Though there are standards in place today to address actions to be taken by the Transmission Operator to relieve SOL/IROL problems, we believe that a "cap" on ACE could be determined in a balancing standard that clearly defines "excessive ACE" and limits the duration of operating in that area, as such operation could cause or contribute to an SOL/IROL problem, or otherwise burden its interconnected neighbors, no matter if the BA is supporting Interconnection frequency. This standard should not attempt to address "loop flow" and other associated problems that could occur even when ACE is zero. This standard should address what the appropriate tradeoffs are between supporting the interconnection frequency, with perhaps less generation control at times and more at others, and not burdening the interconnected neighbors by unacceptable unbalanced operations.
Response: The RBC SAR DT thanks you and will forward your comment to the standards drafting team. The SAR does not address 'loop flows'.			
FirstEnergy	<input checked="" type="checkbox"/>		Although First Energy agrees that there is a reliability-related reason to support developing this requirement, the purpose of this SAR and the Standard must be more definitive. We suggest revising this statement as follows: "To require the Balancing Authority to take corrective action when excessive Area Control Error contributes to an SOL or IROL condition."
Response: The RBC SAR DT thanks you for your comment. We believe that the current purpose statement is more appropriate because it includes those conditions when corrective action is required to prevent an anticipated problem from becoming an actual problem. Based on your and Southern's comments, we will modify the purpose statement as follows: B) To support corrective action by the BA when its excessive Area Control Error, as determined by this standard, may be contributing to or causing action to be taken to correct an SOL or IROL problem.			
HQT	<input checked="" type="checkbox"/>		With the proposed elimination of CPS2 standard, HQT do not believe any reliability

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Question #1			
Commenter	Yes	No	Comment
			standard requirements exist for the proposed BAAL methodology's inability to sufficiently control adverse impacts on neighboring balancing authority areas with respect to large unscheduled flows until interface limits are exceeded.
Response: The RBC SAR DT thanks you for your comment.			
Manitoba Hydro	<input checked="" type="checkbox"/>		There are already requirements in the standards that deal with one BA burdening others. There is also an obligation that BAs follow the direction of an RC, who has authority to direct the correction of ACE if it is causing congestion. If these can be improved upon, fine.
Response: The RBC SAR DT thanks you for your comment. We believe that a better result may be obtained by looking into more technically justified and problem specific solutions to the transmission loading problems aggravated by ACE.			
NPPD	<input checked="" type="checkbox"/>		BA's with excessive ACE may have a large impact on an SOL or IROL. Without a mechanism to require a BA to correct its ACE when it is impacting an IROL or SOL, will impact the reliability of the region. If a BA with curtailments does not meet the requirements with actual generation adjustments or other BA's that are contributing to the IROL/SOL violation are not required to adjust generation to correct their ACE when the ACE is impacting a constraint, it will be difficult if not impossible to control the loading on the constraint and bring the loading within the IROL/SOL.
Response: The RBC SAR DT thanks you and concurs with your comment.			
NPCC RCS	<input checked="" type="checkbox"/>		With the proposed elimination of CPS2 standard, NPCC participating members do not believe any reliability standard requirements exist for the proposed BAAL methodology's inability to sufficiently control adverse impacts on neighboring balancing authority areas with respect to large unscheduled flows until interface limits are exceeded.
Response: The RBC SAR DT thanks you for your comment.			
Robert Blohm	<input checked="" type="checkbox"/>		But be careful here. Whenever this standard favors performance not favored by another standard the conflict must be resolved, but on a case by case basis, in other words when and only when the conflict occurs and not in a way that would preempt a conflict unless either standard is actually encouraging behavior that on a net basis tends to violate the other standard. Building in complete preemption is too much and is equivalent to using one standard to achieve the performance objectives of another standard. Developing a mechanism to resolve a conflict when it occurs may be enough; or designing a standard so that it does not encourage behavior that tends on a net basis to violate another standard may be enough; but creating a single global performance standard that would assure the entire set of performance objectives otherwise assured by separate standards would be the absurd extreme of using one standard to perform the objectives of another standard. In other words, there is a difference between a standard that encourages behavior that tends to violate another standard, and a standard that only occasions

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Question #1			
Commenter	Yes	No	Comment
			violations of the other standard from time to time as often as it actually prevents violations of the other standard from time to time. But either case can and should be corrected well short of making one standard do the job of the other standard.
Response: The RBC SAR DT thanks you for your comment. These issues should be considered by the Standard Drafting Team and we will pass them on to the standards drafting team.			
Southern	<input checked="" type="checkbox"/>		Language used is not clear and specific. We recommend that the wording be changed to : B) To require corrective action by a BA when its excessive ACE, as defined by this standard, is causing an SOL or IROL on the transmission network.
Response: The RBC SAR DT thanks you for your comment. For clarity, we will modify the purpose statement to :			
B) To support corrective action by the BA when its excessive Area Control Error, as determined by this standard, may be contributing to or causing action to be taken to correct an SOL or IROL problem.			
SPP ORWG	<input checked="" type="checkbox"/>		However, as the SDT has indicated in the SAR (page SAR-2, under Corrective Action Not Always Supporting Reliability) this may be very difficult to accomplish given existing limitations on what information may be available to the Balancing Authority.
Response: The RBC SAR DT thanks you for your comment. This will need to be considered by the standards drafting team.			
WECC PWG	<input checked="" type="checkbox"/>		Without this as part of the standard, one of the primary reasons it failed in the last rounds of balloting would not be addressed.
Response: The RBC SAR DT thanks you for your comment.			
PSC South Carolina	<input checked="" type="checkbox"/>		
Ameren	<input checked="" type="checkbox"/>		
Energy Mark	<input checked="" type="checkbox"/>		
SERC OC SRG	<input checked="" type="checkbox"/>		
WECC RCCWG	<input checked="" type="checkbox"/>		

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2. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement D to read as shown below. Do you think that there is a reliability-related reason to support developing a requirement to address the following?

D) To support timely transmission congestion relief by requiring corrective load/generation management by the Balancing Authority(ies) within a defined timeframe when participating in transmission loading relief procedures.

Summary Consideration: The majority of commenters agreed with the purpose statement. Two commenters suggested wording changes that solidified the intent of the purpose statement. The RBC SAR DT has modified the purpose statement based on these comments. Section ‘D’ of the purpose statement was revised as follows:

D) To support timely ~~transmission~~ congestion relief by requiring **the Balancing Authority to employ** corrective load/generation management ~~by the Balancing Authority(ies)~~ within a defined timeframe when participating in transmission loading relief procedures.

Question #2			
Commenter	Yes	No	Comment
AEP		<input checked="" type="checkbox"/>	We already have sufficient Standards that, if enforced correctly or applicability is expanded, would have optimal results.
Response: The RBC SAR DT thanks you for your comment. The development of these standards will complement existing standards and increase the overall reliability of the Interconnections.			
BPA		<input checked="" type="checkbox"/>	This SAR is for managing ACE. While it may cause transmission congestion it need not be concerned with transmission load relief procedures. The SAR should make sure to state how the standard will be drafted to insure ACE that is still within the BAAL upper and/or lower limits but causing transmission congestion issues is corrected in a timely manner.
Response: The RBC SAR DT thanks you for your comment. The SAR Drafting Team believes that large ACE can reduce the effectiveness of TLR or other transmission loading relief procedures used to resolve transmission loading issues. It is important that ACE that prevents effective congestion management under TLR procedures be identified and mitigated.			
Entergy		<input checked="" type="checkbox"/>	Existing TLR standards require curtailment of transactions after which the attaining BA must increase its own generation to meet its load, or be in violation of other balancing standards. If the attaining BA does not increase its generation during a TLR then there may be CPS1 and CPS2 violations. Violations of CPS1 and CPS2 will (should) be penalized through other reliability standards. Therefore, development of requirements in this standard should be deleted.
Response: The RBC SAR DT thanks you for your comment. The SAR Drafting Team believes that large ACE can reduce the effectiveness of TLR or other transmission loading relief procedures used to resolve transmission loading issues. It is important that ACE that prevents effective congestion management under TLR procedures be identified and mitigated.			

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Question #2			
Commenter	Yes	No	Comment
WAPA		<input checked="" type="checkbox"/>	There are other standards which address this issue. To address the congestion related issues caused by having a loose control standard is abandon the standard rather than coming up with a remedy which could potentially conflict with other standards.
<p>Response: The RBC SAR DT thanks you for your comment. The SAR Drafting Team believes that large ACE can reduce the effectiveness of TLR or other transmission loading relief procedures used to resolve transmission loading issues. It is important that ACE that prevents effective congestion management under TLR procedures be identified and mitigated. The standards drafting team will be tasked with ensuring that any new standards do not conflict with any existing standards.</p>			
NPCC RCS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The term congestion relief should be used carefully because it may have different implications depending on market structure. In some areas within NPCC such as New York, having congestion means fully utilizing the transmission system's capabilities.
<p>Response: The RBC SAR DT thanks you for your comment. We agree with your comment. We believe that this issue should be addressed during the development of the standard.</p>			
Ameren	<input checked="" type="checkbox"/>		This has long been a disconnect in requirements although in practice, the industry has generally "done the right thing."
<p>Response: The RBC SAR DT thanks you for your comment.</p>			
Duke Energy	<input checked="" type="checkbox"/>		We agree with the development of this requirement for Balancing Authorities to provide timely transmission congestion relief. The volume of transactions cut under TLR and expected time for relief need to be considered in the practical implementation of the standard.
<p>Response: The RBC SAR DT thanks you for your comment. We agree with your comment. We believe that this issue should be addressed during the development of the standard.</p>			
FirstEnergy	<input checked="" type="checkbox"/>		Although First Energy agrees that there is a reliability-related reason to support developing this requirement, the purpose of this SAR and the Standard must be more definitive. We suggest revising this statement as follows: "To establish timely congestion relief by requiring the Balancing Authority to employ corrective load/generation management within a defined timeframe when participating in transmission loading relief procedures."
<p>Response: The RBC SAR DT thanks you for your comment. Based on your and Southern's comments, we will modify the purpose statement to:</p> <p>To support timely congestion relief by requiring the Balancing Authority to employ corrective load/generation management within a defined timeframe when participating in transmission loading relief procedures.</p>			
HQT	<input checked="" type="checkbox"/>		The term congestion relief should be used carefully because it may have different implications depending on market structure. In some areas within NPCC such as New

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Question #2			
Commenter	Yes	No	Comment
			York, having congestion means fully utilizing the transmission system's capabilities.
<p>Response: The RBC SAR DT thanks you for your comment. We agree with your comment. We believe that this issue should be addressed during the development of the standard.</p>			
IESO	<input checked="" type="checkbox"/>		<p>Corrective load/generation management by the BA is initiated by adjusting tagging information through the instructions issued by the RC when TLR is implemented. There already exists a requirement in the IRO-006 standard that requires BAs to comply with applicable interchange scheduling standards during TLR. This requirement is not needed in the BAL standards.</p> <p>We had made similar comments in the last round of posting. The drafting team held the view that we and others might have misinterpreted the intent, but agreed to revise the wording to clarify the intent. Unfortunately, we feel that the revised purpose continues to convey this intent.</p> <p>The difference lies with the BA's action in supporting transmission loading relief; it is reactionary and as instructed. The wording in (D) that "...by requiring corrective load/generation management by the BA within a defined timeframe..." suggests that there will be requirements in the standard to prompt the BA to take corrective actions. Actions will definitely need to be taken, but the actions are instructed by the RC. All the BA does is to follow the interchange schedule change and the RC's instructions that may override the interchange schedule as necessary.</p> <p>Please also note that the latest version of IRO-006 (version 4) which has gone through balloting with a majority support votes has, as directed by FERC, included language in it to indicate that the TLR procedure alone is an inappropriate and ineffective tool to mitigate an IROL violation due to the time required to implement the procedure. Given this wording and FERC's view, we expect the industry to become less reliant on using TLR to correct SOL/IROL violations. Hence, we do not see the need to develop stringent requirement to have the BA take immediate action on its own. When such actions are deemed necessary to correct transmission problems, they will be directed and instructed by the RC.</p>
<p>Response: The RBC SAR DT thanks you for your comment. Though the current standards support the implementation of transmission loading relief processes from a transaction curtailment perspective, they do not ensure that the source and sink Balancing Authorities restore their ACE in a manner to help achieve the desired outcome of the curtailments directed by the Reliability Coordinator. One reason that transmission loading relief processes may not be as effective as desired, is that upon curtailment of interchange transactions, the impacted Balancing Authorities are only required to balance in accordance with</p>			

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #2			
Commenter	Yes	No	Comment
			the current CPS1 and CPS2 where each could remain unbalanced for an extended time, continuing to impact the transmission system with unscheduled flows replacing the scheduled flows curtailed. The intent of this statement is not to require unilateral action by a BA, but rather to support the transmission loading relief process by requiring the Balancing Authority to balance appropriately upon the curtailment of transactions as one example. As transaction curtailment is most often performed through e-tagging without the Reliability Coordinator verbally directing the impacted Balancing Authorities, to the extent such processes continue to be relied upon, this standard would propose that the Balancing Authority balance its system based upon the direction given to it as part of the transmission loading relief process. The details of this support need to be developed through the standards development process.
Manitoba Hydro	<input checked="" type="checkbox"/>		A requirement can be added to ensure corrective load/generation management to assist in transmission loading relief procedures.
Response: The RBC SAR DT thanks you for your comment.			
NPPD	<input checked="" type="checkbox"/>		Transmission congestion relief is absolutely dependent upon generator movement. Changing scheduled interchange without the associated generation changes has absolutely no impact on congestion.
Response: The RBC SAR DT thanks you for your comment.			
Robert Blohm	<input checked="" type="checkbox"/>		This is basically the same kind of issue as question 1 above. Here behaving to conform to the real-balancing-control standard could create congestion invoking transmission loading relief. Once again, be careful. To repeat, whenever this standard favors performance not favored by another standard the conflict must be resolved, but on a case by case basis, or to eliminate a "tendency" to congest more than decongest, in other words when and only when the conflict occurs or is favored and not in a way that would preempt all conflict. This RBC standard cannot be designed to "preempt" congestion causation, but only to address a tendency to cause it more than prevent it, or to address it when it occurs. The RBC standard is itself not also a congestion relief standard.
Response: The RBC SAR DT thanks you for your comment. These issues should be considered by the Standard Drafting Team and we will pass them on to the standards drafting team.			
Southern	<input checked="" type="checkbox"/>		Language used is not clear and specific. We recommend that the wording be changed to : D) To require corrective load/generation control action by a BA(s) within a well defined timeframe when required to provide transmission load relief by TLR procedures.
Response: The RBC SAR DT thanks you for your comment. Based on your and First Energy's comments, we will modify the purpose statement to: To support timely congestion relief by requiring the Balancing Authority to employ corrective load/generation management within a defined timeframe when participating in transmission loading relief procedures.			

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #2			
Commenter	Yes	No	Comment
SPP ORWG	<input checked="" type="checkbox"/>		<p>A defined timeframe for the implementation of generation redispatch in response to identified NNL relief responsibility could be beneficial during implementation of the transmission loading relief process.</p> <p>Please keep in mind that the Balancing Authority is only a subset of those responsible for implementing transmission loading relief. For example, Generator Operators, Load Serving Entities and others also play a role in the effective implementation of transmission loading relief. Holding the Balancing Authority responsible for meeting these time constraints without also applying them to other entities is unduly restrictive and overly burdensome on the Balancing Authority.</p>
<p>Response: The RBC SAR DT thanks you for your comment. Industry comments will drive the applicability of the new standards through the standards development process. Note that the applicability section of the SAR does include the LSE, PSE and Generator Operator. The inclusion of these functional entities will give the standard drafting team the flexibility to develop requirements (if supported by stakeholders) for those entities that interface with the BA so that the BA is not the only entity responsible for taking action to meet the reliability objectives.</p>			
WECC PWG		<input checked="" type="checkbox"/>	<p>This SAR is for managing ACE. While it may cause transmission congestion it need not be concerned with transmission load relief procedures. The SAR should make sure to state how the standard will be drafted to insure ACE that is still within the BAAL upper and/or lower limits but causing transmission congestion issues is corrected in a timely manner.</p>
<p>Response: The RBC SAR DT thanks you for your comment. The SAR Drafting Team believes that large ACE can reduce the effectiveness of TLR or other transmission loading relief procedures used to resolve transmission loading issues. It is important that ACE that prevents effective congestion management under TLR procedures be identified and mitigated.</p>			
Energy Mark	<input checked="" type="checkbox"/>		
PSC South Carolina	<input checked="" type="checkbox"/>		
SERC OC SRG	<input checked="" type="checkbox"/>		
WECC RCCWG	<input checked="" type="checkbox"/>		

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

3. Based on stakeholder comments, the drafting team modified the SAR’s Purpose Statement E as shown below to identify the specific FERC directives from Order 693 that will be addressed as part of this project. Do you agree that the drafting team has identified all relevant directives?

E) To address the directives of FERC Order 693:

- Add data retention requirements to all standards.
- Require a continent-wide contingency reserve policy.
- Modify BAL-003 – Frequency Response and Bias.
- Require minimum Regulating Reserves for a Balancing Authority.

Summary Consideration: The majority of commenters agreed with the purpose statement. No changes were deemed necessary based on the comments received.

Question #3			
Commenter	Yes	No	Comment
BPA		<input checked="" type="checkbox"/>	BPA fails to see that this part of FERC Order 693 mandates a wholesale change in performance standards. RBC is primarily a set of standards that attempts to manage the short to medium term control. In order to meet the FERC Order, data retention requirements need to be added as need be, and minor modifications to current standards need to be undertaken. There is nothing in this order that dictates removal of CPS2 as a standard. There is also nothing in the order that dictates NERC needs to widen the control margins for all BAs.
Response: The RBC SAR DT thanks you for your comment. Your comments do not address FERC Order 693 requirements, they address other parts of the SAR. We agree that 693 does not require either the removal of CPS2 or the implementation of wider control margins.			
Manitoba Hydro		<input checked="" type="checkbox"/>	We recommend this DT coordinate with the DT working on Frequency Resonse (Project 2007-12) to avoid dupliacation and confusion.
Response: The RBC SAR DT thanks you for your comment. We agree with your comment. The chairs and coordinators of the affected drafting teams have already initiated contact to perform this coordination.			
Texas Reg. Entity		<input checked="" type="checkbox"/>	The six Balancing (BAL) Reliability Standards (BAL-001 through BAL 006) address balancing resources and demand to maintain interconnection frequency within prescribed limits. BAL-001 Real Power Balancing Control Performance; is to maintain Interconnection steady-state frequency within defined limits by balancing real power demand and supply in real-time. The proposed Reliability Standard applies to balancing authorities. In the NOPR, the Commission proposed to approve BAL-001-0 as mandatory and enforceable.

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #3			
Commenter	Yes	No	Comment
			<p>On November 21, 2002, NERC approved a regional difference for ERCOT by allowing it to be exempt from Requirement R2 in BAL-001-0 (ERCOT Waiver of CPS2), because: (1) ERCOT, as a single control area asynchronously connected to the Eastern interconnection, cannot create inadvertent flows or time errors in other control areas and (2) CPS2 may not be feasible under ERCOT’s competitive balancing energy market. Since requesting the waiver from CPS2, ERCOT has adopted section 5 of the ERCOT protocols which identify the necessary frequency controls needed for reliable operation in ERCOT.</p> <p>FERC approved the ERCOT regional difference as mandatory and enforceable and found that ERCOT’s approach under section 5 of the ERCOT protocols to be more stringent practice than Requirement R2 in BAL-001-0.</p> <p>However, as proposed in the NOPR, the Commission directed the ERO to file a modification of the ERCOT regional difference to include the requirements concerning frequency response contained in section 5 of the ERCOT protocols. Order 693, also states, "As with other new regional differences, the Commission expects that the ERCOT regional difference will include Requirements, Measures and Levels of Non-Compliance sections".</p> <p>Given the above summary, does the SAR DT find it necessary to expand the SAR scope to address the above FERC directive?</p>
<p>Response: The RBC SAR DT thanks you for your comment. The SAR DT believes that Order 693 requires a “continent-wide” standard, including a contingency reserve policy. It will be the responsibility of the standards drafting team to consider how this will impact standards developed under this SAR and to take into account regional differences noted during the standards development process. Your participation in this process is critical in recognizing these regional differences. The RBC SAR DT (and subsequent standards drafting team) will be coordinating with the other two standards development projects (Frequency Response and Balancing Authority Controls). The existing ERCOT waiver is for compliance to CPS2 – and the SAR includes retirement of CPS2. If the SAR included retention of CPS2, then the directive in Order 693 that references the ERCOT regional difference would be applicable.</p>			
WECC PWG		<input checked="" type="checkbox"/>	<p>PWG fails to see that this part of FERC Order 693 mandates a wholesale change in performance standards. RBC is primarily a set of standards that attempts to manage the short to medium term control. In order to meet the FERC Order, data retention requirements need to be added as need be, and minor modifications to current standards need to be undertaken. There is nothing in this order that dictates removal of</p>

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #3			
Commenter	Yes	No	Comment
			CPS2 as a standard. There is also nothing in the order that dictates NERC needs to widen the control margins for all BAAs.
<p>Response: The RBC SAR DT thanks you for your comment. Your comments do not address FERC Order 693 requirements, they address other parts of the SAR. We agree that 693 does not require either the removal of CPS2 or the implementation of wider control margins.</p>			
Duke Energy	<input checked="" type="checkbox"/>		We believe that all the FERC directives should be addressed in a coordinated manner among all the Standards Drafting Teams. FERC directives, including those in Order No. 693, must be addressed by NERC. However, FERC noted that it did not mandate particular outcomes in Order 693, but expects the ERO to respond with equivalent, fully supported alternatives. This is consistent with FERC's statutory authority in Section 215 of the Federal Power Act which requires that FERC "...give due weight to the technical expertise of the Electric Reliability Organization with respect to the content of a proposed standard or modification to a reliability standard..."
<p>Response: The RBC SAR DT thanks you for your comment. We agree with your comment.</p>			
HQT	<input checked="" type="checkbox"/>		<p>HQT do acknowledge the above FERC directives but would like to remind the drafting team and NERC of the international issues surrounding such directives and any conflicting opinions with those directives must be dealt with in an appropriate manner that recognizes jurisdictional concerns and respects Provincial Governmental law and markets.</p> <p>In response to address the regulating reserve directives, we are not supportive of a prescribed MW value of a reserve requirement. We support the concept of a continent wide contingency reserve requirement.</p>
<p>Response: The RBC SAR DT thanks you for your comment. These are issues that should be further commented on during the standards development process for this SAR as well as the work under the Frequency Response Standard development and the Balancing Authority Controls SAR development.</p>			
NPCC RCS	<input checked="" type="checkbox"/>		<p>NPCC participating members do acknowledge the above FERC directives but would like to remind the drafting team and NERC of the international issues surrounding such directives and any conflicting opinions with those directives must be dealt with in an appropriate manner that recognizes jurisdictional concerns and respects Provincial Governmental law and markets.</p> <p>In response to address the regulating reserve directives, we are not supportive of a prescribed MW value of a reserve requirement. We support the concept of a continent wide contingency reserve requirement.</p>
<p>Response: The RBC SAR DT thanks you for your comment. These are issues that should be further commented on during</p>			

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #3			
Commenter	Yes	No	Comment
the standards development process for this SAR as well as the work under the Frequency Response Standard development and the Balancing Authority Controls SAR development.			
Robert Blohm	<input checked="" type="checkbox"/>		Reserves and Response, while they overlap with this SAR, are more directly addressed by the other two related SARs for frequency response and balancing-authority-control which ultimately need to be coordinated with real-balancing-control (the subject of this SAR) so that they do not act at cross purposes. I understand the FERC directives as instruction to decide the "what" in the form of definitions of the reserve types, their measurement, and objectives and "how" to achieve them, rather than presuming at this point a specific answer to these questions.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT (and subsequent standards drafting team) will be coordinating with the other two standards development projects (Frequency Response and Balancing Authority Controls) to determine specifically where any reserves requirements should be developed.			
SERC OC SRG	<input checked="" type="checkbox"/>		The Balancing Authority Controls SAR (Project 2007-05) states that it covers the "Continent-Wide" Reserve Policy required by FERC Order 693. NERC should ensure that the "Continent-Wide" Reserve Policy is covered by only one SAR.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT (and subsequent standards drafting team) will be coordinating with the other two standards development projects (Frequency Response and Balancing Authority Controls) to determine specifically where any reserves requirements should be developed.			
Southern	<input checked="" type="checkbox"/>		These directives from FERC order 693 do not appear to apply specifically to the RBC SAR, but also apply to all active NERC projects addressing the BAL standards (Frequency Response - Project 2007-13, Reliability Based Control - Project 2007-18 and Balancing Authority Controls - Project 2007-5). NERC should carefully coordinate these standards to ensure that the requirements of order 693 are addressed effectively without duplication of effort or over lapping requirements within the standards.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT (and subsequent standards drafting team) will be coordinating with the other two standards development projects (Frequency Response and Balancing Authority Controls).			
SPP ORWG	<input checked="" type="checkbox"/>		We are not aware of any additional directives from Order 693.
Response: The RBC SAR DT thanks you for your comment.			
WAPA	<input checked="" type="checkbox"/>		These are good areas to work on. Addressing reserve related issues, regulating and contingency, are vital to system reliability. There are enough confusions surrounding these issues that cleaning it up would be a major accomplishment and it will go a long way in enhancing reliability.
Response: The RBC SAR DT thanks you for your comment.			
AEP	<input checked="" type="checkbox"/>		

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #3			
Commenter	Yes	No	Comment
Energy Mark	<input checked="" type="checkbox"/>		
Entergy	<input checked="" type="checkbox"/>		
FirstEnergy	<input checked="" type="checkbox"/>		
IESO	<input checked="" type="checkbox"/>		
PSC South Carolina	<input checked="" type="checkbox"/>		

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

4. Questions 1 through 3 addressed the modifications made to the SAR Purpose to clarify the scope of the SAR. Are you aware of any other reliability concerns associated with load-resource balancing that this SAR should consider that are not addressed by another SAR, Standard under Development, or approved Standard? Please provide comments in support of your answer in the comment area.

Summary Consideration: The comments received indicated that the SAR needed to be modified concerning the TLR process in version 2. This was changed to a more generic "transmission loading relief" process. Commenters were concerned that using all capital letters for TLR limited the scope to the TLR process implemented in the Eastern Interconnection only.

Question #4			
Commenter	Yes	No	Comment
WECC RCCWG			The WECC RCCWG notes that on page SAR-07 references to the Eastern Interconnection TLR practices. TLR is not a process followed by the Western Interconnection.
Response: The RBC SAR DT thanks you for your comment. We have modified the appropriate section of the SAR to reflect a more generic transmission loading relief process rather than a specific Interconnection process.			
SERC OC SRG		<input checked="" type="checkbox"/>	We recommend that NERC ensure the Balancing Authority Controls SAR (Project 2007-05) and the Frequency Response Standard Drafting Team (Project 2007-12) and the Reliability-Based Control SAR (Project 2007-18) are closely coordinated to address FERC Order 693 directives without duplication.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT (and subsequent standards drafting team) will be coordinating with the other two standards development projects (Frequency Response and Balancing Authority Controls) to determine specifically where any reserves standards should be developed.			
WECC PWG		<input checked="" type="checkbox"/>	The only other issue PWG has with RBC is that it replaces CPS2 as a standard without any technical justification to prove that the removal of CPS2 is necessary.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT feels that the replacement of CPS2 with standards that limit ACE contributions to transmission congestion while at the same time correcting the technically deficient frequency support characteristics of CPS2 is justified. The standards development process will ensure that any new standards have the required technical merits and justification.			
BPA		<input checked="" type="checkbox"/>	The only other issue BPA has with RBC is that it replaces CPS2 as a standard without any technical justification to prove that removal of CPS2 is necessary.
Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT feels that the replacement of CPS2 with standards that limit ACE contributions to transmission congestion while at the same time correcting the technically deficient frequency support characteristics of CPS2 is justified. The standards development process will ensure that any new standards have the required technical merits and justification.			
Southern		<input checked="" type="checkbox"/>	
SPP ORWG		<input checked="" type="checkbox"/>	

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #4			
Commenter	Yes	No	Comment
Texas Reg. Entity		<input checked="" type="checkbox"/>	
Ameren		<input checked="" type="checkbox"/>	
Energy Mark		<input checked="" type="checkbox"/>	
Entergy		<input checked="" type="checkbox"/>	
FirstEnergy		<input checked="" type="checkbox"/>	
HQT		<input checked="" type="checkbox"/>	
IESO		<input checked="" type="checkbox"/>	
Manitoba Hydro		<input checked="" type="checkbox"/>	
NPPD		<input checked="" type="checkbox"/>	
NPCC RCS		<input checked="" type="checkbox"/>	
PSC South Carolina		<input checked="" type="checkbox"/>	
AEP	<input checked="" type="checkbox"/>		While we do not see a significant reliability need to modify the Standards, if the SAR were to proceed there are some additional items to consider in the scope. For example, to address the SAR's stated purpose of "C" (To prevent Interconnection frequency excursions of short-duration attributed to the ramping of Interchange Transactions) there should be enforceable requirements/measures for Purchasing-Selling Entities and Generator Operators to schedule and to follow in real-time balancing. Lack of proper scheduling, based on generator/resource capability, and following by PSEs and Generators in real-time while meeting the balancing requirement on an hourly integrated basis can lead to unscheduled use of transmission service that is not evaluated during the reliability assessment window. This possible unscheduled use of transmission service for the purposes of hourly integrated balancing is not captured in the NERC IDC reliability tool and could also be causing unwarranted congestion on the Bulk Electric System. There needs to be enforceable requirements specifically stated for each reliability function involved. Most BAs have supporting reliability function subsets that have a direct impact on reliability; yet these are not addressed in the current BAL Standards and proposed SAR.
<p>Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT does not have sufficient information to modify the SAR to include an expanded scope, but believes that the existing scope does allow for the inclusion of requirements for those entities that support the BA in balancing resources. The applicability section of the SAR does include the LSE, PSE and</p>			

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #4			
Commenter	Yes	No	Comment
<p>Generator Operator (as well as the BA and RC). The inclusion of these functional entities will give the standard drafting team the flexibility to develop requirements (if supported by stakeholders) for those entities that interface with the BA so that the BA is not the only entity responsible for taking action to meet the reliability objectives. We encourage you to continue to participate during the standard development process (including the Balancing Authority Controls SAR DT) to include your concepts as additional industry input would be necessary for this to be included.</p>			
Duke Energy	<input checked="" type="checkbox"/>		<p>On Saturday, August 4, 2007, the Eastern Interconnection experienced multiple losses of generation resulting in the Interconnection frequency dropping below 59.86 Hz. Though the response of the grid on that day was sufficient to bring the Eastern Interconnection back above the low Frequency Abnormal Limit of 59.918 Hz, it emphasized the importance of the immediate, primary response provided by unit governors and other resources contributing to the Frequency Response. Duke Energy would expect that ensuring adequate resources for providing such "primary" response would fall under Frequency Response SAR, however we are concerned that the current standards do not ensure adequate "secondary" response being provided by Balancing Authorities correcting ACE when significant events drop the Interconnection frequency below the Frequency Abnormal Limit. As the Balancing Authority ACE Limit (BAAL) currently proposes a violation to occur when the BAAL is exceeded for more than 30 consecutive clock-minutes, we believe that the scope of this SAR must be broad enough to consider requiring more immediate response from the Balancing Authorities when frequency drops below the Frequency Abnormal Limit.</p>
<p>Response: The RBC SAR DT thanks you for your comment. We would like to point out that the Frequency Response standard being developed will be limited to data collection and analysis and that a subsequent SAR will have to be submitted. Your comments with regard to primary response should be made to the BAC SAR DT and the Generator Verification SDT as well. The Generator Verification SDT is working on requirements that address the generator's response to frequency deviations. The RBC SAR DT would like to point out the there is one existing standard (DCS) that provides for secondary response. However, the DCS standard may not ensure that there is adequate secondary response for a non-reportable event.</p>			
Robert Blohm	<input checked="" type="checkbox"/>		<p>Eliminating economic incentives for bad control behavior while keeping economic incentives for good control behavior through pro-reliability pricing. NERC originally addressed this issue in the Joint Inadvertent Interchange Taskforce Whitepaper but referred the issue to NAESB because it involved pricing. Technically-challenged NAESB punted/remanded this commercial/reliability interface issue back to NERC on the technical basis that any standard involving usage of the ACE measure should be developed by NERC. The RBC SAR should duly note association with this issue but note that it is best addressed directly, if at all, in the Balancing Authority Control Standard's treatment of Inadvertent Interchange.</p>

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #4			
Commenter	Yes	No	Comment
			Response: The RBC SAR DT thanks you for your comment. Economic considerations are outside of the scope of the reliability standards development process.

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

- If there any other comments you wish to provide to the SAR Drafting team that you have not already provided in response to the questions above, please provide them here.

Summary Consideration: Many of the comments received for this question can be more readily addressed during the Standard Development process. The RBC SAR DT will ensure the Standards Drafting team is aware of these comments and takes them into consideration. There were two comments concerning regional concerns. HQT and the Texas Regional Entity brought up waivers or exemptions. As the SAR envisions the retirement of CPS2, modifications to ERCOT’s waiver for compliance to CPS2 are not needed. HQT has identified a possible need for a variance from BAL-007-1 and the SAR was modified to include this.

Question #5	
Commenter	Comment
AEP	<p>Since Generator Operators and PSEs are also stated in the SAR as applicable reliability functions, why are there no specific references in the requirements or measures to be enforced for these entities? The BA is charged with the burden of complying with the intent of the Balancing Standards Requirements and Measures, but it has little direct control of the actions that a Generator Operator or PSE in real-time. Some of these concerns should also be addressed in other areas, such as the Interconnection Operating and Regulation Agreements, but the NERC Reliability Standard should provide some enforceability.</p> <p>The BAL and INT Standards, already in place, provide the requirements and measurability to address the overall purpose and reliability intent of this SAR; yet they do not specifically address the other reliability functions that might compromise the BA's ability in meeting the requirements.</p>
<p>Response: The RBC SAR DT thanks you for your comment. The final determination of applicable entities will be determined through the standards development process. The comments from the SPP ORWG indicated that the responsibility for implementing transmission loading relief rests with several entities, not just the BA. In the Detailed Description section of the SAR that describes Balancing Requirements related to transmission loading relief processes, the SAR DT noted that the proposed standards may address the 'resources' that are available to relieve congestion, resulting in requirements assigned to the PSE, LSE or Generator Operator. Based on the SPP ORWG comments and the possible need for requirements that address the use of available resources to relieve congestion, the drafting team retained the LSE and Generator Operator in the applicability section of the SAR.</p>	
BPA	<p>Interconnected system operation is predicated on mutual assistance between Balancing Authorities (BA) during emergencies and disturbances while maintaining individual BA autonomy. Reliability standards and older operating policies and guidelines created to facilitate interconnected system operation were designed to maintain this individual BA self-sufficiency and independence. Even though the reliability standards, operating policies and guidelines may have been deficient on technical basis, they were accepted and supported because they were consistent in ensuring proper separation and allocation of expenditures among interconnected entities. Fairness and equity were</p>

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #5	
Commenter	Comment
	<p>maintained. The draft BAL-007 Standard which will be incorporated into this new SAR, violates these underlying principles of self-sufficiency, fairness and equity. It would allow a BA to undergenerate and use energy from neighboring BA's to supply its load not only during disturbances but continuously as long as its BAAL limit is not exceeded. Even though balloting comments may not have focused on this aspect, this could be what really is the underlying reason why the draft BRD standards BAL-007 through BAL-011 were not passed. It would be very difficult for a BA to vote for a standard that will allow another BA to exploit the costly energy it generates without being compensated for it.</p> <p>Besides the standard being proposed could really be considered as a subset of law of the United States since it is created pursuant to section 215 of the Federal Power Act. As such, it should not ignore the requirement that the standard be fair and equitable similar to other laws of the US. BAL-007 will not be fair and equitable since it will provide the largest opportunity for gaming the system and allow rogue entities to use a neighboring entity's energy without paying for it. Note that the FERC would only approve a proposed standard if the Commission determines that the proposal is just, reasonable, not unduly discriminatory or preferential, and in the public interest.</p>
	<p>Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT feels that having the BAAL limit in conjunction with the transmission related ACE limits will create appropriate ACE boundaries to address the impact such entities can have on Interconnection reliability. The NERC Standards Development Process does not allow for economic (equity) issues to be addressed in reliability standards. Standards are to be designed with a reliability purpose in mind that does not pose any undue burden on any of the owners, users or operators of the BES. In addition, the RBC SAR DT recommends that you make similar comments to the Balancing Authority Control SAR DT.</p>
Duke Energy	<p>Three separate projects (Project 2007-5: Balancing Authority Controls, Project 2007-12: Frequency Response, and Project 2007-18: Reliability-based Control) are currently being implemented that are directly tied to frequency and Balancing Authority control. In order to ensure consistency and a logical conclusion, these three projects should develop a white paper that outlines the approach to be taken in respect to frequency response and control, and Balancing Authority action and performance. After development, the white paper should go through the Standards Process for industry review, comments and response. The three project teams should continue to work together until all projects have concluded.</p>
	<p>Response: The RBC SAR DT thanks you for your comment. The three drafting teams are working together to ensure that there are no scope overlaps or, more importantly, no gaps in the standards development process. As the process moves forward, the concept of a white paper may have more merit and will be considered at that time. We will forward your comment to the FR and BAC teams. As you monitor these standards development projects, we encourage you to also monitor the work of the Generator Verification SDT as some of their work is also looking at measuring and verifying a generator's response to frequency deviations (PRC-024 — Generator Performance During Frequency and Voltage Excursions).</p>
Entergy	<p>We are concerned that several aspects of this SAR infringe on business practices which should not be</p>

Consideration of Comments on 2nd Draft of Reliability-based Control SAR (Project 2007-18)

Question #5	
Commenter	Comment
	<p>developed by NERC but should be sent to NAESB for development as business practices.</p> <p>The SAR Purpose Statement C, and the Brief Description section, contain a discussion of what appears to be on-peak and off-peak transaction concerns. Do the authors mean the times of transition from on-peak to off-peak and off-peak to on-peak transitions? Entergy believes any reliability standard should be adequate for all time periods, hour-to-hour as well as the transitions from on-peak to off-peak and back. If the System can not handle the on-peak to off-peak transition due to business practices then maybe the business practices need to change. We do not understand what or how the author would write reliability standards requirements, other than existing requirements in other standards, based on this scope statement. Please explain in greater detail. However, at this time we think this part of the SAR should be deleted as it probably encroachs on NAESB business practice standards. We also suggest the author submits a request for correction of this problem to NAESB to develop block schedules that do not jeopardize reliability.</p> <p>Also, the industry should identify and/or define the acceptable range of Interconnection frequency excursions of short duration. More to the point, this aspect of the SAR should be deleted from this SAR, investigated and developed by another group (maybe under the Operating Committee) and returned under a new SAR for development as a reliability standard based on the results of that investigation.</p> <p>The section of the SAR - Corrective action not always supporting reliability, page SAR-3, - contains an open-ended statement for the SDT to "determine what other other bounds may be necessary":</p> <p>This standard would also determine what other bounds may be necessary to require proper action by the Balancing Authority when excessive ACE (as determined by this standard) is impacting transmission constraints; however the outcome must be a set of compliance elements that cannot conflict or require information that the Balancing Authority does not have access to.</p> <p>We view this part of the SAR as an investigation and development process, not a standards development process. Therefore, we strongly suggest this whole Corrective section be deleted. An investigation and development should be undertaken by another group (maybe under the Operating Committee). Then, when the investigation and development are complete a new SAR can be submitted to develop new standard requirements based on that investigation</p> <p>We also suggest all investigation aspects be complete before any SAR is submitted for standards development, including all other aspects of this SAR that are investigations.</p>

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	<p>Response: The RBC SAR DT thanks you for your comment and agrees that there may be business practices that have to be added or changed in order to relieve reliability concerns. In accordance with the Reliability Standards Development Procedure, if the Standards Committee accepts this SAR for further development, a joint NERC/NAESB group will review the SAR to determine if the proposed standards should be developed by NERC or by NAESB. At that time, even if both organizations agree that the standards should be developed by NERC, NAESB may form a team to coordinate with the standard drafting team to ensure that, if the standard needs business practices, these business practices are developed.</p> <p>You are correct in noting that the short duration frequency excursions discussed are primarily associated with the transition from on-peak to off-peak and off-peak to on-peak, however the intent of the SAR is to develop a standard applicable at all times. It would be up to the Standard Drafting Team to investigate and propose technically defensible solutions with sufficient detail for the industry to decide what range of Interconnection frequency excursions of short duration is acceptable.</p> <p>As the SAR process is used to determine if there is a general consensus on whether a standard should be developed to address a reliability need, further analysis and targeted research during the development of the standard may be necessary to present one or more solutions to the industry.</p>
FirstEnergy	<p>The FERC Order to address the need for a continent wide contingency reserve policy (per Order 693 Par. 340) is applicable to modifications to BAL-002-0. However, another NERC Project (2007-05) also involves revisions needed for BAL-002. In an effort to efficiently coordinate changes to the BAL-002 standard, would it help to incorporate this Order into project 2007-05?</p>
	<p>Response: The RBC SAR DT thanks you for your comment. We believe that coordination between drafting teams should be sufficient to resolve this issue.</p>
HQT	<p>Review EOP-002 applicability of changing R5?</p> <p>For exactitude purpose, we should refer to «Québec Interconnection.» instead of «HQ Interconnection.» Part of the confusion might have come from our own comments, we apologized for that.</p> <p>We consider that the response to our comment in the first comment period :</p> <p>« For a single Balancing Area interconnection like Hydro-Québec Interconnection, BAAL-007-1 is not appropriate. Thus, Hydro-Québec TransÉnergie (HQT) should not be subjected to BAAL-007-1 requirements and so not be subject to compliance to that standards. BAAL-008 is the Standard that is more appropriate for HQT reliable operation.... The SAR drafting team should specify if an Interconnection -wide Regional variance to that effect is necessary and if so, it should be included in the further development of these Standards. If there is another means to take into account these concerns, the SAR drafting team should indicate how.»</p>

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	<p>Did not fully address our concern.</p> <p>HQT think that it is important to indicate as soon as possible in the process what venue should be taken about Standard BAL-007 not being implemented for Québec Interconnection.</p>
	<p>Response: The RBC SAR DT thanks you for your comment. We will pass your comment along to the standards drafting team for their consideration in developing the standard. We have modified the SAR to indicate that there may be an interconnection-wide regional difference specified by Hydro-Québec Interconnection. It will be the responsibility of the standards drafting team to consider how this will impact standards developed under this SAR and to take into account regional differences noted during the standards development process. If at all possible, the drafting team will develop the standards so that there is no need for any regional differences. Your participation in this process is critical in identifying the need for any regional differences and then for drafting any needed regional differences.</p>
IESO	<p>EOP-002-2 (R5) should not be included in this SAR. The requirement is correct as written. The BA should only respond to RC's and TOP's instructions which include correction of SOL/IROL violations.</p> <p>IRO-005-2 should be modified only to the extent that CPS, DCS and Reserves tasks are changed, but not for SOLs/IROLs.</p>
	<p>Response: The RBC SAR DT thanks you for your comment. The intent of the RBC SAR scope is to create standards that prevent aggravation of existing frequency issues, as opposed to taking unilateral action as a potential remedy. We will forward your comment to the standards drafting team for their consideration. EP-002-2 R5 states:</p> <p style="padding-left: 40px;">A deficient Balancing Authority shall only use the assistance provided by the Interconnection's frequency bias for the time needed to implement corrective actions. The Balancing Authority shall not unilaterally adjust generation in an attempt to return Interconnection frequency to normal beyond that supplied through frequency bias action and Interchange Schedule changes. Such unilateral adjustment may overload transmission facilities.</p> <p>The Missing Measures and Compliance Elements drafting team could not develop a measure for this requirement because it is ambiguous. As envisioned, the proposed BAL standards will include objective requirements that identify when the BA should take action to control ACE – and should eliminate the need for EOP-002-2 R5.</p> <p>IRO-005-2 R4, R8, R9, and R11 all include references to 'CPS' and, as envisioned, these references should be modified so that they refer to 'CPM and BAAL' rather than 'CPS'.</p>
Manitoba Hydro	<p>We support this SAR and could support an ultimate ACE cap if that is what is required to move forward.</p> <p>Manitoba Hydro was part of the BAAL field test and was comfortable operating to BAL-007. Manitoba</p>

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	Hydro contributed to frequency regulation, minimized CPM2 violations and our inadvertent account was not negatively impacted. We are not aware of our ACE causing transmission congestion problems on our system or our neighbouring systems. Our RC was never put in the position to request us to reduce our ACE because it was negatively impacting the grid.
	Response: The RBC SAR DT thanks you for your comment.
NPCC RCS	Review EOP-002 applicability of changing R5?
	<p>Response: The RBC SAR DT thanks you for your comment. The intent of the RBC SAR scope is to create standards that prevent aggravation of existing frequency issues, as opposed to taking unilateral action as a potential remedy. Revisions to EOP-005 may be required based on the outcome of the standards development process. EP-002-2 R5 states:</p> <p style="padding-left: 40px;">A deficient Balancing Authority shall only use the assistance provided by the Interconnection’s frequency bias for the time needed to implement corrective actions. The Balancing Authority shall not unilaterally adjust generation in an attempt to return Interconnection frequency to normal beyond that supplied through frequency bias action and Interchange Schedule changes. Such unilateral adjustment may overload transmission facilities.</p> <p>The Missing Measures and Compliance Elements drafting team could not develop a measure for this requirement because it is ambiguous. As envisioned, the proposed BAL standards will include objective requirements that identify when the BA should take action to control ACE – and should eliminate the need for EOP-002-2 R5.</p>
Robert Blohm	<p>Add the following sentence to the end of the paragraph that follows paragraph E:</p> <p>"Also questions were raised about the adequacy of the technical research in support of the standard."</p> <p>Reason:</p> <p>The questioners included NPCC, Energy Mark and me, all of whom filed extensive specific comments, by far the most extensive of any comments submitted.</p> <p>The paragraph purports to explain why the standard failed to pass the balloting. It so far gives only one explanation of several possible explanations, which could include an explanation of why the total voter turnout wasn't greater and more widely distributed beyond the over-concentration in a few companies for example. For example, I couldn't vote because the ballot body was inexplicably reconstituted twice within a year without individual notification of the members.</p> <p>I missed out in what was an eliminatory management practice probably to reduce the required quota, not an inclusionary or expansive management practice which would have been to leave the old ballot body alone and not eliminate some live members along with dead members. I would have been half an entire membership sector that voted, giving each of our two votes more weight than any other.</p>

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	<p>There are many ways to slice/analyze a cake and interpret election results. Giving only one explanation looks too much like electoral strategizing to win when here the objective is not supposed to be political but technical. In other words, take the time to develop the best technical standard by being inclusive and addressing all the technical concerns and the votes will follow. "Build it (right) and they will come."</p> <p>Don't Gerrymander (pun not intended) a standard in an attempt to manipulate, manage or massage a consensus. We're not hush-hush Karl Roves trying to finesse a political result: we're technicians, standards developers. According to the ERO mandate, NERC is all about being technicians, not political strategists.</p> <p>The "continued work in this area" clause in the next (the last) paragraph takes care of the remedy to the clause I am proposing to add.</p>
<p>Response: The RBC SAR DT thanks you for your comments however it does not feel that the SAR should be changed based on your comments.</p>	
SERC OC SRG	<p>SERC wants to ensure that short term frequency response, if not addressed by this SAR, is addressed by the frequency response drafting team.</p>
<p>Response: The RBC SAR DT thanks you for your comment. We have initiated coordination with the Frequency Response and Balancing Authority Controls teams. As you monitor these standards development projects, we encourage you to also monitor the work of the Generator Verification SDT as some of their work is also looking at measuring and verifying a generator's response to frequency deviations (PRC-024 – Generator Performance During Frequency and Voltage Excursions).</p>	
SPP ORWG	<p>Concerning predefined frequency limits mentioned in Statement A of the Purpose, frequency itself may not be the appropriate parameter to establish as the criteria for determining proper control action. Although frequency is the driving force necessitating the establishment of the standard, frequency control is the outcome of the combined operation of all Balancing Authorities and other entities in an interconnection. While a Balancing Authority can cause a drop in frequency as the result of a loss of generation, that single Balancing Authority, depending upon its size, may not be able to individually recover frequency on the interconnection during excursions for which that Balancing Authority is not responsible.</p>
<p>Response: The RBC SAR DT thanks you for your comment. We agree with your comments and have included appropriate measures in the SAR to ensure coordination between all responsible entities. Note that the applicability section of the SAR does include the LSE, PSE and Generator Operator (in addition to the RC and BA). The inclusion of these functional entities will give the standard drafting team the flexibility to develop requirements (if supported by stakeholders) for those entities that interface with the BA so that the BA is not the only entity responsible for taking action to meet the reliability objectives.</p>	
Texas Reg. Entity	<p>Please refer to comment on Q.3. Given the existence of the "waiver" of CPS2 requirements for ERCOT, and the FERC Directive to the ERO to modify the standard, the ERCOT ISO suggests that the SAR should be modified to include language to resolve the FERC Directive with regard to the ERCOT</p>

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	waiver. ERCOT ISO believes that the directive could be addressed either by reference to the new Standard CPM requirements or by modification of the language of the existing BAL-001-0 language to indicate that CPS2 does not apply to an Interconnection within which there is a single entity assigned the responsibility for frequency control, regardless of whether there is a single BA or multiple BAs.
	Response: The RBC SAR DT thanks you for your comment. It will be the responsibility of the standards drafting team to consider how this will impact standards developed under this SAR and to take into account regional differences noted during the standards development process. As the SAR envisions the retirement of CPS2, modifications to ERCOT’s waiver for compliance to CPS2 are not needed. However, ERCOT may need an interconnection-wide regional difference to some of the other proposed requirements. Your participation in this process is critical in identifying the need for any regional differences and then for drafting any needed regional differences. If at all possible, the drafting team will develop the standards so that there is no need for any regional differences.
WECC PWG	<p>Interconnected system operation is predicated on mutual assistance between Balancing Authorities (BA) during emergencies and disturbances while maintaining individual BA autonomy. Reliability standards and older operating policies and guidelines created to facilitate interconnected system operation were designed to maintain this individual BA self-sufficiency and independence. Even though the reliability standards, operating policies and guidelines may have been deficient on technical basis, they were accepted and supported because they were consistent in ensuring proper separation and allocation of expenditures among interconnected entities. Fairness and equity were maintained. The draft BAL-007 Standard which will be incorporated into this new SAR, violates these underlying principles of self-sufficiency, fairness and equity. It would allow a BA to undergenerate and use energy from neighboring BA’s to supply its load not only during disturbances but continuously as long as its BAAL limit is not exceeded. Even though balloting comments may not have focused on this aspect, this could be what really is the underlying reason why the draft BRD standards BAL-007 through BAL-011 were not passed. It would be very difficult for a BA to vote for a standard that will allow another BA to exploit the costly energy it generates without being compensated for it.</p> <p>Besides the standard being proposed could really be considered as a subset of law of the United States since it is created pursuant to section 215 of the Federal Power Act. As such, it should not ignore the requirement that the standard be fair and equitable similar to other laws of the US. BAL-007 will not fair and equitable since it will provide the largest opportunity for gaming the system and allow rogue entities to use a neighboring entity’s energy without paying for it. Note that the FERC would only approve a proposed standard if the Commission determines that the proposal is just, reasonable, not unduly discriminatory or preferential, and in the public interest.</p>
	Response: The RBC SAR DT thanks you for your comment. The RBC SAR DT feels that having the BAAL limit in conjunction with the transmission related ACE limits will create appropriate ACE boundaries to address the impact such entities can have on Interconnection reliability. The NERC Standards Development Process does not allow for economic (equity) issues to be

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	addressed in reliability standards. Standards are to be designed with a reliability purpose in mind that does not pose any undue burden on any of the owners, users or operators of the BES. In addition, the RBC SAR DT recommends that you make similar comments to the Balancing Authority Control SAR DT.
WECC RCCWG	The WECC RCCWG applauds the SAR drafting team suggestion of working with WECC regarding parameters and transmission concerns.
Response: The RBC SAR DT thanks you for your comment.	