

## **Consideration of Comments on the First Posting of the SAR for Generator Verifications**

The members of the SAR drafting team for Project 2007-09 Generator Verification thank all commenters who submitted comments on Draft 1 of the SAR. This SAR was posted for a 30-day public comment period from April 20 through May 21, 2007. The requester asked stakeholders to provide feedback on the SAR through a special SAR Comment Form. There were 16 sets of comments, including comments from 63 different individuals from more than 35 organizations representing 7 of the 10 Industry Segments as shown in the table on the following pages.

In response to the comments received, the SAR drafting team has revised the SAR for Project 2007-09 Generator Verification as follows:

- Added the Generator Operator and Reliability Coordinator as reliability functions that may have responsibilities in the proposed standards.
- Added language to clarify that the standard drafting team will consider the Phase III & IV field test results when developing the standards associated with this project.

In addition, the SAR drafting team received some comments recommending specific modifications to requirements that were outside the scope of responsibility of the SAR drafting team. These comments have been collected and added as Attachment 1 to the SAR for resolution during standard drafting.

Based on the comments received, the SAR drafting team recommends that the Standards Committee accept the revised SAR for Project 2007-09 Generation Verification for:

- New standards to be finalized as part of this project:
  - PRC-019 — Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection
  - PRC-024 — Generator Performance During Frequency and Voltage Excursions
  - MOD-026 — Verification of Models and Data for Generator Excitation System Functions
  - MOD-027 — Verification of Generator Unit Frequency Response
- Existing standards to be revised as part of this project:
  - MOD-024 — Verification of Generator Gross and Net Real Power Capability
  - MOD-025 — Verification of Generator Gross and Net Reactive Power Capability

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:

<http://www.nerc.com/~filez/standards/Generator-Verification-Project-2007-09.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 Director of Standards, Gerry Adamski, at 609-452-8060 or at [gerry.adamski@nerc.net](mailto:gerry.adamski@nerc.net). In addition, there is a NERC Reliability Standards Appeals Process.<sup>1</sup>

---

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

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

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.	Thad K. Ness	AEP	✓				✓	✓						
2.	Anita Lee (G1)	AESO		✓										
3.	John E. Sullivan	Ameren	✓		✓									
4.	Robert Ferguson	Ameren Services						✓						
5.	Rich Young	ATC LLC.	✓											
6.	Dave Rudolph (G7)	Basin Electric Power Cooperative	✓		✓		✓	✓						
7.	Brent Kingsford (G1)	CAISO		✓										
8.	Ed Thompson (G2)	Con-Edison	✓		✓			✓						
9.	John Loftis (G5)	Dominion Virginia Power	✓		✓									
10.	Larry Whanger (G5)	Dominion Virginia Power					✓							
11.	Art Howell (G5)	Entergy	✓		✓		✓							
12.	Stan Jaskot (G5)	Entergy					✓							
13.	Will Franklin (G6)	Entergy						✓						
14.	Arthur Howell (G6)	Entergy Fossil Organization					✓							
15.	Jules Guillot (G6)	Entergy Fossil Organization					✓							
16.	Stanley Jaskot (G6)	Entergy Fossil Organization					✓							
17.	Thomas Barnett (G6)	Entergy Fossil Organization					✓							
18.	Steve Myers (G1)	ERCOT		✓										✓
19.	Doug Hohlbaugh	FirstEnergy	✓											
20.	Joe Knight (G7)	Great River Energy	✓		✓		✓							
21.	Roger Champagne (I) (G2)	HQT	✓											
22.	David Kiguel (G2)	Hydro One Networks	✓		✓									
23.	Ron Falsetti (I) (G1)	IESO		✓										
24.	Kathleen Goodman	ISO- NE		✓										

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

	(I) (G2)												
25.	Matt Goldberg (G1)	ISO-NE		✓									
26.	Bill Shemley (G2)	ISO-NE		✓									
27.	Don Nelson (G2)	MA PUC										✓	
28.	Mike Brytowski (G7)	Midwest Reliability Organization											✓
29.	Carol Gerou (G7)	Minnesota Power	✓		✓		✓	✓					
30.	William Phillips (G1)	MISO		✓									
31.	Mike Rinalli (G2)	National Grid US	✓										
32.	Randy Macdonald (G2)	New Brunswick System Operator		✓									
33.	Mike Gopinathan (G2)	Northeast Utilities	✓										
34.	Guy V. Zito (G2)	NPCC											✓
35.	Greg Campoli (G2)	NYISO		✓									
36.	Ralph Rufrano (G2)	NY Power Authority	✓										
37.	Jim Castle (G1)	NYISO		✓									
38.	Al Adamson (G2)	NYSRC											✓
39.	Richard Kafka	PHI	✓		✓			✓					
40.	Alicia Daugherty (G1)	PJM		✓									
41.	C. Robert Moseley (G4)	PSC of SC											✓
42.	David A. Wright (G4)	PSC of SC											✓
43.	Elizabeth B. Fleming (G4)	PSC of SC											✓
44.	G. O'Neal Hamilton (G4)	PSC of SC											✓
45.	John E. Howard (G4)	PSC of SC											✓
46.	Mignon L. Clyburn (G4)	PSC of SC											✓
47.	Phil Riley (G4)	PSC of SC											✓
48.	Randy Mitchell (G4)	PSC of SC											✓
49.	Pat Longshore (G5)	SCE&G			✓		✓	✓					
50.	Pat Huntley (G5)	SERC Reliability Corp											✓
51.	Lee Taylor (G5)	Southern Company	✓										
52.	J.T Wood (G3)	Southern Company SI	✓										
53.	Jim Busgin (G3)	Southern Company SI											
54.	John Ciza (G3)	Southern Company SI						✓					
55.	Keith Calhoun (G3)	Southern Company SI	✓										
56.	Marc Butts (G3)	Southern Company SI	✓										
57.	Roman Carter (G3)	Southern Company SI	✓										

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

---

58.	Terry Crawley (G3)	Southern Company SI					✓					
59.	Tom Higgins (G3)	Southern Company SI					✓					
60.	Tom Higgins (G5)	Southern Company SI					✓					
61.	Charles Yeung (G1)	SPP										✓
62.	David Williams (G5)	US Army Corps of Engineers									✓	
63.	Pam Oreschnick(G7)	Xcel Energy	✓		✓		✓	✓				

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

G1 – IRC Standards Review Committee

G2 – NPCC CP9 Reliability Standards Working Group (NPCC CP9)

G3 – Southern Company Services

G4 – PSC of South Carolina

G5 – SERC Generator Standards Filed Test Task Force

G6 – Entergy

G7 – MRO NSRS

## Index to Questions, Comments, and Responses

1. Do you agree that there is a reliability-related need to finalize these standards (MOD-026, MOD-027, PRC-024, PRC-019)? .....	7
2. Do you agree that there is a reliability-related need to revise these standards (MOD-024 and MOD-025) to support accurate modeling?.....	11
3. Do you agree with this scope? .....	14
4. Do you agree with the list of proposed applicable functional entities?.....	19
5. If you are aware of any regional variances that will be needed as a result of this project, please identify the Regional Variance. ....	22
6. If you are aware of any business practice that will be needed or that will need to be modified as a result of this project, please identify the business practice. ....	24
7. If you have any other comments on this SAR that you haven't already mentioned above, please provide them here:.....	25

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

1. The field test from the Phase III & IV project included PRC-019, PRC-024, MOD-026, and MOD-027. The field testing has shown that requirements can be developed and incorporated into standards for the following:
  - Generator excitation system verification (MOD-026)
  - Generator frequency response verification (MOD-027)
  - Expectations for generators to remain connected during specified voltage and frequency excursions (PRC-024)
  - Coordination of generator voltage regulator controls and limit functions with generator capabilities and protective relays (PRC-019)

Finalizing these standards will require significant changes that are outside the scope of the original Phase III & IV SARs, which is why the draft standards have been included in the scope of this new SAR.

Do you agree that there is a reliability-related need to finalize these standards (MOD-026, MOD-027, PRC-024, PRC-019)?  
If not, please explain in the comment area.

**Summary Consideration:** Most commenters agreed that there is a reliability-related need to finalize the four Phase III & IV standards that were field tested.

Question #1			
Commenter	Yes	No	Comment
Ameren Services			At this point in time we cannot determine if there is a reliability related need to finalize these standards. The results of the field test by the 4 participating RROs will not be complete until late June 2007. The 4 RROs, in support of the NERC Field Test team, have spent significant resources in an attempt to implement procedures and subsequently carry out the draft Reliability Standard requirements. Thus, in order to ensure proper consideration is given to the results of the field tests, the scope of the SAR should make it clear that the decision by the SDT to either refine / significantly revise / or delete these standards should be heavily weighted on the outcome of the field test. Recommend that the last sentence in the paragraph in the SAR on page SAR-3 under "Detailed Description" be modified to: "In addition, the SDT will consider and address all applicable FERC Orders, including Order 693, in addition to any modifications, deficiencies, and other items as found in the NERC Phase III-IV Planning Standard Field Tests, and in addition the following proposed changes for each of the six standards in this set of standards:"
<b>Response:</b>			
The NERC Phase III-IV Field Tests will be complete on June 19, before the subject SAR is completed and before the Generation Verification SDT is formed. The SAR DT is meeting at the same time that the field test reports are being given so that the DT will have first hand knowledge of the results. The intention of the SAR was to clearly direct the SDT to give			

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #1			
Commenter	Yes	No	Comment
proper consideration to the results of the field tests. The SAR has been clarified accordingly.			
Entergy		<input checked="" type="checkbox"/>	It is questionable whether there is a reliability related need for these standards. The field tests are not complete, but initial results show that PRC-024 and MOD-027 are difficult to perform, give questionable results, and may not be translated into better models or higher reliability. MOD-026 is also difficult to translate into better models or higher reliability.
<p><b>Response:</b></p> <p>During the public posting for comment of the proposed draft Phase III-IV Standards, the industry did provide comments questioning the feasibility of performing the draft requirements, the industry did consistently affirm the reliability need. The purpose of the field test was to specifying confirm whether the requirements were feasible. In addition, since the NERC Phase III-IV Field Tests will be complete on June 19, before the subject SAR is completed and before the Generation Verification SDT is formed. The SAR DT is meeting at the same time that the field test reports are being given so that the DT will have first hand knowledge of the results. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
SERC GSFT-TF			At this point in time we cannot determine if there is a reliability related need to finalize these standards. The results of the field test by the 4 participating RROs will not be complete until late June 2007. The 4 RROs, in support of the NERC Field Test team, have spent significant resources in an attempt to implement procedures and subsequently carry out the draft Reliability Standard requirements. Thus, in order to ensure proper consideration is given to the results of the field tests, the scope of the SAR should make it clear that the decision by the SDT to either refine / significantly revise / or delete these standards should be heavily weighted on the outcome of the field test. Recommend that the last sentence in the paragraph in the SAR on page SAR-3 under "Detailed Description" be modified to: "In addition, the SDT will consider and address all applicable FERC Orders, including Order 693, in addition to any modifications, deficiencies, and other items as found in the NERC Phase III-IV Planning Standard Field Tests, and in addition the following proposed changes for each of the six standards in this set of standards:"
<p><b>Response:</b></p> <p>The NERC Phase III-IV Field Tests will be complete on June 19, before the subject SAR is completed and before the Generation Verification SDT is formed. The SAR DT is meeting at the same time that the field test reports are being given so that the DT will have first hand knowledge of the results. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
SCT		<input checked="" type="checkbox"/>	We are in agreement with the comments made by the SERC Generator Standards Field Test Task Force to this question. To re-state their comments here, "At this point we cannot determine if there is

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #1			
Commenter	Yes	No	Comment
			a reliability related need to finalize these standards. The results of the field test by the 4 participating RROs will not be complete until late June 2007. The 4 RROs, in support of the NERC Field Test team, have spent significant resources in an attempt to implement procedures and subsequently carry out the draft Reliability Standard requirements. Thus, in order to ensure proper consideration is given to the results of the field tests, the scope of the SAR should make it clear that the decision by the SDT to refine, significantly revise or delete these standards should be heavily weighted on the outcome of the field test. (We) Recommend that the last sentence in the paragraph in the SAR on page SAR-3 under "Detailed Description" be modified to: "In addition, the SDT will consider and address all applicable FERC Orders, including Order 693, in addition to any modifications, deficiencies, and other items as found in the NERC Phase III-IV Planning Standard Field Tests, and in addition the following proposed changes for each of the six standards in this set of standards:"
<p><b>Response:</b></p> <p>The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
HQT NPCC CP9 RSWG	<input checked="" type="checkbox"/>		It is our understanding and hope that the results of the recent field test will be considered during development of the Standards
<p><b>Response:</b></p> <p>The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
AEP	<input checked="" type="checkbox"/>		
Ameren	<input checked="" type="checkbox"/>		
ATC LLC.	<input checked="" type="checkbox"/>		
FirstEnergy	<input checked="" type="checkbox"/>		
IESO	<input checked="" type="checkbox"/>		
IRC-SRC	<input checked="" type="checkbox"/>		
ISO-NE	<input checked="" type="checkbox"/>		
MRO	<input checked="" type="checkbox"/>		
PHI	<input checked="" type="checkbox"/>		

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

---

Question #1			
Commenter	Yes	No	Comment
PSC SC	<input checked="" type="checkbox"/>		

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

2. Two of the standards (MOD-024 and MOD-025) associated with this SAR had already been approved by the NERC Board of Trustees, but are “pending” with FERC because they include “fill-in-the-blank” requirements assigned to the Regional Reliability Organization. These standards must be revised to remove the fill-in-the-blank characteristics before they can become mandatory and enforceable. The intent of MOD-024 and MOD-025 is to ensure that accurate information on generator gross and net real and reactive power capability is available for the steady-state models used to assess bulk electric system reliability. To be enforceable, these standards need to be revised.

Do you agree that there is a reliability-related need to revise these standards (MOD-024 and MOD-025) to support accurate modeling?

**Summary Consideration:** Most commenters agreed that there is a reliability-related need to revise MOD-024 and MOD-025.

Question #2			
Commenter	Yes	No	Comment
SCT		<input checked="" type="checkbox"/>	The scope statement for both of these standards includes increases in their scope -- MOD-024 now reflects increased demonstration requirements and MOD-025 scope has crept to require expanded verification to include multiple operating points. The scope of these two standards should be restricted to that of the current versions.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to “require verification of reactive power capability at multiple points....”. The SDT will be expected , as outlined in “Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890” (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. In addition the FERC stated concerns about the lack of clarity in MOD-024.</p>			
SERC GSFT-TF	<input checked="" type="checkbox"/>		However, the scope statement for MOD-025 includes increased scope: (scope creep to require expanded verification to include multiple operating points). The scope of this standard needs to be restricted to that of the current version!
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to “require verification of reactive power capability at multiple points....”. The SDT will be expected , as outlined in “Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890” (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p>			
Ameren	<input checked="" type="checkbox"/>		With regards to the scope of MOD-025, it should not be necessary to include a blanket requirement for verification of reactive power capability at multiple points for all generators. However, should a generator frequently have difficulty reaching its stated reactive power output, additional testing

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #2			
Commenter	Yes	No	Comment
			requirements for that generator would be indicated.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points....". The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p>			
Entergy	<input checked="" type="checkbox"/>		However, there is no need increase the scope and test multiple points for MOD-025 for leading and lagging. This will not improve reliability or accurate modeling.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points....". The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p>			
FirstEnergy	<input checked="" type="checkbox"/>		The present legacy document ECAR Document 4 details the testing and is sufficient to cover the present accurate for a regional basis. The standards if spread to a national level will need to look at the difference between summer peaking regions and winter peaking. Presently the testing in RFC follows ECAR Document 4 which corrects the testing for average ambient conditions which is left up to the discretion of the testing personnel. The temperature conditions of the water inlet or ambient air needs to be defined.
<p><b>Response:</b></p> <p>Thank you for your suggestions. Your specific concerns regarding summer and winter peaking regions and temperatures which impact capabilities will be forwarded to the Standard Drafting Team.</p>			
AEP	<input checked="" type="checkbox"/>		
Ameren Services	<input checked="" type="checkbox"/>		
ATC LLC.	<input checked="" type="checkbox"/>		
HQT	<input checked="" type="checkbox"/>		
IESO	<input checked="" type="checkbox"/>		

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

---

Question #2			
Commenter	Yes	No	Comment
IRD-SRC	<input checked="" type="checkbox"/>		
ISO-NE	<input checked="" type="checkbox"/>		
MRO	<input checked="" type="checkbox"/>		
NPCC CP9 RSWG	<input checked="" type="checkbox"/>		
PHI	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

3. The scope of this project includes:

- Modifying the six standards associated with this project so they conform to the latest version of NERC’s Reliability Standards Development Procedure and the ERO Sanction Guidelines,
- Replacing the fill-in-the-blank requirements assigned to the Regional Reliability Organization with requirements that can be applied on a continent-wide basis and are assigned to users, owners, or operators of the bulk power system, and
- Addressing issues identified in FERC Order 693.

Do you agree with this scope?

If not, please explain in the comment area.

**Summary Consideration:** Most commenters indicated they do agree with the scope of this project. Some commenters suggested that the scope be modified to specifically include a notation that the standard drafting team will consider the results of the field tests, and the drafting team did modify the SAR to clarify that the project does include the following:

- Considering and addressing issues identified during Phase III & IV field testing.

Some commenters suggested specific changes to the technical content of the requirements in the draft standards. The SAR DT modified the SAR to clarify that the standard drafting team must consider the comments submitted by stakeholders during the posting of the SAR, and the SAR DT appended these comments to the SAR.

Question #3			
Commenter	Yes	No	Comment
SCT		<input checked="" type="checkbox"/>	We are essentially in agreement with the three bullet points included in this question (and project); however, we are not in agreement with the scope of the SAR, specifically as it relates to MOD-024 and MOD-025. The scope of MOD-024 and MOD-025 have both been expanded beyond what is stated in the bullet points of this question. As we point out in our response to Question #2, MOD-024 now reflects increased demonstration requirements and MOD-025 scope has expanded (crept) to require expanded verification to include multiple operating points. The changes to the other four standards (PRC-019, PRC-024, MOD-026 and MOD-027) should be based on the field test results up to, and including, their elimination, if so recommended.
<b>Response:</b>			
In FERC Order 693, the ERO was directed to modify MOD-024-1 and 025-1 including “require verification of reactive power capability at multiple points....”. As such, the SDT is obligated to address, as outlined in “Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890” (April 13, 2006), the FERC directives or propose other viable alternatives that achieve that same objective.			
The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field			

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #3			
Commenter	Yes	No	Comment
tests. The SAR has been clarified accordingly.			
SERC GSFT-TF		<input checked="" type="checkbox"/>	The scope of MOD-025 has been expanded beyond what is stated above. The changes to the four field test standards should be based on the field test results up to and including their elimination if so recommended.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points...." The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p> <p>The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
Entergy		<input checked="" type="checkbox"/>	The scope of MOD-025 has been expanded beyond what is stated above. The changes to the four field test standards should be based on the field test results up to and including their elimination if so recommended.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points...." The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p> <p>The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
IESO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The SDT should consider the term characteristics during the review of the standards. The following is an example of: PRC-019-1 R2.1.2 & R2.1.5 - How to define characteristics? A common interpretation could be to define characteristics as the "setpoints" for the controllers. However, this does not appear to be the case as in other requirements they request "setpoints" as is shown in R2.1.6. MOD-026-1 appears to address this but refers to the excitation system functions. In other words, the terms "characteristics" and "setpoints/settings" are presented in the requirements without clearly clarifying the meaning of the terms. "Characteristic" could mean something like a Generator capability curve (or any operating curve for that matter or nomograms) where the operations are defined by a "bounded region of

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #3			
Commenter	Yes	No	Comment
			<p>operation” as such and is kind of “analog” in nature. “Setpoint/Setting” on the other hand could be something like a Generator Under-frequency trip setting where there are “set-points” for tripping – kind of “digital” in nature. Is this what the SDT means by these terms. Please clarify. As the standards are reviewed, there are specific questions that need to be addressed such as: MOD-025-1</p> <p>R1.5.3 - Is this individual loads, or is this an overall value for the total auxiliary loads running at full station output?</p> <p>Also, What will define the need to revisit this when equipment changes occur? In addition, the SDT should consider additional field tests for all the changes associated with the revised standard.</p>
<p><b>Response:</b></p> <p>Thank you for your comments. They will all be forwarded to the SDT for their consideration. The task of the SDT is to clarify the current draft standards and remove RRO requirements. The commenter is encouraged to review and comment on the public postings by the future Generator Verification SDT.</p> <p>Regarding your comment concerning the field test results, the SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
IRC-SRC ISO-NE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The SDT should consider the term characteristics during the review of the standards. Sections below are identified as locations for clarification.</p> <p>-PRC-019-1</p> <p>R2.1.2 &amp; R2.1.5 - How to define characteristics? A common interpretation would be define characteristics as the "setpoints" for the controllers. However, this does not appear to be the case as in other requirements they request "setpoints" as is shown in R2.1.6. MOD-026-1 appears to address this but refers to the excitation system functions. What is meant by characteristics, if the characteristics are not defined as the setpoint?</p> <p>As the standards are reviewed, there are specific questions that need to be addressed such as: MOD-025-1</p> <p>R1.5.3 - Is this individual loads, or is this an overall value for the total auxiliary loads running at full station output?</p> <p>Also, What will define the need to revisit this when equipment changes occur?</p> <p>The SDT should also identify a date for compliance for each of the requirements and measures. Here are a few examples:</p> <p>-MOD-024-1</p> <p>M1 &amp; M3 - Will need to prescribed a date for compliance</p> <p>-MOD-026-1</p> <p>M3 - Will need to prescribed a date for compliance</p>

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

<b>Question #3</b>			
<b>Commenter</b>	<b>Yes</b>	<b>No</b>	<b>Comment</b>
			-MOD-027-1 M1 & M3 - Will need to prescribed a date for compliance In addition the SDT should consider additional field tests for all the changes associated with the revised standard. Also careful consideration needs to be provided to the implementation plans.
<p><b>Response:</b></p> <p>Thank you for your comments. They will all be forwarded to the SDT for their consideration. The task of the SDT is to clarify the current draft standards and remove RRO requirements. The commenter is encouraged to review and comment on the public postings by the future Generator Verification SDT.</p> <p>Regarding your comment concerning the field test results, the SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
FirstEnergy	<input checked="" type="checkbox"/>		The project should account for potential regional differences. See comment on question # 5 below
<p><b>Response:</b></p> <p>Your comment will be forwarded to the SDT for their consideration. The SAR Drafting Team encourages the commenter to review the future posting of the draft Reliability Standards proposed by the future Generation Verification SDT, and make specific comments if necessary.</p>			
Ameren Services	<input checked="" type="checkbox"/>		The scope of MOD-025 has been expanded beyond what is stated above. The changes to the four field test standards should be based on the field test results.
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to “require verification of reactive power capability at multiple points....”. The SDT will be expected , as outlined in “Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890” (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p> <p>The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>			
NPCC CP9 RSWG	<input checked="" type="checkbox"/>		The SDT should consider additional field tests for all the changes associated with the revised standard.
<p><b>Response:</b></p>			

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

---

Question #3			
Commenter	Yes	No	Comment
The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests, and the SAR will be clarified accordingly.			
AEP	<input checked="" type="checkbox"/>		
ATC LLC.	<input checked="" type="checkbox"/>		
HQT	<input checked="" type="checkbox"/>		
MRO	<input checked="" type="checkbox"/>		
PHI	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

4. Page 6 of the SAR identifies a list of reliability functions that may be assigned responsibility for requirements in the set of standards addressed by this SAR. (At this point additional industry debate is needed on which function or functions will be assigned responsibility for the requirements currently assigned to the RRO — and that debate is expected to take place during standard drafting as the requirements are refined. Note that the standard drafting team can “reduce” but cannot “expand” this list of responsible reliability functions during standard drafting.)

Do you agree with the list of proposed applicable functional entities?

If you feel that the list should be modified, please explain in the comment area.

**Summary Consideration:** Many commenters indicated that the Generator Operator should be added to the list of reliability functions with responsibilities in the revised standards and the drafting team modified the SAR to include the Generator Operator. In addition, one commenter suggested that the Reliability Coordinator may have additional requirements in the proposed standards, and the SAR DT adopted the suggestion to also add the Reliability Coordinator to the list of reliability functions that may have responsibilities in the proposed standards.

Question #4			
Commenter	Yes	No	Comment
ATC LLC.		<input checked="" type="checkbox"/>	Generator Operator should be included.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
SCT		<input checked="" type="checkbox"/>	The list of possible applicable functional entities found on page 6 of the SAR should include Generator Operators. It seems to us that generator testing involving real and reactive power quantities will not be possible without the inclusion of this functional entity.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
SERC GSFT-TF		<input checked="" type="checkbox"/>	The Generator Operator should be added to the list of possible applicable functional entities on page 6 of the SAR.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
FirstEnergy		<input checked="" type="checkbox"/>	It is recommended that the SAR be written to include the Generator Operator entity. If the drafting

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #4			
Commenter	Yes	No	Comment
			team determines only the GO is applicable and that the GOP is not needed it can be removed. As stated above, the SDTs can reduce scope but not expand. The Generator Operator may have involvement in PRC-024.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
HQT		<input checked="" type="checkbox"/>	Depending on the Requirements that are developed during the standard drafting phase, the Generator Operator may be an applicable entity.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
Entergy		<input checked="" type="checkbox"/>	
IESO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	We agree that the list covers all the reliability functions that are listed in the existing standards. However, in view of the expected industry debate on this issue, it may be prudent to add Generator Operator to the list in the event that any of the six standards should be revised to hold Generator Operators responsible for any tasks.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions.			
IRC-SRC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	The SDT should consider applicability to Generator Operators who will be required to actually perform the tests. The SDT should also review the applicability of this SAR to the Reliability Coordinator. It is unclear at this time what role the RC will have in requirements associated with this standard.
<b>Response:</b> The SAR drafting team agrees and Generator Operator has been added to the list of responsible reliability functions. The SAR drafting team also agrees that the SDT may determine it necessary for the Reliability Coordinator to be involved to the extent where verification activities are allowed or not for certain system conditions based on operational security analysis. Reliability Coordinator has been added to the list of responsible reliability functions.			
ISO-NE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ISO New England asked the SDT to consider applicability to Generator Operators who will be required to actually perform the tests.
<b>Response:</b>			

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #4			
Commenter	Yes	No	Comment
The SAR drafting team agrees and Generator Operator will be added to the list of responsible reliability functions.			
NPCC CP9 RSWG		<input checked="" type="checkbox"/>	Depending on the Requirements that are developed during the standard drafting phase, the Generator Operator may be an applicable entity.
<b>Response:</b> The SAR drafting team agrees and Generator Operator will be added to the list of responsible reliability functions.			
PHI		<input checked="" type="checkbox"/>	Generator Operator should be added.
<b>Response:</b> The SAR drafting team agrees and Generator Operator will be added to the list of responsible reliability functions.			
Ameren Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
MRO	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		
AEP	<input checked="" type="checkbox"/>		

5. If you are aware of any regional variances that will be needed as a result of this project, please identify the Regional Variance.

**Summary Consideration:** While some commenters identified the 'potential' for a regional variance, no commenters identified the need for any specific regional variances.

Question #5		
Commenter	Regional Variance	Comment
FirstEnergy		Not aware of existing, but potential for regional differences exist. The fill-in-the-blank needs to take into account regional differences such as summer or winter peaking conditions. The standard needs to address the main factor in generation capacity which is inlet water temperatures on once through cooling units and ambient temperature and humidity on cooling towers and combustion turbines.
<p><b>Response:</b></p> <p>Your comment will be forwarded to the SDT for their consideration. The SAR Drafting Team encourages the commenter to review the future posting of the draft Reliability Standards proposed by the future Generation Verification SDT, and make specific comments if necessary.</p>		
HQT	Possible	For Québec Interconnection, there might be some specific value for frequency range applicable for PRC-024 and PRC-019
<p><b>Response:</b></p> <p>The SAR Drafting Team encourages the commenter to review the future posting of the draft Reliability Standards PRC-019 and PRC-024 proposed by the future Generation Verification SDT, and make specific comments if necessary. In removing the RRO requirement to establish requirements for frequency excursions, the SDT will need, as you indicate, to propose specific limits for excursions needed to develop a continent or interconnection wide requirement.</p>		
NPCC CP9 RSWG	No	Within the Québec Interconnection, there might be some specific value for frequency range applicable for PRC-024 and PRC-019 and this should be allowed for in the standard drafting phase.
<p><b>Response:</b></p> <p>The SAR Drafting Team encourages the commenter to review the future posting of the draft Reliability Standards PRC-019 and PRC-024 proposed by the future Generation Verification SDT, and make specific comments if necessary. In removing the RRO requirement to establish requirements for frequency excursions, the SDT will need, as you indicate, to propose specific limits for excursions needed to develop a continent or interconnection wide requirement.</p>		

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

---

Question #5		
Commenter	Regional Variance	Comment
SCT	None	
Ameren Services	None	
SERC GSFT-TF	None	

## Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

---

6. If you are aware of any business practice that will be needed or that will need to be modified as a result of this project, please identify the business practice.

**Summary Consideration:** No commenter identified the need for a business practice to support the modified standards.

Question #6		
Commenter	Business Practice	Comment
FirstEnergy	-	Aware of none.
HQT	No	
NPCC CP9 RSWG	No	
SCT	None	
Ameren Services	None	
SERC GSFT-TF	None	

7. If you have any other comments on this SAR that you haven't already mentioned above, please provide them here:

**Summary Consideration:**

Question #7	
Commenter	Comment
AEP	<p>Please transmit to the Standard Drafting Team the following specific suggested revisions to MOD-025: Key changes relate to FERC's requirement that regional "fill-in-the-blank" standards be rewritten as North American standards; these and other recommended changes are provided below:</p> <p>A. Introduction</p> <p>1. Title: Verification of Generator [ ] Reactive Power Capabilities</p> <p>3. Purpose: To ensure that [ ] steady-state models used for assessing Bulk Electric System reliability reflect realistic/usable generator reactive power capabilities.</p> <p>B. Requirements</p> <p>R1. The North American Electric Reliability Corporation (NERC) shall establish and maintain procedures to address verification of generator gross and net Reactive Power capability. These procedures shall include the following:</p> <p>R1.5. Information to be reported to Regional Reliability Organization (RRO):</p> <p>R1.5.1. Verified maximum gross and net Reactive Power capability (both lagging and leading) at Seasonal Real Power generating capabilities as reported in accordance with Reliability Standard MOD-024 Requirement 1.5.1. and at Minimum Real Power output levels of generators. Net capabilities should be reported at the low- and high-voltage terminals of generator step-up (GSU) transformers.</p> <p>R1.5.3. Verified Real and Reactive Power of auxiliary loads fed from: (a) generator bus and (b) transmission system bus (listed separately).</p> <p>R1.5.5. System bus voltages (as scheduled and as verified), generator bus voltage and generator hydrogen pressure.</p> <p>R1.5.6. In-service transformer taps setting and impedance (including base quantities).</p> <p>R1.6. Requirement that sanity checks (or analysis) be used to ensure consistency/accuracy of reactive power capabilities obtained via measurement.</p> <p>R2. The RRO shall provide [ ] generator gross and net Reactive Power capability verification and reporting procedures, and any changes to those procedures, to ...</p> <p>R3. The Generator Owner shall follow NERC's procedures for verifying and reporting to RRO generator gross and net Reactive Power capabilities per R1.</p> <p>C. Measures</p> <p>M2. The RRO shall have written evidence that [ ] procedures...</p> <p>M3. The Generator Owner shall have written evidence it provided verified information of its generator gross and net Reactive Power capabilities, consistent with NERC's procedures.</p>

Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification

Question #7	
Commenter	Comment
	<p>D. Compliance                      This section should be revised to recognize that the procedures for generator Reactive Power capability verification will be written by NERC as a continent-wide standard. AEP recommends that Ape's Circular Letter OP-G-CL-011 (Reactive Capability Testing of Generators), developed over nearly two decades of testing experience and advocacy within the former ECAR region, be used as a reference in drafting this standard.</p>
<p><b>Response:</b></p> <p>Thank you for your suggestions. Your specific recommendations will be made available to the Standard Drafting Team.</p>	
Ameren	<p>MOD-026-1 and MOD-027-1: The existing language in R1.2 for each of these standards states that manufacturer data is one of the methods which can be utilized for verification of models and data. However, typical data for these types of models is generally not adequate to sufficiently characterize the models for use in system simulations.</p>
<p><b>Response:</b></p> <p>As part of the process of modifying the existing MOD-024 and 025 standards to remove the "fill in the blank" requirements and replacing them with requirements that can be applied on a continent-wide basis, the SDT will be charged to carefully consider the validity of each method that can be utilized for verification of models and data.</p>	
Ameren Services	<p>The scope of MOD-024 and MOD-025 should not be expanded beyond the scope contained in the current version of these two standards. The results of the field test for the other 4 Draft Reliability Standards by the 4 participating RROs will not be complete until late June 2007. Thus, the scope of the SAR should make it clear that the decision by the SDT to either refine / significantly revise / or delete these standards should be heavily weighted on the outcome of the field test.</p>
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points....". The SDT will be expected, as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. In addition the FERC stated concerns about the lack of clarity in MOD-024.</p> <p>The NERC Phase III-IV Field Tests will be complete on June 19, before the subject SAR is completed and before the Generation Verification SDT is formed. The SAR DT is meeting at the same time that the field test reports are being given so that the DT will have first hand knowledge of the results. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>	
ATC LLC.	<p>The SAR includes language requiring the SDT to identify any generators that should be exempt from compliance.</p>

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

<b>Question #7</b>	
<b>Commenter</b>	<b>Comment</b>
	<p>There are many standards both under this project and others (such as Project 2007-01) that need to consider applicability based on generator size and/or voltage. If these standards remain separate, this requirement will either force needless repetition of the same language in many standards, or there is a distinct possibility that differences will develop among the exemptions, making it very difficult for generator owners to know which of their generators are covered by which standards. I suggest there should be a global definition of minimum generator size to which all NERC Reliability Standards apply, much like the global definition of Bulk Electric System. To start the discussion let me suggest "generators with a net electrical output or 20 MW or greater, connected through a step-up transformer with a high voltage rating of 100 kV or higher."</p> <p>The wording in the third bullet point for MOD-024-1 and MOD-025-1 in the Detail Description should be changed from "Consider Requiring" to just "Require".</p>
<p><b>Response:</b></p> <p>Part of the work performed by the SDT is to clearly state the applicable entities and any specific characteristics. This was commented on by FERC repeatedly. The SDT will have to develop the "applicability" that is consistent with other NERC standards as you indicate. This will need to be done in concert with the definition of the BES and the compliance registration guidelines. Your comment will be forwarded to the SDT.</p> <p>The SAR Drafting Team agrees with your second comment and has changed the SAR accordingly.</p>	
Entergy	<p>MOD-24 &amp; 25 should not be increased beyond their current scope. Multiple test points cost time and money, and increase the potential of plant trips, but do not improve reliability. The rest of the standards should be judged based on the results of the field test and significantly modified or eliminated if the field test show that they are very difficult to perform, give questionable results or do not improve the reliability of the bulk power system.</p>
<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points....". The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p> <p>The SAR Drafting Team agrees. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>	
FirstEnergy	<p>On page SAR-3 under PRC-024-1, the bullet "Add requirement for the Transmission Owner and Generator Owner to coordinate protection systems" should be revised or removed. If it is included, it should be revised to specifically state what protection schemes are being coordinated via this standard. Otherwise it should be removed because the coordination of the transmission and generation protection is covered in PRC-001-1 R3 and R4.</p>

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

<b>Question #7</b>	
<b>Commenter</b>	<b>Comment</b>
<b>Response:</b>	
<p>PRC-001-1 R3 requires "A Generator Operator or Transmission Operator shall coordinate NEW protective systems and CHANGES". R4 requires "Each Transmission Operator shall coordinate protection systems on MAJOR transmission lines and interconnections with NEIGHBORING Generator Operators ....." It is the task of the SDT to propose requirements as a result of this SAR that complement and/or supplement PRC-001-1. Based on the SDT considerations and/or comments received during public postings, the SDT may consider writing another SAR to address these issues in a revision of PRC-001.</p>	
HQT NPCC CP9 RSWG	The industry should be provided the opportunity to comment on and provide suggestions for the periodicity and magnitude of the testing.
<b>Response:</b>	
<p>Industry will have the opportunity to comment on all aspects of future drafts of the NERC Reliability Standards to be developed by the future Generator Verification SDT as required by the NERC Standard Development Procedure.</p>	
IRC - SRC	There is a reliability need for this SAR, but the Industry must be allowed to comment on the periodicity of the tests. There should be justification for annual testing requirements, since some characteristics do not change appreciably over time.
<b>Response:</b>	
<p>Thank you for your comments. They will all be forwarded to the SDT for their consideration. The task of the SDT is to clarify the current draft standards and remove RRO requirements. The commenter is encouraged to review and comment on the public postings by the future Generator Verification SDT.</p>	
ISO-NE	There is a reliability need for this SAR, but the Industry must be allowed to comment on the periodicity and magnitude of the tests. There should be justification for annual testing since characteristics do not change appreciably over time.
<b>Response:</b>	
SCT	The scope of MOD-024 and MOD-025 should not be expanded beyond the scope contained in the current version of these two standards. As for the other four standards; PRC-019, PRC-024, MOD-026 and MOD-027, the timing of the subject SAR appears to be premature since the field testing is not complete.
<b>Response:</b>	
<p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points...". The SDT will be expected, as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other</p>	

**Consideration of Comments on 1<sup>st</sup> Draft of SAR for Project 2007-09 Generator Verification**

<b>Question #7</b>	
<b>Commenter</b>	<b>Comment</b>
	<p>viable alternatives that meet the same objective.</p> <p>The NERC Phase III-IV Field Tests will be complete on June 19, before the subject SAR is completed and before the Generation Verification SDT is formed. The SAR DT is meeting at the same time that the field test reports are being given so that the DT will have first hand knowledge of the results. The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>
SERC GSFT-TF	<p>The scope of MOD-024 and MOD-025 should not be expanded beyond the scope contained in the current version of these two standards. The results of the field test for the other 4 Draft Reliability Standards by the 4 participating RROs will not be complete until late June 2007. Thus, the scope of the SAR should make it clear that the decision by the SDT to either refine / significantly revise / or delete these standards should be heavily weighted on the outcome of the field test.</p>
	<p><b>Response:</b></p> <p>In FERC Order 693, the ERO was directed to modify MOD-025-1 to "require verification of reactive power capability at multiple points....". The SDT will be expected , as outlined in "Guidance to Standards Drafting Team Relative to FERC Order Nos. 693 and 890" (April 13, 2006), to address verification of reactive power capability at multiple points or provide other viable alternatives that meet the same objective. Your suggestion will be forwarded to the SDT for their consideration.</p> <p>The intention of the SAR was to clearly direct the SDT to give proper consideration to the results of the field tests. The SAR has been clarified accordingly.</p>
XCEL	<p>Under Draft PRC-024-1 on the SAR form, the fourth bullet says "Add a requirement for the Transmission Owner and Generator Owner to coordinate protection systems". This is already required and measured under PRC-001-1, and should therefore not be added as a requirement in PRC-024-1.</p>
	<p><b>Response:</b></p> <p>PRC-001-1 R3 requires "A Generator Operator or Transmission Operator shall coordinate NEW protective systems and CHANGES". R4 requires "Each Transmission Operator shall coordinate protection systems on MAJOR transmission lines and interconnections with NEIGHBORING Generator Operators ....." It is the task of the SDT to propose requirements as a result of this SAR that complement and/or supplement PRC-001-1. Based on the SDT considerations and/or comments received during public postings, the SDT may consider writing another SAR to address these issues in a revision of PRC-001.</p>