

**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

Please use this form to submit comments on the proposed SAR. Comments must be submitted by **September 7, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with the words "Real-time TOP\_BA SAR" in the subject line. If you have questions please contact Ed Dobrowolski at [ed.dobrowolski@nerc.net](mailto:ed.dobrowolski@nerc.net) or by telephone at 609-947-3673.

<b>Individual Commenter Information</b>		
(Complete this page for comments from one organization or individual.)		
Name:	Thad K. Ness	
Organization:	AEP	
Telephone:	614-716-2053	
E-mail:	tkness@aep.com	
NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input checked="" type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> RFC	<input checked="" type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input checked="" type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

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Group Comments (Complete this page if comments are from a group.)

**Group Name:**

**Lead Contact:**

**Contact Organization:**

**Contact Segment:**

**Contact Telephone:**

**Contact E-mail:**

Additional Member Name	Additional Member Organization	Region*	Segment*

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- Added IRO-004, IRO-005 & IRO-006 to the scope of standards to be reviewed to eliminate redundant requirements.
- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
  - R11. The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators shall utilize identical SOLs for common facilities. The Transmission Operator shall update these Bulk Electric System studies as necessary to reflect current system conditions; and shall make the results of Bulk Electric System studies available to the Transmission Operators, Balancing Authorities (subject confidentiality requirements), and to its Reliability Coordinator.
- Reworded the recommendation in TOP-002-2, R14 & R15 to clarify that these requirements may be better addressed in other standards.
  - R14. Generator Operators shall, without any intentional time delay, notify their Balancing Authority and Transmission Operator of changes in capabilities and characteristics including but not limited to:
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Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: We agree with the concept of eliminating redundancy in the NERC Standards. However, Project 2006-08 involves re-writing IRO-006 in three phases and is currently in phase one. Any changes required to IRO-006 to eliminate redundancy of Transmission Operator and Balancing Authority requirements in other standards should be coordinated with, and handed off to, the Project 2006-08 IRO-006 Standard Drafting Team. Thus, IRO-006 should not be included in the scope of this SAR. We have no objection to including IRO-004 and IRO-005 into the scope of this project and we stand by our comments to the first SAR.

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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
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E-mail:	jshaver@atcllc.com	
NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
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- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
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Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: The SDT has not provided any information as to scope of work that will be performed on IRO-004, 005 and 006 in the posted version of the SAR. Therefore ATC does not agree with the expanded scope. The SAR SDT must provide information as to why these standards must be worked on as part of this effort. We request that the SAR SDT provided the necessary information and post a revised version of the SAR for comment.

Additional comments:

Issue 1:

A majority of comments submitted on Question 2 (Initial SAR posting) did not support the SDT proposal to remove SOL requirements from NERC's Reliability Standards. ATC believes that SOLs are a BES issue and must continue to be part of NERC Reliability Standards. ATC does not agree with the SDT proposed compromise that would limit Reliability Standards to only requiring monitoring of SOL. (Note: The SAR provides little to no justification as to why SOL should be removed from NERC Reliability Standards.)

"Question 2 (initial SAR posting): The SAR DT believes that SOLs, while very important to local utility operations, are not a true Bulk Electric System reliability issue, and as such, believes that any requirements related to SOLs should be moved into guides or other reference documents, to be added to the literature on 'good utility practice'. Do you agree?"

Issue 2:

ATC continues to disagree with the current scope of work. We find that scope of work's description is overly prescriptive and not complete. It seems that the SAR is attempting to remove requirements that address SOL conditions from NERC standards but that is never specifically stated in the SAR. It's also import to note that in Appendix B of the SAR no specific request was made to remove SOL from NERC standards. Many of the requests in Appendix B only support clarification and removal of redundant requirements.

It's our position that the effort to remove SOLs from NERC standards will reduce interconnection reliability. Therefore ATC can not support this SAR until a proper scope of work is developed. The scope should be limited to clarifying existing requirements by; removing redundancy, better alignments of requirements to measures and removal/clarification of ambiguous language.

Issue 2a:

COM-001 Is currently being worked on in projects 2006-04 & 2006-06

COM-002 Is currently being worked on in projects 2006-06 & 2007-02

IRO-004 Is currently being worked on in project 2007-02

IRO-005 Is currently being worked on in project 2007-02 & 2007-18



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IRO-006 Is currently being worked on in project 2006-08

Lastly ATC believes that this project should be delayed until the all previously identified efforts have been completed in order to insure an efficient work flow. If this project is moved into the standard development phase five Standards will have parallel efforts on going. Coordination will be extremely difficult if not impossible to manage.

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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
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<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
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Yes

No

Comments:

We have additional comments on other parts of this revised SAR.

COMMENTS ON TOP-001-1

We suggest the deletion of the first recommended change to TOP-001-1:

- o Removal of R2 due to redundancy with R1. R2 largely describes an ill-defined procedure which should not be in a standard.

This suggested change was revised from the first posting of this SAR, changing "with R3" to "with R1". Each of the three requirements of TOP-001-1 address different responsibilities of a TOP. R1 states a TOP has responsibility and authority, R2 states the TOP will take action, and R3 states the TOP and others will comply with the directives of the RC, or TOP. We do not agree R2 contains an ill-defined procedure.

However, we may agree to remove TOP-001-1 R2 because it may be redundant with TOP-008-1 R1.

We also suggest revising the TOP-001-1 draft change from:

Eliminating R5 in light of possible redundancy with IROL standards.

to:

Eliminating R5 IF REDUNDANT with IROL standards.

COMMENTS ON TOP-002-2

The first suggestion of TOP-002-2 suggests deleting R1 as it is redundant with TOP-008-1 R1. We recommend changing the TOP-008-1 reference to R2, rather than R1. We agree that TOP-002-2 can be eliminated as being redundant with TOP-008-1 R2, not TOP-008-1 R1.

We do not agree with the suggestion that TOP-002-2 that R4 should be deleted. TOP-002-2 R4 is a requirement on the BA and TOP while IRO-005-2 R9 is a requirement on the RC.

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We do not agree with the suggestion of deleting TOP-002-2 R6 as it is redundant with IRO-005-2 R9. However, we do agree with deleting R6 if the reason is changed to being redundant with EOP-001 R3.2. With this change we agree with deleting TOP-002-2 R6.

We do not agree with the suggestion to delete TOP-002-2 R7 and R9. Both these requirements should remain in TOP-002. The reason for the suggested deletion is R7 and R9 are redundant with BAL-007 through BAL-011. However, BAL-007 through BAL-011 were not approved by the Ballot Body and are not NERC standards. Therefore TOP-002-2 R7 and R9 are not redundant and the suggestion should be deleted.

TOP-002-2 R12 should not be deleted. We believe it is not redundant of the requirements in FAC-010 SOL Methodology for the Planning Horizon and FAC-011 SOL Methodology for the Operations Horizon.

### COMMENTS ON TOP-004-1

The first entry for TOP-004-1 suggests deleting reference to SOL in R1. Deleting R1 indicates TOPs are not required to operate within SOLs. TOPs should operate within SOLs and this entry should be deleted from the SAR.

### COMMENTS ON TOP-005-1

It is suggested deleting R1 and R1.1 as they are redundant with IRO-010-1. However, IRO-010-1 is not an approved standard so R1 and R1.1 should remain in TOP-005-1. That is unless the SAR is changed to say R1 and R1.1 should be deleted after IRO-010-1 is approved and has provisions that duplicate R1 and R1.1.

It is suggested that R4 be deleted from TOP-005-1. Do not delete R4 (PSE provides information as requested for reliability assessments and coordinate operations) as it is significantly more encompassing than INT-001-2 R1 (which only requires PSEs provide Arranged Interchange to the IA.) If anything is done INT-001-2 R1 should be deleted and TOP-005-1 R4 should be kept.

### COMMENTS ON TOP-006-1

It is suggested that R1 be deleted from TOP-006-1. Do not delete R1 (report facility status) as it is significantly different than FAC-009-1 R2 (report facility ratings). They are not the same.

It is suggested that R4 be deleted from TOP-006-1 as the requirement is redundant with BAL-001 and -002 and is addressed in IRO-010 R1 and R3. R4 should only be deleted if the requirements are actually included in the final approved IRO-010.

It is suggested that R6 (use sufficient metering) be deleted from TOP-006-1 as the requirement is redundant with BAL-005-1 (annually check and calibrate time error and

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frequency devices). We suggest R6 be kept in TOP-006-1 since the requirements are not in BAL-005-1.

COMMENTS ON TOP-007-0

It is suggested to delete R4 in deference to the RC Project. We suggest R4 be kept in TOP-007-0 until the RC Project is a NERC approved standard.

COMMENTS ON TOP-008-0

It is suggested to delete R1 (relieve IROL or SOL) as it is redundant with TOP-007-0 R3 (relieve IROL). We suggest R1 be kept in TOP-008-0 or include SOLs in TOP-007-0 R3.

COMMENTS ON COM-001-1

No Comments.

COMMENTS ON COM-002-2

The first bullet is to delete the second sentence of COM-002-2 R1 as it is redundant with PER-003-0 R3. However, there is no R3 in PER-003-0 so we recommend the second sentence stay in COM-002-2 R1.

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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
Name: Dave Folk		
Organization: FirstEnergy Corp.		
Telephone: 330-384-4668		
E-mail: folkd@firstenergycorp.com		
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**Contact Telephone:**  
**Contact E-mail:**

Additional Member Name	Additional Member Organization	Region*	Segment*
Sam Ciccone	FE FERC Compliance Department		
Doug Hohlbaugh	FE FERC Compliance Department		

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: FirstEnergy, like some other entities, is concerned that the SAR drafting team did not provide an opportunity to comment on their proposed resolution to the SOL issue identified in Question 2 of the previous draft's comment form. While it is not crystal clear to us that the SAR Drafting Team intended to removal all references to SOLs from the Standards, it is also not clear to us that the revisions made to the SAR by the drafting team adequately addressed the views expressed by the commenters. The messages sent by the SAR Drafting Team in the Comment Summary and the individual responses to comments seem mixed. The response to comments document indicates that the SAR drafting team will pass comments on to the Standard Drafting Team; however, the modifications to the SAR were minor and did not provide any guidance to the Standard Drafting Team on the method for applying these comments. Furthermore, the SAR Drafting Team did not seem to embrace the comments provided by the industry on this topic. We understand that the comments received were provided by a small segment of the industry; however, we are also aware that the communication from the commenters was was clear. The majority of commenters supported the retention of SOLs in the standards as necessary and appropriate.

All of this being said, while we clearly do not agree with the wholesale removal of SOLs from the Standards, but we do support the removal of SOLs from TOP-004-1 Requirement 1 as specified in the SAR. We support this because the methodology used to determine SOLs, and for that matter, IROLS is not clearly defined. This means that one organization may be using a methodology that produces an eight hour SOL while another's method may produce a one hour SOL. We believe that the company using an eight hour limit should not be bound as tightly to that limit as a company that uses a one hour limit. Therefore, the SAR should direct the Standard Drafting team to develop, or at least investigate the development, of a limit methodology applicable across all of NERC that can be consistently applied.

FE also offers the following comments to specific items revised in the SAR:

Added IRO-004, IRO-005 & IRO-006 to the scope of the standards to be reviewed to eliminate redundant requirements.

FE agrees

Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.

R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.

FE disagrees with this direction.

There does not appear to be an industry agreed upon justification given to remove this requirement in lieu of developing 'R8' along with eliminating ambiguity in the existing measure for this requirement described in 'M3'.

Removed the recommendation for deleting TOP-002-2, R11:

R11. The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators

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FE agrees

Reworded the recommendation in TOP-002-2, R14 & R15 to clarify that these requirements may be better addressed in other standards.

R14. Generator Operators shall, without any intentional time delay, notify their Balancing Authority and Transmission Operator of changes in capabilities and characteristics including but no limited to:

R14.1. Changes in real output capabilities

R15. Generator Operators shall, at the request of the Balancing Authority or Transmission Operator, provide a forecast of expected real power output to assist in operations planning (e.g., a seven-day forecast of real output).

FE agrees, but with the following provision:

The SDT should also develop clear justification for addressing these requirements in "other standards" while identifying the appropriate "other standards"; and, if justified, the SDT should develop a clear, industry approved plan to transfer these requirements to those identified standards.

Clarified the deletion requested in TOP-004-1, R1 is the reference to 'SOLs'

R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).

FE agrees, but with the following provision:

The SDT should also consider verbiage in the standards with regard to how SOLs can still be conveyed with some indirect measure (non-sanctioned) of importance in development of the applicable standards.

**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

Please use this form to submit comments on the proposed SAR. Comments must be submitted by **September 7, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words "Real-time TOP\_BA SAR" in the subject line. If you have questions please contact Ed Dobrowolski at [ed.dobrowolski@nerc.net](mailto:ed.dobrowolski@nerc.net) or by telephone at 609-947-3673.

<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
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NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input checked="" type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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Group Comments (Complete this page if comments are from a group.)

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**Lead Contact:**

**Contact Organization:**

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Additional Member Name	Additional Member Organization	Region*	Segment*

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- Added IRO-004, IRO-005 & IRO-006 to the scope of standards to be reviewed to eliminate redundant requirements.
- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: Both IRO-006-3 and draft IRO-006-4 have the TOP listed in applicability section. However, neither actually has any requirement in the standard. They simply reference the TOP in the requirements.

We think that the scope should not be restricted to only eliminate redundancy in IRO-004, -005 and -006 but should permit other changes in those standards. Hydro-Québec TransÉnergie would probably have some proposition to make because of the characteristics of Québec Interconnexion.

The SAR drafting team should modify the scope so that all requirements to monitor and control flows within SOLs are not eliminated. While the SAR drafting team points out in their response to the comments that NERC's definition defines an SOL as local, eliminating all requirements to monitor and control to SOLs will be detrimental to reliability. Multiple SOLs occurring on a system may be a sign of an undetected IROL or, if left unchecked, propagate into an IROL. This was the cause of the August 14<sup>th</sup> blackout. Clearly there should be an obligation on the part of the TOP and RC to monitor and mitigate these limits to prevent such propagation.

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<b>Individual Commenter Information</b>		
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<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
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<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
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- Clarified the deletion requested in TOP-004-1, R1 is the reference to ‘SOLs’
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Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments:

Since this comment form has only one question, we are checking both boxes - yes for inclusion of IRO-004, -005 and -006 but no to some of the changes made or not made to the previous SAR, and provide additional comments as follows:

(1) Specific to the bullets provided in the background section, above, we agree with the first bullet and do not have any comments on the 2<sup>nd</sup> to 4<sup>th</sup> bullets. However, we do not agree with the 5<sup>th</sup> bullet to remove reference to SOL from TOP-004-1 R1, which requires that "Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs)."

In the SAR DT's response posted in Consideration of Comments, it states that "Based on stakeholder comments, the SAR DT is proposing to retain requirements to (1) be aware of SOLs and (2) monitor system conditions related to SOLs." Removing reference to SOL in TOP-004-1 R1 contradicts with the above statement. Further, we continue to strongly disagree with the SDT that TOPs are not required to operate within SOLs - We agree that all SOLs are not created equally but there are those SOLs which have a tremendous impact on system reliability, much in the same way as IROLs, and given the appropriate conditions, these very SOLs, if not complied with, could have a highly detrimental impact on the system and subsequently the interconnection (also see comments by others in the Consideration of Comments).

(2) In the Consideration for Comments, the SAR DT responded to our previous comments under Question #9, from TOP-001 R2 to TOP-002 R18. We appreciate that the DT's concurs with most of our comments.

However, we are unable to find the DT's response to our other comments, from TOP-003 to TOP-008. A review of the revised SAR indicates that changes proposed in the previous SAR for these standards/requirements would remain, some of which we expressed disagreement in our previous comment submission. Not seeing a response from the SAR DT, we are uncertain whether our comments were overlooked, or the DT concluded that our comments did not result in any material changes to the proposed revisions to these standards.

Assuming it was an oversight, we are providing our comments on TOP-003 to TOP-008 again as follows. We would appreciate seeing the DT's response to these comments when the Consideration of Comments on this revised SAR is posted.

TOP-003-0

R3: the SDT suggests deleting R1.3 as it is redundant with IRO-010, R3 as part of the over-all data specification effort. We believe the referenced requirement should be R4.

TOP-004-0

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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R1: the SDT suggests deleting R1 as it is redundant with IRO-009-1, R4. We disagree with this. SAR IRO-009-1 holds the RC responsible for operated within IROL. We feel strongly that the TOP must also operate its system to respect IROL. Further, we need to defer any changes to remove or modify SOL until after the definition of Adequate Level of reliability is defined. We also provided other reasons for retaining it. Please see our comments on Q2, above.

R2: the SDT suggests deleting R2 as it is simply the definition of an IROL and is redundant with FAC-010-1 and FAC-011-1. We disagree with this proposal since R2 requires TOP to operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency. FAC-010-1 and FAC-011-1 deal with the methodology to determine SOL and IROL. They hold different entities for doing very different things altogether.

R3: We disagree with removing this requirement for the above same reason.

TOP-005-1

R2: the SDT suggests deleting this requirement. We agree that R2 is not a reliability requirement, but the SDT needs to recommend a home for entities that receive data from the ISN that it must sign the NERC Confidentiality Agreement for "Electric System Reliability Data".

TOP-006-1

R1: the SDT suggests deleting R1 as it is redundant with FAC-009-1, R2. We disagree with this proposal since R1 deals with real-time data such as facility status, resource availability; whereas FAC-009-1 deals with establishing ratings.

R4: the SDT suggests deleting R4 as it is redundant with BAL-001 and -002 and is also addressed in IRO-010-1, R1 and R3. We disagree as R4 requires the operating entities to do things that are very different from any of BAL-001, BAL-002 and IRO-010-1.

R7: the SDT considers deleting Balancing Authority as it is covered in BAL-005-0, R8 and deleting Reliability Coordinator as it is covered in BAL-008-1, R1. We do not agree with both. In the first case, the requirements for the BA in R7 is to monitor system frequency which is different than those in BAL-005-0, R8 which specify the data and metering requirements. In the second case, BAL-008 doesn't yet exist (failed ballot).

TOP-008

R3: the SDT suggests deleting R3 as it is a local utility risk consideration and not a reliability issue as currently worded. We do not agree with the deletion since the requirement implies that the action taken by the TOP has interconnected system implication.

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<b>Individual Commenter Information</b>		
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<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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**Lead Contact:**  
**Contact Organization:**  
**Contact Segment:**  
**Contact Telephone:**  
**Contact E-mail:**

<b>Additional Member Name</b>	<b>Additional Member Organization</b>	<b>Region*</b>	<b>Segment*</b>

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: Both IRO-006-3 and draft IRO-006-4 have the TOP listed in applicability section. However, neither actually has any requirement in the standard. They simply reference the TOP in the requirements.

Because there is not the typical question regarding additional comments in the comment form, we will provide those here.

R8 in TOP-002-2 should not be eliminated because it is not measurable. The standards drafting should attempt to modify it so that there is a requirement on maintaining voltage or reactive levels that is measurable. If this is not possible deletion may be appropriate, but the industry, not the SAR drafting team, should not be making this determination.

Because the SAR states that R14 and R15 in TOP-002-2 may be better addressed in other standards, we are concerned that the standards drafting team may delete these requirements under the assumption that another team will add them to another standard. This standard drafting team should not remove these requirements unless they simply are not needed for reliability or added to another standard in conjunction with the deletion.

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<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
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Telephone:	204 487 5517	
E-mail:	cmclean@hydro.mb.ca	
<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input checked="" type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input checked="" type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities



## Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)

---

### Background Information:

The SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03) was posted for comment from May 15 through June 13, 2007. The SAR Drafting Team considered the comments and corrected all noted typographical errors and made the following revisions to the SAR:

- Added IRO-004, IRO-005 & IRO-006 to the scope of standards to be reviewed to eliminate redundant requirements.
- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
  - R11. The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators shall utilize identical SOLs for common facilities. The Transmission Operator shall update these Bulk Electric System studies as necessary to reflect current system conditions; and shall make the results of Bulk Electric System studies available to the Transmission Operators, Balancing Authorities (subject confidentiality requirements), and to its Reliability Coordinator.
- Reworded the recommendation in TOP-002-2, R14 & R15 to clarify that these requirements may be better addressed in other standards.
  - R14. Generator Operators shall, without any intentional time delay, notify their Balancing Authority and Transmission Operator of changes in capabilities and characteristics including but not limited to:
    - R14.1. Changes in real output capabilities.
  - R15. Generation Operators shall, at the request of the Balancing Authority or Transmission Operator, provide a forecast of expected real power output to assist in operations planning (e.g., a seven-day forecast of real output).
- Clarified the deletion requested in TOP-004-1, R1 is the reference to ‘SOLs’
  - R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).

Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: Although it is not covered in this SAR's second draft we are assuming from your response to comments on the initial draft that Requirements will remain to ensure that SOLs will be monitored by the RC and TOP and that appropriate action will be taken when SOLs are exceeded. This we agree with.

**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

Please use this form to submit comments on the proposed SAR. Comments must be submitted by **September 7, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with the words "Real-time TOP\_BA SAR" in the subject line. If you have questions please contact Ed Dobrowolski at [ed.dobrowolski@nerc.net](mailto:ed.dobrowolski@nerc.net) or by telephone at 609-947-3673.

<b>Individual Commenter Information</b>		
(Complete this page for comments from one organization or individual.)		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
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## Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)

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Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.



**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: We are concerned that the SAR drafting team did not provide an opportunity to comment on their proposed resolution to the SOL issue identified in Question 2 of the previous draft's comment form. It appears that the drafting team did not adequately address the view expressed by the majority of the commenters. We draw this conclusion from the inconsistency in the determination of what is a consensus and what isn't. For example, the comment form shows that the SAR drafting team wrote: "The SAR drafting team appreciates that the industry is near consensus," in response to comments on Question 1. There were 13 yes votes in support, 6 no votes against and 4 abstentions. In response to question 7, the SAR drafting team wrote: "The consensus is that the industry agrees with the stated purpose of the SAR." There were 14 yes votes indicating support, nine no votes indicating disagreement and no abstentions. Question 2 asked if the commenter agreed that SOLs should be moved into guides or good utility practices. 13 commenters voted no, 6 voted yes and 7 abstained. Given that the drafting team found near consensus on question 1 and consensus on question 7, we question why the drafting team does not view the responses to question 2 as a consensus?

We are further troubled by the drafting team's solution to this SOL issue. In the responses, the SAR DT proposes to retain requirements to be aware of SOLs and monitor system conditions related to SOLs. However, there is actually no scope changes that reflect this response in draft 2 of the SAR. Additionally, the drafting team asked only one specific question in the comment form for draft 2. It is unusual to not add the general open ended question that allows the commenter to provide any additional comments. We find this unusual given that the drafting team chose the word propose in their response. Use of this word would tend to invite a response because one is not sure that the proposal is acceptable. If the drafting team had an expectation that the proposal may not be acceptable, why would they not ask if the proposal is acceptable in the comment form? We believe they should have asked specifically if the proposed solution would "bridge the divide" between the commenters and the drafting team. Clearly they are on opposite ends of a spectrum with the SOL issue and one would think it would be prudent to determine if the gap has been narrowed enough before moving on to the standards drafting phase.

We also believe that the SAR DT did not follow the Reliability Standards Development Procedure. On page 16, under step 2 is the following paragraph:

"The requester, assisted by the SAR drafting team if one is appointed, shall give prompt consideration to written views and objections of all participants. An effort to resolve all expressed objections shall be made and each objector shall be advised of the disposition of the objection and the reasons therefore."

It would appear that the SAR DT did not fully resolve expressed objections with removal of SOL requirements and should continue working to do so.

We also have the following specific issues with the SAR.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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R8 in TOP-002-2 should not be eliminated because it is not measurable. The standards drafting team should attempt to modify it so that there is a requirement on maintaining voltage or reactive levels that is measurable. If this is not possible, deletion would then be appropriate. The SAR drafting team should not be making this determination.

Because the SAR states that R14 and R15 in TOP-002-2 may be better addressed in other standards, we are concerned that the standards drafting team may delete these requirements under the assumption that another team will add them to another standard. This standard drafting team should not remove these requirements unless they simply are not needed for reliability or are added to another standard in conjunction with the deletion.

The SAR drafting team should modify the scope so that all requirements to monitor and control flows within SOLs are not eliminated. While the SAR drafting team points out in their response to the comments that NERC's definition defines an SOL as local, eliminating all requirements to monitor and control to SOLs will be detrimental to reliability. To the extent that an SOL is truly local (i.e. radial load serving line), there is no need for this requirement. However, there are SOLs that may not pose a transmission security problem but could impose a generation adequacy problem on another system if the equipment should become damaged. Imports into another system may then be reduced. Additionally, multiple SOLs occurring on a system may be a sign of an undetected IROL. Clearly there should be an obligation on the part of the TOP and RC to review the situation to rule it out.

**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

Please use this form to submit comments on the proposed SAR. Comments must be submitted by **September 7, 2007**. You may submit the completed form by e-mail to [sarcomm@nerc.net](mailto:sarcomm@nerc.net) with the words "Real-time TOP\_BA SAR" in the subject line. If you have questions please contact Ed Dobrowolski at [ed.dobrowolski@nerc.net](mailto:ed.dobrowolski@nerc.net) or by telephone at 609-947-3673.

<b>Individual Commenter Information</b>		
(Complete this page for comments from one organization or individual.)		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
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<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
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<input type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

Group Comments (Complete this page if comments are from a group.)

**Group Name:** MRO NERC Standards Review Subcommittee  
**Lead Contact:** Eric Ruskamp  
**Contact Organization:** MRO  
**Contact Segment:** 10  
**Contact Telephone:** 402-473-3387  
**Contact E-mail:** eruskamp@les.com

<b>Additional Member Name</b>	<b>Additional Member Organization</b>	<b>Region*</b>	<b>Segment*</b>
Joe Knight	Great River Energy	MRO	
Terry Bilke	MISO	MRO	
Mike Brytowski	MRO	MRO	
David Rudolph	Basin Electric Power Cooperative	MRO	
Pamela Oreschnick	Xcel Energy	MRO	
Rober Coish	Manitoba Hydro	MRO	
Neal Balu	WPSR	MRO	
Carol Gerou	Minnesota Power	MRO	
Jim Haigh	WAPA	MRO	
Ken Goldsmith	ALTW	MRO	
Tom Mielnik	MEC	MRO	
27 additional MRO members	not named above	MRO	

\*If more than one Region or Segment applies, please list all that apply. Regional acronyms and segment numbers are shown on prior page.



## Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)

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### Background Information:

The SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03) was posted for comment from May 15 through June 13, 2007. The SAR Drafting Team considered the comments and corrected all noted typographical errors and made the following revisions to the SAR:

- Added IRO-004, IRO-005 & IRO-006 to the scope of standards to be reviewed to eliminate redundant requirements.
- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
  - R11. The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators shall utilize identical SOLs for common facilities. The Transmission Operator shall update these Bulk Electric System studies as necessary to reflect current system conditions; and shall make the results of Bulk Electric System studies available to the Transmission Operators, Balancing Authorities (subject confidentiality requirements), and to its Reliability Coordinator.
- Reworded the recommendation in TOP-002-2, R14 & R15 to clarify that these requirements may be better addressed in other standards.
  - R14. Generator Operators shall, without any intentional time delay, notify their Balancing Authority and Transmission Operator of changes in capabilities and characteristics including but not limited to:
    - R14.1. Changes in real output capabilities.
  - R15. Generation Operators shall, at the request of the Balancing Authority or Transmission Operator, provide a forecast of expected real power output to assist in operations planning (e.g., a seven-day forecast of real output).
- Clarified the deletion requested in TOP-004-1, R1 is the reference to ‘SOLs’
  - R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).

Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: If the SAR Drafting team feels that the Standard Drafting Team can handle three additional standards the MRO has no issue with including them in the scope.

Additional comments:

It has come to our attention that TOP-001-1 R3 is an exact duplicate of IRO-001-1 R8. Of these two instances, it seems most appropriate to remove the Requirement in IRO-001-1 as that standard is focused on the responsibilities and authorities of the Reliability Coordinator. The MRO recommends either including this in the scope of this SAR or adding this comment to the future work of the IRO-001-1 standard.

R8 in TOP-002-2 should not be eliminated because it is not measurable. The SDT should attempt to modify it so that there is a requirement on maintaining voltage or reactive levels that is measurable. If this is not possible, deletion would then be appropriate. It would seem more appropriate for the SDT to make this determination rather than the SAR DT.

Because the SAR states that R14 and R15 in TOP-002-2 may be better addressed in other standards, we are concerned that the standards drafting team may delete these requirements under the assumption that another team will add them to another standard. This standard drafting team should not remove these requirements unless they simply are not needed for reliability or are added to another standard in conjunction with the deletion.

The MRO members are also confused on the SOL issue. In the Consideration of Comments to SAR 1 question #2, the SAR DT asked the if it would be appropriate to remove all requirements related to SOLs from the NERC Reliability Standards. 5 groups of commenters agreed with removing SOLs, 9 disagreed and 5 abstained. The SAR DT concluded that they would propose to retain requirements to (1) be aware of SOLs and (2) monitor system conditions related to SOLs, yet nothing was changed in the scope of this SAR to reflect that decision. It would have been advantageous to request comments on the new direction proposed by the SAR DT on SOLs as it was heavily commented on during the last round of comments.

The MRO members are also confused on the SOL issue. In the Consideration of Comments to SAR 1 question #2, the SAR DT asked the if it would be appropriate to remove all requirements related to SOLs from the NERC Reliability Standards. 5 groups of commenters agreed with removing SOLs, 9 disagreed and 5 abstained. The SAR DT concluded that they would propose to retain requirements to (1) be aware of SOLs and (2) monitor system conditions related to SOLs, yet nothing was changed in the scope of this SAR to reflect that decision. It would have been advantageous to request comments on the new direction proposed by the SAR DT on SOLs as it was heavily commented on during the last round of comments. Also it appears that all SOL are not crated equal, see the discussion below discussing potential SOL issues.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

To the extent that an SOL is truly local (i.e. radial load serving line), there is no need for the SOL requirements. However, there are SOLs that may not pose a transmission security problem but could impose a generation adequacy problem on another system if the equipment should become damaged. Imports into another system may then be reduced. Additionally, multiple SOLs occurring on a system may be a sign of an undetected IROL. Clearly there should be an obligation on the part of the TOP and RC to review the situation to rule it out.



**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
Name: Rick White		
Organization: Northeast Utilities		
Telephone: 860-665-2572		
E-mail: whitefb@nu.com		
<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input type="checkbox"/> ERCOT	<input checked="" type="checkbox"/>	1 — Transmission Owners
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

Group Comments (Complete this page if comments are from a group.)

**Group Name:**

**Lead Contact:**

**Contact Organization:**

**Contact Segment:**

**Contact Telephone:**

**Contact E-mail:**

Additional Member Name	Additional Member Organization	Region*	Segment*

\*If more than one Region or Segment applies, please list all that apply. Regional acronyms and segment numbers are shown on prior page.

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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: TOP-001-1 R7.3 Replacing "at the earliest time" with "without delay" is not appropriate, since the step covers "When time does not permit.....". With this change, if there were any delay, it would be a noncompliance.

TOP-007-0 Rewording R2 to say act "without delay", in lieu of "as soon as possible" is not desirable. With this change, if there were any delay, it would be a noncompliance.

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<b>Individual Commenter Information</b> (Complete this page for comments from one organization or individual.)		
Name:	David L. Gladey	
Organization:	PPL Susquehanna	
Telephone:	610-774-7774	
E-mail:	dlgladey@pplweb.com	
<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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Group Comments (Complete this page if comments are from a group.)

**Group Name:**

**Lead Contact:**

**Contact Organization:**

**Contact Segment:**

**Contact Telephone:**

**Contact E-mail:**

<b>Additional Member Name</b>	<b>Additional Member Organization</b>	<b>Region*</b>	<b>Segment*</b>

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Please review the revised SAR and then answer the question on the following page. Please submit your comments by **September 7, 2007** to [sarcomm@nerc.com](mailto:sarcomm@nerc.com) with the words “Real-time TOP\_BA SAR” in the subject line.

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

---

1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: IRO-004-1 is applicable to Generator Owners, currently the SAR only list the generator operators. The reliability functions listed in the SAR should be revised to include Generator Owner.



**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

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<b>Individual Commenter Information</b>		
(Complete this page for comments from one organization or individual.)		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region (check all Regions in which your company operates)		Registered Ballot Body Segment (check all industry segments in which your company is registered)
<input type="checkbox"/> ERCOT	<input type="checkbox"/>	1 — Transmission Owners
<input type="checkbox"/> FRCC	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> MRO	<input type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> NPCC	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input type="checkbox"/> RFC	<input type="checkbox"/>	5 — Electric Generators
<input type="checkbox"/> SERC	<input type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> SPP	<input type="checkbox"/>	7 — Large Electricity End Users
<input type="checkbox"/> WECC	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> NA – Not Applicable	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
	<input type="checkbox"/>	10 — Regional Reliability Organizations and Regional Entities

**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

Group Comments (Complete this page if comments are from a group.)

**Group Name:** Public Service Commission of South Carolina  
**Lead Contact:** Phil Riley  
**Contact Organization:** Public Service Commission of South Carolina  
**Contact Segment:** 9  
**Contact Telephone:** 803-896-5154  
**Contact E-mail:** philip.riley@psc.sc.gov

Additional Member Name	Additional Member Organization	Region*	Segment*
Mignon L. Clyburn	Public Service Commission of SC	SERC	9
Elizabeth B. "Lib" Fleming	Public Service Commission of SC	SERC	9
G. O'Neal Hamilton	Public Service Commission of SC	SERC	9
John E. "Butch" Howard	Public Service Commission of SC	SERC	9
Randy Mitchell	Public Service Commission of SC	SERC	9
C. Robert "Bob" Moseley	Public Service Commission of SC	SERC	9
David A. Wright	Public Service Commission of SC	SERC	9

\*If more than one Region or Segment applies, please list all that apply. Regional acronyms and segment numbers are shown on prior page.

## Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)

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### Background Information:

The SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03) was posted for comment from May 15 through June 13, 2007. The SAR Drafting Team considered the comments and corrected all noted typographical errors and made the following revisions to the SAR:

- Added IRO-004, IRO-005 & IRO-006 to the scope of standards to be reviewed to eliminate redundant requirements.
- Clarified that the reason for recommending the deletion of TOP-002-2, R8 is because the requirement is unmeasurable.
  - R8. Each Balancing Authority shall plan to meet voltage and/or reactive limits, including the deliverability/capability for any single contingency.)
- Removed the recommendation for deleting TOP-002-2, R11:
  - R11. The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators shall utilize identical SOLs for common facilities. The Transmission Operator shall update these Bulk Electric System studies as necessary to reflect current system conditions; and shall make the results of Bulk Electric System studies available to the Transmission Operators, Balancing Authorities (subject confidentiality requirements), and to its Reliability Coordinator.
- Reworded the recommendation in TOP-002-2, R14 & R15 to clarify that these requirements may be better addressed in other standards.
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments:

**Comment Form for Second Draft of SAR for Project 2007-03 — Real-time Transmission Operations and Balancing of Load and Generation**

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<b>Individual Commenter Information</b>		
<b>(Complete this page for comments from one organization or individual.)</b>		
Name:	Thomas J. Bradish	
Organization:	Reliant Energy	
Telephone:	724-597-8593	
E-mail:	tbradish@reliant.com	
<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
<input checked="" type="checkbox"/> <b>ERCOT</b>	<input type="checkbox"/>	1 — Transmission Owners
<input checked="" type="checkbox"/> <b>FRCC</b>	<input type="checkbox"/>	2 — RTOs and ISOs
<input type="checkbox"/> <b>MRO</b>	<input checked="" type="checkbox"/>	3 — Load-serving Entities
<input type="checkbox"/> <b>NPCC</b>	<input type="checkbox"/>	4 — Transmission-dependent Utilities
<input checked="" type="checkbox"/> <b>RFC</b>	<input checked="" type="checkbox"/>	5 — Electric Generators
<input checked="" type="checkbox"/> <b>SERC</b>	<input checked="" type="checkbox"/>	6 — Electricity Brokers, Aggregators, and Marketers
<input type="checkbox"/> <b>SPP</b>	<input type="checkbox"/>	7 — Large Electricity End Users
<input checked="" type="checkbox"/> <b>WECC</b>	<input type="checkbox"/>	8 — Small Electricity End Users
<input type="checkbox"/> <b>NA – Not Applicable</b>	<input type="checkbox"/>	9 — Federal, State, Provincial Regulatory or other Government Entities
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## Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)

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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: In IRO-004-1 Reliability Coordination Operations Planning section 4.6 Generator Owners should be deleted. This standard is also applicable to generator operators as listed in 4.7. The justification for deleting GO is that this reliability standard addresses the operation of a generating facility. The GOP and not the GO would be the entity most knowledgeable of equipment capabilities and ratings. The GOP would be the entity conducting and supervising any testing or unit operation required to comply with this standard. The GOP is most likely the entity responsible for maintenance of unit equipment so the GOP would be most familiar with equipment limits, ratings and capabilities. In addition, replacing GO with GOP in this standard and other standards has the following benefits:

1. How a facility is operated has more impact on reliability than ownership of a facility.
2. Removing the GO from responsibility will more clearly define who is responsible for standard compliance at jointly-owned facilities.
3. For jointly-owned facilities, this change eliminates the need for each owner to make redundant submittals and streamlines administration for each Regional Entity.
4. As the industry moves away from the regulated model, more non-traditional entities will become owners of facilities. These owners typically contract operation responsibilities to entities with operating experience. The operating entity will more fully understand the importance of reliability and would be in a better position to comply.
5. Requiring the GO to be responsible for standard compliance may in some cases discourage non-traditional entities from owning generating assets, which will hinder competition in the market.



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Name:		
Organization:		
Telephone:		
E-mail:		
<b>NERC Region (check all Regions in which your company operates)</b>		<b>Registered Ballot Body Segment (check all industry segments in which your company is registered)</b>
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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

Group Comments (Complete this page if comments are from a group.)

**Group Name:** Southern Company  
**Lead Contact:** JT Wood  
**Contact Organization:** Southern Company Services  
**Contact Segment:**  
**Contact Telephone:** 205-257-6238  
**Contact E-mail:** jtwood@southernco.com

<b>Additional Member Name</b>	<b>Additional Member Organization</b>	<b>Region*</b>	<b>Segment*</b>
Marc Butts	Southern Company Services	SERC	1
Jim Busbin	Southern Company Services	SERC	1
Roman Carter	Southern Company Services	SERC	1

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1. Do you agree to expand the scope of the SAR to include IRO-004, -005, & -006 for the purpose of eliminating redundancy related to the Transmission Operator and Balancing Authority?

Yes

No

Comments: To keep consistency and development among the related standards these standards should be taken into account in the review.

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**Comment Form — Second Draft of SAR for Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03)**

Group Comments (Complete this page if comments are from a group.)

**Group Name:** WECC Reliability Coordination Comments Work Group  
**Lead Contact:** Nancy Bellows  
**Contact Organization:** WACM  
**Contact Segment:** 10  
**Contact Telephone:** 970-461-7246  
**Contact E-mail:** bellows@wapa.gov

Additional Member Name	Additional Member Organization	Region*	Segment*
Paul Bleuss	CMRC	WECC	1
Mike Gentry	SRP	WECC	1
Greg Tillitson	CMRC	WECC	1

\*If more than one Region or Segment applies, please list all that apply. Regional acronyms and segment numbers are shown on prior page.

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Yes

No

Comments: