

Consideration of Comments on Generator Requirements at the Transmission Interface — Project 2010-07

The GOTO Drafting Team thanks all commenters who submitted comments on the proposed SAR and modifications to several reliability standards and NERC Glossary terms associated with the recommendations of the Generator Requirements at the Transmission Interface Ad Hoc Group, embodied in Project 2010-07. These standards were posted for a 30-day public comment period from February 12, 2010 through March 15, 2010. The stakeholders were asked to provide feedback on the standards through a special Electronic Comment Form. There were 41 sets of comments, including comments from more than 80 different people from over 60 companies representing 7 of the 10 Industry Segments as shown in the table on the following pages.

In this report, comments have been organized by question number. All comments may be reviewed in their original format on the following web page:

http://www.nerc.com/filez/standards/Project2010-07_GOTO_Project.html

Based on stakeholder comments, along with discussions with FERC and NERC staff, the SAR drafting team (SAR DT) made the following modifications to the SAR:

- Gave the Standard Drafting Team (SDT) the flexibility to include additional standards not originally identified in the Ad Hoc Task Force Report
- With respect to new terms and modifications of definitions of terms, the SAR DT made it clearer that the SDT can adopt proposals as indicated in the Ad Hoc Task Force Report or modify them to address stakeholder concerns
- Gave the SDT the option of merging the Ad Hoc Task Force's proposed changes into one new standard or an existing standard(s) if deemed appropriate
- Language changes for clarity

Some commenters indicated that the SAR as written was too broad, but the SDT believes that giving the SDT as many options as possible is advantageous. The SDT will be the team to ultimately determine which standards should be modified.

Many commenters made specific recommendations for modifications to standards. The SAR DT has compiled those comments for use during the next phase of this project, standard drafting. In particular, the comments on Question 7 and its subcomponents were intended to provide input for the SDT in the development of its implementation plan to accompany the project as it moves forward. The most frequently cited challenges – training, agreements, and technical details – will be considered by the SDT.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Herb Schrayshuen, at 315-439-1390 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

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

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The Industry Segments are:

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

		Commenter	Organization	Industry Segment										
				1	2	3	4	5	6	7	8	9	10	
1.	Group	Philip R. Kleckley	SERC Planning Standards Subcommittee	X		X		X						
		Additional Member	Additional Organization	Region			Segment Selection							
1.	John Sullivan	Ameren Services Company	SERC				1							
2.	Charles Long	Entergy	SERC				1							
3.	James Manning	North Carolina Electric Membership Corporation	SERC				3							
4.	Pat Huntley	SERC Reliability Corporation	SERC				10							
5.	Bob Jones	Southern Company Services, Inc. - Transmission	SERC				1							
2.	Group	Guy Zito	Northeast Power Coordinating Council											X
		Additional Member	Additional Organization	Region			Segment Selection							
1.	Alan Adamson	New York State Reliability Council, LLC	NPCC				10							
2.	Gregory Campoli	New York Independent System Operator	NPCC				2							
3.	Roger Champagne	Hydro-Quebec TransEnergie	NPCC				2							
4.	Kurtis Chong	Independent Electricity System Operator	NPCC				2							
5.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC				1							
6.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC				1							

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		Commenter	Organization	Industry Segment																
				1	2	3	4	5	6	7	8	9	10							
7.	Gerry Dunbar		Northeast Power Coordinating Council	NPCC								10								
8.	Ben Eng		New York Power Authority	NPCC								4								
9.	Brian Evans-Mongeon		Utility Services	NPCC								8								
10.	Mike Garton		Dominion Resources Services, Inc.	NPCC								5								
11.	Brian L. Gooder		Ontario Power Generation Incorporated	NPCC								5								
12.	Kathleen Goodman		ISO - New England	NPCC								2								
13.	David Kiguel		Hydro One Networks Inc.	NPCC								1								
14.	Michael R. Lombardi		Northeast Utilities	NPCC								1								
15.	Randy MacDonald		New Brunswick System Operator	NPCC								2								
16.	Greg Mason		Dynegy Generation	NPCC								5								
17.	Bruce Metruck		New York Power Authority	NPCC								6								
18.	Chris Orzel		FPL Energy/NextEra Energy	NPCC								5								
19.	Lee Pedowicz		Northeast Power Coordinating Council	NPCC								10								
20.	Robert Pellegrini		The United Illuminating Company	NPCC								1								
21.	Saurabh Saksena		National Grid	NPCC								1								
22.	Michael Schiavone		National Grid	NPCC								1								
23.	Peter Yost		Consolidated Edison Co. of New York, Inc.	NPCC								3								
3.	Group	Rick Terrill	Luminant						X											
4.	Group	Jalal Babik	Electric Market Policy	X		X		X	X											
		Additional Member	Additional Organization	Region							Segment Selection									
1.	Louis Slade			SERC								5								
2.	Mike Garton			NPCC								6								
5.	Group	Ben Li	ISO RTO Council Standards Review Committee		X															
		Additional Member	Additional Organization	Region							Segment Selection									
1.	Patrick Brown		PJM	RFC								2								
2.	Jame Castle		NYISO	NPCC								2								

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		Commenter	Organization	Industry Segment									
				1	2	3	4	5	6	7	8	9	10
3.		Lourdes Estrada-Salinero	CAISO	WECC						2			
4.		Matt Goldberg	ISO NE	NPCC						2			
5.		Steve Myers	ERCOT	ERCOT						2			
6.		Bill Phillips	MISO	RFC						2			
7.		Mark Thompson	AESO	WECC						2			
8.		Charles Yeung	SPP	SPP						2			
6.	Group	Jason L. Marshall	Midwest ISO Standards Collaborators		X								
Additional Member		Additional Organization		Region					Segment Selection				
1.		Steve Rose	CWLP	SERC					1				
2.		Jim Cyrulewski	JDRJC Associates, LLC	RFC					8				
3.		Joe Knight	Great River Energy	MRO					1, 3, 5, 6				
4.		Barb Kedrowski	We Energies	RFC					3, 4, 5				
5.		Sam Ciccone	First Energy	RFC					1, 3, 4, 5, 6				
6.		Doug Hohlbaugh	First Energy	RFC					1, 3, 4, 5, 6				
7.	Group	Frank Gaffney	Florida Municipal Power Agency	X		X	X	X	X				
Additional Member		Additional Organization		Region					Segment Selection				
1.			City of Vero Beach	FRCC					3				
2.			City of New Smyrna Beach	FRCC					3				
3.			Kissimmee Utility Authority	FRCC					3				
4.			Lakeland Electric	FRCC					3				
5.			City of Clewiston	FRCC					3				
6.			Beaches Energy Services	FRCC					1				
7.			Fort Pierce Utility Authority	FRCC					4				
8.	Group	Denise Koehn	Bonneville Power Administration	X		X		X	X				
Additional Member		Additional Organization		Region					Segment Selection				
1.		Jim Burns	BPA, Transmission Technical Operations	WECC					1				

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		Commenter	Organization	Industry Segment									
				1	2	3	4	5	6	7	8	9	10
9.	Group	Richard Kafka	Pepco Holdings, Inc - Affiliates	X		X		X	X				
		Additional Member	Additional Organization	Region						Segment Selection			
		1. Kara Dundas	Conectiv Energy Supply, Inc	RFC						5			
		2. Don Bridge	Conectiv Energy Supply, Inc	RFC						5			
		3. James Newton	Pepco Energy Services	RFC						5			
10.	Group	Mary Jo Cooper	First Wind					X					
		Additional Member	Additional Organization	Region						Segment Selection			
		1. First Wind O&M, LLC		NPCC						5			
		2. Canandaigua Power Partners, LLC		NPCC						5			
		3. Canandiagu Power Partners II, LLC		NPCC						5			
		4. Milford Wind Coordin Phase I, LLC		WECC						5			
		5. Stetson Wind II, LLC		NPCC						5			
		6. Evergreen Wind Power V, LLC		NPCC						5			
11.	Group	Kenneth D. Brown	PSEG Companies	X		X		X	X				
		Additional Member	Additional Organization	Region						Segment Selection			
		1. Jim Hebson	PSEG ER&T	NPCC						6			
		2. Dave Murray	PSEG Fossil	ERCOT						5			
		3. Jim Hubertus	PSE&G	RFC						1, 3			
12.	Group	Michael Gammon	Kansas City Power & Light	X		X		X	X				
		Additional Member	Additional Organization	Region						Segment Selection			
		1. Jim Useldinger	KCPL	SPP						1, 3, 5, 6			
		2. Jennifer Flandermeyer	KCPL	SPP						1, 3, 5, 6			
		3. Nick McCarty	KCPL	SPP						1, 3, 5, 6			
		4. Melinda Mangold	KCPL	SPP						1, 3, 5, 6			
		5. Dennis Greashaber	KCPL	SPP						1, 3, 5, 6			
		6. Jerry Hatfield	KCPL	SPP						1, 3, 5, 6			

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		Commenter	Organization	Industry Segment									
				1	2	3	4	5	6	7	8	9	10
7.		Tom Saitta	KCPL	SPP						1, 3, 5, 6			
8.		Harold Wyble	KCPL	SPP						1, 3, 5, 6			
13.	Individual	Jack Cashin	Energy Standards Working Group										
14.	Individual	Brent Ingebrigtsen	E.ON U.S.	X		X		X	X				
15.	Individual	Silvia Parada-Mitchell	Transmission Owner/Generation Owner	X		X		X	X				
16.	Individual	Larry Rodriguez	Entegra Power Group LLC					X	X				
17.	Individual	Ken Parker	Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners		X								
18.	Individual	Jack Stamper	Public Utility District #1 of Clark County	X									
19.	Individual	Daniel E. Kujala	Detroit Edison Company			X		X					
20.	Individual	Mark Bennett	Competitive Power Ventures, Inc.					X					
21.	Individual	Sam Dwyer	AmerenUE, Power Operations Services					X					
22.	Individual	Amir Hammad	Constellation Power Source Generation Inc.					X					
23.	Individual	Alisha Anker	Prairie Power, Inc.			X							
24.	Individual	Michelle D'Antuono	Ingleside Cogeneration, LP					X					
25.	Individual	Katy Mirr	Sempra Generation					X					
26.	Individual	Robert Ellis	Mesquite Power	X				X					
27.	Individual	Jon Kapitz	Xcel Energy	X		X		X	X				

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				1	2	3	4	5	6	7	8	9	10	
28.	Individual	Kasia Mihalchuk	Manitoba Hydro	X		X		X	X					
29.	Individual	James Sharpe	South Carolina Electric and Gas	X		X		X	X					
30.	Individual	Scott Helyer	Tenaska, Inc.					X						
31.	Individual	Kevin Gillespie	El Dorado Energy LLC					X						
32.	Individual	Patti Metro	National Rural Electric Cooperative Association (NRECA)			X	X							
33.	Individual	Greg Rowland	Duke Energy	X		X		X	X					
34.	Individual	James H. Sorrels, Jr.	American Electric Power	X		X		X	X					
35.	Individual	James Manning, Bob Beadle, Doug White, and Richard McCall	North Carolina Electric Membership Corporation			X	X	X						
36.	Individual	Dan Rochester	Independent Electricity System Operator		X									
37.	Individual	Jason Shaver	American Transmission Company	X										
38.	Individual	Laura Zotter	ERCOT ISO		X									
39.	Individual	Darcy O'Connell	California ISO											X
40.	Individual	Alice Murdock	Xcel Energy	X		X		X	X					
41.	Individual	Marcus Lotto	Southern California Edison co.	X		X		X	X					

1. Do you agree that there is a reliability-related need for the proposed standards action?

Summary Consideration: The overwhelming majority of stakeholder comments affirmed the need for this proposed standard action.

Organization	Yes or No	Question 1 Comment
E.ON U.S.	No	E.ON U.S. has already determined a Division of Responsibilities between the GO/TO and therefore does not see the need for auditable reliability standards to be added between the GO/TO.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that there is a reliability need for this SAR.</p>		
Luminant	No	In general, Luminant agrees there is a need to address generation facilities with extended connections to the transmission system. However, Luminant does not agree there is a reliability need for the proposed standards action as it relates to generators connected in close proximity to the grid where the connection typically consists of a bus or short wires connection from the high side of a generator step up transformer to the generator breaker.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that there is a reliability need for this SAR.</p>		
Kansas City Power & Light	No	There is a need to bring clarity to the Reliability Standards regarding the delineation of what the Generator Owner and Generator Operator is responsible for and for definitions distinguishing between Generator Operators at Power Plants and “Generator Operator” as the “Power System Operator” directing a fleet of generators in a balancing area. I do not believe reliability of the interconnected grid has suffered as a result of the shortcomings of the Reliability Standards in this regard as the electric industry has continued to operate in a responsible manner.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that there is a reliability need for this SAR. And while we respect your concern about the definition of Generator Operator versus Power System Operator, we maintain that it is outside the scope of this SAR.</p>		
Detroit Edison Company	No	Vegetation Inspection change to include any BES component Transmission Line or Generator Interconnection Facility Right-of-Way or any other BES component to document vegetation conditions.
<p>Response: Thank you for your comment. Based on the SAR DT’s interpretation of this comment, we believe it is outside the scope of the SAR.</p>		

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Organization	Yes or No	Question 1 Comment
AmerenUE, Power Operations Services	Yes	
American Electric Power	Yes	
American Transmission Company	Yes	
Bonneville Power Administration	Yes	
California ISO	Yes	
Duke Energy	Yes	
El Dorado Energy LLC	Yes	
Electric Market Policy	Yes	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	Yes	
ERCOT ISO	Yes	
First Wind	Yes	

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Organization	Yes or No	Question 1 Comment
Florida Municipal Power Agency	Yes	
Independent Electricity System Operator	Yes	
ISO RTO Council Standards Review Committee	Yes	
Mesquite Power	Yes	
Midwest ISO Standards Collaborators	Yes	
National Rural Electric Cooperative Association (NRECA)	Yes	
North Carolina Electric Membership Corporation	Yes	
Prairie Power, Inc.	Yes	
PSEG Companies	Yes	
Public Utility District #1 of Clark	Yes	

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Organization	Yes or No	Question 1 Comment
County		
Sempra Generation	Yes	
SERC Planning Standards Subcommittee	Yes	
South Carolina Electric and Gas	Yes	
Southern California Edison co.	Yes	
Xcel Energy	Yes	
Xcel Energy	Yes	
Entegra Power Group LLC	Yes	But, that action should be reasonable, provide specific detail, and be kept simple so the reliability-related objectives are effectively understood by those operators of the GI Facilities.
Response: The SAR DT thanks you for your comment.		
Energy Standards Working Group	Yes	EPSA members, through active participation in many NERC activities including the team that prepared the report and the attached SAR, are strong advocates of mandatory standards to protect reliability of the Grid. We also strongly agree that there is a need for greater clarity of the responsibilities of Generator Owner/Operators and Transmission Owner/Operators at the Generator Interconnection Interface and thus concur with the direction of this SAR that this should be achieved without the need for Generator Owner/Operators to be included in the registry as Transmission Owner/Operators.
Response: The SAR DT thanks you for your comment.		
Competitive Power	Yes	In fact, the technical analysis in the Ad Hoc Group's Report provides a valuable and useful understanding of the specific nature and extent of reliability issues associated with generator interconnection facilities. Up to now, the need for generator

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Organization	Yes or No	Question 1 Comment
Ventures, Inc.		TO/TOP registrations has not been supported by a clear and technically sound rationale. The Report's conclusion, based upon its comprehensive and thorough review, that there is no need for generators to be registered as TO/TOPs to address the specific reliability issues is especially significant.
Response: The SAR DT thanks you for your comment.		
Ingleside Cogeneration, LP	Yes	Ingleside Cogeneration, LP believes that the effort by the Ad Hoc Group for Generator Requirements at the Transmission Interface has generally succeeded in developing criteria clarifying the ownership and operational responsibilities of registered generation and transmission entities at their point of interface. This is an important body of work which needs to result in an end to the forced registration of Generator Owners/Operators (GO/GOP) as Transmission Owner/Operators (TO/TOP) by Regional Entities.
Response: The SAR DT thanks you for your comment.		
Pepco Holdings, Inc - Affiliates	Yes	It is difficult to say if there is a “reliability-related need”. Most GOs operate and maintain their Generator Interconnection Facility in the same manner as the rest of their generation facilities. It is beneficial to differentiate between the “Generation Interconnection Facility” and the “Transmission” system so that GOs do not have to be registered as TOs.
Response: The SAR DT thanks you for your comment.		
Tenaska, Inc.	Yes	Tenaska actively participates in many NERC activities, including the team that prepared the report and the attached SAR/Draft Standards, and strongly advocates the need for reliability of the system. We also strongly agree that there is a need for greater clarity of the responsibilities of Generator Owner/Operators and Transmission Owner/Operators at the Generator Interconnection Interface and thus concur with the direction of this SAR that this should be achieved without the need for Generator Owner/Operators to be included in the registry as Transmission Owner/Operators.
Response: The SAR DT thanks you for your comment.		
Manitoba Hydro	Yes	With the implementation of the new Glossary Terms, this will clarify the dividing point between GO and TO.
Response: The SAR DT thanks you for your comment.		
Constellation Power Source	Yes	Yes - Defining the compliance responsibility to align more accurately with operational reality is important in managing reliability. However, the SDT must also consider those entities that enter into a Joint Registration Organization (“JRO”) for certain GOP reliability standards. This registration exception applies to market entities, where there has been a JRO created

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Organization	Yes or No	Question 1 Comment
Generation Inc.		that delineates specific joint responsibilities, with respect to the GOP reliability standards. It is incumbent on both parties to comply with their agreed upon respective responsibility.
Response: The SAR DT thanks you for your comment. It will be referred to the SDT for their consideration.		

2. Do you agree with the scope of the proposed standards action?

Summary Consideration: While there were a number of responses that indicated the SAR was too broad, an in-depth review of the comments indicated that most of the concerns could be addressed by modifications to the proposed standards changes included in the Ad Hoc Report. As a result, many of these comments will be referred to the SDT for their consideration, including final resolution of which standards need to be modified. Based on discussions with FERC and NERC staffs regarding previous Commission actions and NERC compliance filings, the SAR DT also elected to give the SDT the flexibility to include additional standards (now listed in the modified SAR) not identified in the Ad Hoc Report.

Organization	Yes or No	Question 2 Comment
American Electric Power	No	
Luminant	No	Luminant believes the scope of the standards action significantly exceeds the reliability need. The scope should only extend to Generation Interconnection Facilities of greater than one-half (½) mile in length from the property boundary of the generation plant. This standards action should only be applied where there is a demonstrated reliability benefit. For the bulk of the Generator Owners, the proposal creates excessive documentation and paperwork, and increases compliance risk with no reliability benefit to the Bulk Electric System (BES).
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.</p>		
California ISO	No	Adding language in several standards actually creates confusion rather than provide clarity. For example, EOP-003-1 (Load Shedding Plans) applies in situations when there is insufficient generation or transmission, requiring load shedding to avoid risk of uncontrolled failure of the interconnection. This function is generally accomplished through under frequency relay settings which will drop a pre-determined amount of load to maintain generation/load balance. Involving the Generator Operator to comply with this standard is unnecessary and may even complicate matters because the BA and the TOP will now have to coordinate with GOPs. Other similar examples are EOP-001-0, EOP-004-1, and TOP-001-1 where adding “Generator Interconnection Facility” does not add clarity but is rather redundant, and may create interpretation issues.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.</p>		
Public Utility District #1 of Clark	No	Clark Public Utilities believes the scope of the proposed standards actions is too broad.

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Organization	Yes or No	Question 2 Comment
County		
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate.</p>		
E.ON U.S.	No	E.ON U.S. has already determined a Division of Responsibilities between the GO/TO and therefore does not see the need for auditable reliability standards to be added between the GO/TO.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate.</p>		
Florida Municipal Power Agency	No	<p>FAC-003 should not be applicable to Generator Owners / Operators. The intent of all of the standards is to avoid an Adverse Reliability Impact, or as the FPA Section 215(a)(4) defines “reliable operations” as: “operating the elements of the bulk-power system within equipment and electric system thermal, voltage and stability limits so that instability, uncontrolled separation, or cascading failures of such systems will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.” Radial Facilities serving only generating plants when tripped will not threaten an Adverse Reliability Impact or we would be hard pressed to run that generation in the first place.FMPA believes the intent of the standard is to prevent a cascading event where, if a line trips, another line loads heavily increasing the sag of that line, which may sag into un-cleared vegetation, causing the second line to trip, which may in turn cause heavily loading on a third line, etc. If a line trips in the transmission network, radial Facilities from generating plants will not have their loading changed much at all (since they are radial) and will not participate in this sort of “thermal” cascading event. Hence, there is no cause to regulate vegetation management of radial Facilities to generating plants since the system is always planned and operated to that potential contingency anyway and there is no danger of an Adverse Reliability Impact. Regulating vegetation management on radial Facilities is beyond the scope of the Federal Power Act Section 215.Generator Owners / Operators are still incented to perform adequate vegetation management without the need for regulation because any outage of the plant results in lost opportunity costs to the plant.</p>
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.</p>		
Ingleside Cogeneration, LP	No	<p>No. Ingleside Cogeneration, LP believes there is a secondary, but equally important issue which we believe has not been fully addressed in the proposed SAR. There can be components of the Generator Interconnection Facility located on the Generator Owner’s property, but are maintained by the Transmission Owner. An excellent example is the relays protecting the interconnected transmission line. Although these are usually purchased by the Generator Owner and are financially carried on their books, in some cases the Transmission Owner performs the associated maintenance and testing. This arrangement can</p>

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Organization	Yes or No	Question 2 Comment
		<p>make sense as the relays are protecting a transmission system and must properly interact with relays on the other side of the transmission line through associated communications systems. This kind of arrangement can lead to a variety of interpretations by auditors even when presented with an Interconnection Agreement specifying the ownership/maintenance arrangement. We believe that if the responsibility to a requirement is clearly delineated in a formal document, the associated collection and presentation of evidence of compliance is part of that responsibility - in this case the TO owning maintenance and testing of protective relays financially owned by the GO. The Exclusion statement under Section III.c.4 of the Statement of Compliance Registry Criteria allows for compliance responsibility to be transferred to another entity provided it registers as the appropriate entity. In addition, we recognize that Sections 501 and 507 of the NERC Rules of Procedure allows distribution of responsibility among two or more entities through a Joint Registration - although that process is designed for tightly connected organizations such as joint ventures or cooperatives.</p> <p>We recommend these all-or-nothing approaches be modified in the exclusion as suggested below:</p> <p style="padding-left: 40px;">A generator owner/operator will not be registered based on these criteria if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, G&T cooperative or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure. "Responsibility for individual requirements applicable to the Generator Interconnection Facility including reporting can be transferred by written agreement without a change to an entity's registration."</p>
<p>Response: The SAR DT thanks you for your comment. It is outside the scope of both the SAR DT and the SDT to propose changes to the NERC Rules of Procedure.</p>		
ISO RTO Council Standards Review Committee	No	Please see our comments under Q8.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.</p>		
Constellation Power Source Generation Inc.	No	Please see the comments for Question #4: Constellation agrees with the proposed new requirements in principal. However, further clarity is needed in the requirements so that there isn't any added confusion. Either an implementation plan or a "frequently asked questions" document would be recommended.
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>		

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Organization	Yes or No	Question 2 Comment
Prairie Power, Inc.	No	PPI believes the group has extended the scope too broadly from its initial intent as described in comments below.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.</p>		
AmerenUE, Power Operations Services	No	While we agree with the overall scope of the proposed actions, there appears to be one missing critical element. What requirement will ensure that each GO, GOP, TO and TOP agree on the specifics of implementing these new requirements for each GIF? Has the Ad Hoc Group considered adding a requirement to mandate execution of an Agreement or Procedure between the GO, GOP, TO and TOP to ensure minimal specific actions that would guarantee compliance with each GIF Requirement?
<p>Response: The SAR DT thanks you for your comment. The SAR has been modified to allow the SDT the option of merging the changes into one new standard or an existing standard(s).</p>		
American Transmission Company	Yes	
Bonneville Power Administration	Yes	
Competitive Power Ventures, Inc.	Yes	
Detroit Edison Company	Yes	
Duke Energy	Yes	
El Dorado Energy LLC	Yes	
Electric Market	Yes	

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Organization	Yes or No	Question 2 Comment
Policy		
Energy Standards Working Group	Yes	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	Yes	
ERCOT ISO	Yes	
Independent Electricity System Operator	Yes	
Kansas City Power & Light	Yes	
Manitoba Hydro	Yes	
Mesquite Power	Yes	
Midwest ISO Standards Collaborators	Yes	
North Carolina Electric Membership Corporation	Yes	
PSEG Companies	Yes	

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Organization	Yes or No	Question 2 Comment
Sempra Generation	Yes	
SERC Planning Standards Subcommittee	Yes	
South Carolina Electric and Gas	Yes	
Southern California Edison co.	Yes	
Tenaska, Inc.	Yes	
Entegra Power Group LLC	Yes	<p>BUT, FAC-003 SHOULD BE APPLIED IN A REASONABLE MANNER. MORE DETAIL SHOULD BE PROVIDED THAN IT WOULD APPLY FOR MORE THAN 2 SPANS. WHAT IF THERE ARE 3 SPANS, BUT ONLY A QUARTER MILE IN DISTANCE WHICH IS TOTALLY VISIBLE FROM THE GIF. THE SDT SHOULD MAKE SOME REASONABLE CONCESSIONS FOR THESE SITUATIONS, OR ALLOW THE GIF TO DOCUMENT THE SOUND REASONING USED IN NOT IMPLEMENTING FAC-003 TO THE EXTENT REQUIRED BY THE EXISTING STANDARD. A REASONABLE VEGETATION MANAGEMENT PROGRAM SHOULD BE ADEQUATE. MORE DETAIL AND SPECIFICS DESCRIBING WHAT ADEQUATE TRAINING IS FOR PER-002.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>		
Pepco Holdings, Inc - Affiliates	Yes	<p>Defining “Generator Interconnection Facility” in the glossary is a good idea. Going beyond this to specifically note this term in so many other standards seems unnecessary since other individual devices are not noted in so many other locations. If “Generator Interconnection Facility” is included in all other Generating Facilities, this may simplify the process.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
First Wind	Yes	<p>The proposed SAR modification set is the responsible approach to resolve gaps Generator Interconnection Facility gaps identified by the industry. The functions required of an Owner(s) and Operator(s) of facilities used to connect generation to the</p>

Consideration of Comments on Generator Requirements at the Transmission Interface — Project 2010-07

Organization	Yes or No	Question 2 Comment
		BES (Generator Interconnection Facilities) are not the same as the functions required to own and operate Transmission and should not be considered to be the same. We commend the task force for coming up with a reasonable approach that directly addresses reliability without requiring GO and GOPs to perform activities that have no bearing on the reliability of the BES.
Response: The SAR DT thanks you for your comment.		

3. Do you agree with the proposed NERC Glossary additions or revisions? If you disagree with one or more of the proposed new or modified definitions, please provide a revision that would make the definition acceptable to you.

Summary Consideration: While a majority of comments did not challenge the need for the proposed new definitions, some did suggest modifications to those new terms, as well as to some existing terms defined in the *NERC Glossary of Terms*. Given this, the SAR DT modified the SAR to make it clearer that the SDT can adopt proposals as indicated in the report or modify them to address stakeholder concerns expressed in responses to the SAR DT questionnaire.

Organization	Yes or No	Question 3 Comment
Xcel Energy		Should the definition of Generator Interface Facility indicate that no BES (or any) loads be tapped between the generator and the GIF operational interface?
Response: The SAR DT thanks you for your comment. It will be referred to the SDT.		
Independent Electricity System Operator	No	(1) Generator Operator: We agree with the first sentence of the definition for Generator Operator, but do not agree with the need for the second sentence. The first sentence already states inclusion of Generator Interconnection Facility. The first part of the second is simply a repeat of this change. The latter part of the second sentence is a requirement that should be stipulated in an appropriate standard. We suggest to strike out the second sentence. (2) Generator Interconnection Facility: The Sole-use facilities should include those which transmit power to radial customer loads if such facilities do not form a part of the connection to multiple transmission facilities that are subject to network power flows.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
ISO RTO Council Standards Review Committee	No	(1) Generator Operator: We agree with the first sentence of the definition for Generator Operator, but do not agree with the need for the second sentence. The first sentence already states inclusion of Generator Interconnection Facility. The first part of the second is simply a repeat of this change. The latter part of the second sentence is a requirement that should be stipulated in an appropriate standard. We suggest to strike out the second sentence.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
Duke Energy	No	<ul style="list-style-type: none"> o The definitions of Generator Owner and Generator Operator should not be revised, because every Generator Owner and Generator Operator may not own and operate a Generator Interconnection Facility, as the revised definitions imply. The revised definition of Generator Operator also adds a coordination requirement which is more properly included in the requirements of a standard. o While we are sensitive to the fact that this SAR is attempting to close a reliability gap, we believe that the definition of

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Organization	Yes or No	Question 3 Comment
		<p>Generator Interconnection Facility is too broad. The Standard Drafting Team should consider limiting it to the voltages defined for the Bulk Electric System, and other facilities as deemed critical by the Regional Entity. Also, how does the Regional Entity deem a facility “critical”?</p> <p>o The Right-of-Way (ROW) definition should spell out TO and GO. Suggested rewording: “A corridor of land on which electric lines may be located. The Transmission Owner or Generator Owner which owns the lines may own the land in fee, own an easement, or have certain franchise, prescription, or license rights to construct and maintain the lines.”</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Public Utility District #1 of Clark County</p>	<p>No</p>	<p>Clark Public Utilities believes the proposed definitions do not provide the necessary amount of guidance and clarity. The proposed definitions and standards revisions are being considered because of the potential impacts of a 26-mile 500 kV Generation Interconnection Facility. The proposed definition for the term “Generation Interconnection Facility” will include the 26- mile interconnection as well as a host of other types of interconnections that should not be considered in this effort. Clark’s generator is attached to the transmission grid by slack span (less than 100’) between the high side of the GSU (owned by the generator) and a circuit breaker (owned and operated by the Transmission Operator) located within the Transmission Operators switchstation. There are no operable components in the slack span. Clark believes the currently proposed standards actions are overly broad. The definitions and applicability of these standards must be narrowed. Clark proposes the following definition for Generator Interconnection Facility: Generator Interconnection Facility Sole-use facility for the purpose of connecting the generating unit(s) to the transmission grid. In this regard, the sole-use facility only transmits power associated with the interconnecting generator, whether delivered to the grid or delivered to the generator for station service or auxiliary load, or delivered to meet cogeneration load requirements. Generator Interconnection Facilities shall not include lines that are less than or equal to two spans in length or lines that the host Transmission Operator has agreed to include as part of the transmission system it operates.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Kansas City Power & Light</p>	<p>No</p>	<p>I believe the intent of what has been proposed here is to define the term, “Generator Operator” to mean the Operator that operates units directly at a power station. With that in mind, although the proposed definition is close, I believe the interaction with the Transmission Operator only in the definition makes this confusing. Recommend consideration of the following definition: The entity that operates generating unit(s) and the Generator Interconnection Facility and performs the functions of supplying energy and reactive power as directed by the Balancing Authority and the Transmission Operator. The Generator Operator may also operate the Generator Interconnection Facility and is responsible for coordinating with the Balancing Authority and the Transmission Operator when the facility is energized or about to be energized to/de-energized from the transmission system. In addition, recommend adding the generating station property line to the definition for Generator Interconnection Facility for clarity: Sole-use facility that leaves generator property line for the purpose of connecting the generating unit(s) to the transmission grid. In this regard, the sole-use facility only transmits power</p>

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Organization	Yes or No	Question 3 Comment
		associated with the interconnecting generator, whether delivered to the grid or delivered to the generator for station service or auxiliary load, or delivered to meet cogeneration load requirements.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
American Electric Power	No	It is unclear if the Generator Interconnection Facility definition only includes facilities at 100 kV or greater or those deemed critical to the Bulk Electric System by the Regional Entity.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
North Carolina Electric Membership Corporation	No	<p>NCEMC seeks clarification from the ad hoc team regarding the definition of Generation Interconnection Facility (GIF), especially regarding the option for ownership of the GIF. The way the definition currently reads leaves the interpretation that it might be optional for the Generator Operator to own the GIF. We are not sure that the Ad Hoc team intended this possible conclusion, which in our opinion, could completely change the scope of this SAR (in the case where the GOP does NOT own the GIF). If that is the intent of the Ad Hoc team or SDT, then the definition of Generator Operator should be changed to reflect the "option" of the GOP owning the GIF versus someone else like the Transmission Owner/Operator. Also, the second sentence of the GOP definition is not needed in our opinion since it is a requirement of the standards and as such requirements are not usually a part of the NERC definition.</p> <p>Other definitions we suggest changing are as follows:Vegetation Inspection - The systematic examination of a Right-of-Way to document vegetation conditions. The main reason for the change in definition for ROW was the proposed use of the non-capitalized term "electric line". Since the use of that phrase sometimes means distribution lines as well as transmission, we suggest staying with the capitalized NERC terms for better clarity.Right-of-Way (ROW) - A corridor of land on which a Transmission Line or Generator Interconnection Facility may be located. The owner of the Transmission Line or Generator Interconnection Facility may own the land in fee, own an easement, or have certain franchise,prescription, or license rights to construct and maintain lines.</p>
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
Prairie Power, Inc.	No	PPI agrees with the first and existing sentence of the Generator Operator definition. However, the first part of the second sentence regarding operating the Generator Interconnection Facility is redundant with the first sentence. The second portion of the second sentence regarding coordinating with the Transmission Operator has been established already in TOP-001 R7.1 and TOP-003 R1.1 for the purpose of this project.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		

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Organization	Yes or No	Question 3 Comment
California ISO	No	<p>The definition for “Generator Interconnection Facility” (GIF) is not consistent with either Conclusion #1 of the Adhoc Group’s final report, or with “Applicability 4.5” added under FAC-003-1. Conclusion #1 mentions “Generator Interconnecting Facilities operating at a voltage of 100 kV or greater or those deemed critical to the Bulk Electric System by the Regional Entity...” and Applicability 4.5 mentions “Generator Interconnection Facility above 200 kV... or are otherwise deemed critical by the Regional entity below 200 kV...”. In both these instances it appears that the Adhoc Group is emphasizing those Generator Interconnection Facilities that are either part of the Bulk Electric System (BES) or deemed critical by the Regional entity. Therefore, we suggest modifying the definition as follows:First sentence, after the word grid, add “above 200 kV or otherwise deemed critical by the Regional entity below 200 kV”.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Manitoba Hydro	No	<p>The definition for Generator Interconnection Facility does not fully include the recommendations of the Ad Hoc Group Conclusions. The first conclusion states that the facility must be 100 KV and above and more importantly that if there is power flows through this station that do not belong to the generators or their exclusive station loads, then this station becomes a TO responsibility.The definition of Transmission somewhat covers the above statement, but still need clarity.Example:Transmission - An interconnected group of lines and associated equipment in which network powerflows through this station are associated with the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems. Generator Interconnection Facility will not contain any of the above criteria.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Constellation Power Source Generation Inc.	No	<p>The term “point of interconnection” must be used in the glossary definitions of a “Generator Interconnection Facility” and “Generator Interconnection Operational Interface.” It is a common industry term that is widely understood, and is even being used in the revision to FAC-008. Using the term “point of interconnection” would further clarify the new glossary definitions. Here are the proposed changes:Generator Interconnection Facility (NEW)Sole-use facility for the purpose of connecting the generating unit(s) to the transmission grid. In this regard, the sole-use facility only transmits power associated with the interconnecting generator, whether delivered to the grid or delivered to the generator for station service or auxiliary load, or delivered to meet cogeneration load requirements.The Generator Interconnection Facility is physically defined as the facility and its encompassing equipment beginning at the low side of the Generator Step Up to the point of interconnection. Generators connected to the same interconnection facility with different Generator Operators must coordinate operations. Generator Interconnection Operational Interface (NEW)Location at which operating responsibility for the Generator Interconnection Facility changes between the Transmission Operator and the Generator Operator.This location is known as the point of interconnection.</p>
<p>Response: The SAR DT thanks you for your comment. Because of potential confusion with language in various interconnection agreements, the SAR DT will</p>		

Organization	Yes or No	Question 3 Comment
not make changes to this definition and will defer to the SDT.		
Midwest ISO Standards Collaborators	No	We agree with the first sentence of the definition of Generator Operator. However, the first part of the second sentence regarding operating the Generator Interconnection Facility is redundant with the first sentence. The second portion of the second sentence regarding coordinating with the Transmission Operator is a requirement and already established in requirement X.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
First Wind	No	<p>We recommend the definition of Generator Interconnection Facility be modified.</p> <p>”Generator Interconnection Facility (NEW)A facility used for the sole purpose of connecting the generating unit(s) to the transmission grid. In this regard, the sole-use facility only transmits power associated with the interconnecting generator(s), whether delivered to the grid or delivered to the generator(s) for station service or auxiliary load, or delivered to meet cogeneration load requirements.</p> <p>The purpose of the above modification is to account for the situations where a Generator Operator may have many units, such as wind turbines, all using the same Generator Interconnection Facility to connect to the transmission grid. Additionally, we feel it is irrelevant if the Generating Unit is owned by one or the same owners. Two scenarios explain why multiple generators using the same Generator Interconnection Facility does not serve a function of a TO or TOP.</p> <ul style="list-style-type: none"> • Scenario 1Each Generator Operator is connected to the Transmission Operator through an independent Generator Interconnection Facility. There is no need for the Generator Operators to coordinate their operations with one another because their operations do not impact common facilities. However, there may be a need for the Transmission Operator to coordinate its instructions to the Generator Operators (if they issue voltage schedules, for example). When it becomes necessary for the Transmission Operator to communicate instructions to the Generator Operators, it is necessary for the Transmission Operator to communicate with each of the Generator Operators. • Scenario 2Generator Operator A is connected independently, but Generator Operators B and C share a common Generator Interconnection Facility. In this case, it is necessary for Generators B and C to coordinate their operations. It is not necessary to designate either GO_B or GO_C as the “operator” of the Generator Interconnections Facility. Rather, it is most appropriate to place the obligation to coordinate operations on both parties. By placing the obligation on both parties, they share an equal burden to comply with the applicable standards.Placing the obligation to coordinate operations on both GO_B and GO_C does not increase the burden to the Transmission Operator. <p>If there is trouble at the point of interconnect substation, the Transmission Operator might need to coordinate operations with GO_A, GO_B and GO_C in either Scenario 1 or Scenario 2. If in Scenario 2, the Transmission Operator only issued</p>

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Organization	Yes or No	Question 3 Comment
		<p>instructions to GO_A and GO_B, they could not be sure that GO_C would receive the instructions. Furthermore, since GO_B is not a Transmission Operator, they lack the authority to issue instructions to GO_C.</p> <p>We recommend an additional requirement to resolve coordination between generators. For example “Generator Operators interconnected through a common Generator Interconnection Facility shall coordinate their operations.”</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>SERC Planning Standards Subcommittee</p>	<p>No</p>	<p>We suggest 3 alternate modified definitions:</p> <p>Right-of-Way (ROW) A corridor of land on which a Transmission Line or Generator Interconnection Facility may be located. The owner of the Transmission Line or Generator Interconnection Facility may own the land in fee, own an easement, or have certain franchise, prescription, or license rights to construct and maintain lines.</p> <p>Vegetation Inspection The systematic examination of a Right-of-Way to document vegetation conditions. The main reason for the change in definition for ROW was the proposed use of the non-capitalized term "electric line". Since the use of that phrase sometimes means distribution lines as well as transmission, we suggest staying with the capitalized NERC terms for better clarity.</p> <p>Generator Operator The entity that operates generating unit(s) and performs the functions of supplying energy and Interconnected Operations Services. The Generator Operator may also operate the Generator Interconnection Facility. The main reason for the change in the definition for Generator Operator was that the 2nd sentence in the proposed definition was a requirement and not a true definition. The other change was to allow for the case where the Generator Operator was not the operator of the Generator Interconnection Facility.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>AmerenUE, Power Operations Services</p>	<p>Yes</p>	
<p>American Transmission Company</p>	<p>Yes</p>	
<p>Bonneville Power Administration</p>	<p>Yes</p>	

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Organization	Yes or No	Question 3 Comment
Detroit Edison Company	Yes	
El Dorado Energy LLC	Yes	
Electric Market Policy	Yes	
Entegra Power Group LLC	Yes	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	Yes	
Florida Municipal Power Agency	Yes	
Ingleside Cogeneration, LP	Yes	
Mesquite Power	Yes	
PSEG Companies	Yes	
Sempra Generation	Yes	
South Carolina Electric and Gas	Yes	
Tenaska, Inc.	Yes	

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Organization	Yes or No	Question 3 Comment
Pepco Holdings, Inc - Affiliates	Yes	<p>“Generator Interconnection Facility” is useful to allow GOs to be distinguished from TOs and their responsibilities. “Generator Interconnection Operational Interface” is also known as the “Point of Interconnect” by the RTO. This may be an alternate name that could be used to make things standard.</p>
<p>Response: The SAR DT thanks you for your comment. Because of potential confusion with language in various interconnection agreements, the SAR DT will not make changes to this definition and will defer to the SDT.</p>		
Southern California Edison co.	Yes	<p>Additional clarification would be useful as it/ they would cut down on future requests for interpretation... i.e provide a specific threshold for the proposed Generator interconnection Facility definition</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>		
Energy Standards Working Group	Yes	<p>In particular we support the revised definition of the Generator Interconnection Facility, which has appropriately incorporated our comments from the draft of the Team’s report</p>
<p>Response: The SAR DT thanks you for your comment.</p>		

4. Do you agree with the proposed *new* requirements intended to add clarity around expectations for generator owners and operators at the transmission interface?

Summary Consideration: A number of responses expressed concern about the need for various proposed new requirements. An in-depth review of the comments, however, indicated that most of the concerns could be addressed by the SDT. As a result, many of these comments will be referred to the SDT for their consideration, including final resolution of which standards need to be modified. Revisions to the SAR also allow the SDT the option of merging the changes into one new standard or an existing standard(s).

Organization	Yes or No	Question 4 Comment
Kansas City Power & Light	No	<ul style="list-style-type: none"> o PER-001, R1: The language proposed for PER-001, R1, infers the Generator Operator is able to take independent actions regarding the “Generation Facility” and the Generator Interconnection Facility. There is no definition for Generation Facility in this proposal or currently in the NERC Glossary. At any rate, do not agree with the Generator Operator taking any independent actions other than those to monitor and maintain the safe operation of a generating unit for the production of energy and reactive power. o PER-002, R3 (Proposed here): This infers again the Generator Operator taking independent actions with regard to equipment within the Generator Interconnection Facility. Although, the Generation Interconnection Facility is defined properly, that does not mean the Generator Operator is the control authority over that equipment. It is not uncommon for the Generator Operator to operate equipment within the Generator Interconnection Facility at the direction of the Transmission Operator. Recommend consideration be given to modify this requirement to reflect that. o TOP-001, R9 and R10 (Proposed here): This infers again the Generator Operator taking independent actions with regard to equipment within the Generator Interconnection Facility. Although, the Generation Interconnection Facility is defined properly, that does not mean the Generator Operator is the control authority over that equipment. It is not uncommon for the Generator Operator to operate equipment within the Generator Interconnection Facility at the direction of the Transmission Operator. Recommend consideration be given to modify these requirements to reflect the Transmission Operator can be the authority over the equipment within the Generation Interconnection Facility but that the Generator Operator may operate that equipment at the direction of the Transmission Operator.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
American Electric Power	No	AEP believes that the only new requirement that should be addressed is in reference to FAC-003. AEP does not see benefit in expanding the scope of EOP-003, PER-001, and PER-002. With respect to TOP-004, AEP does not feel the added requirement is necessary as the Generator Interconnection Facility should be adequately sized to handle the output of the generator. The added requirement in TOP-008 for notification is redundant with other obligations for the GOP to notify other entities, such as in COM-002 and TOP-003.

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Organization	Yes or No	Question 4 Comment
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>American Transmission Company</p>	<p>No</p>	<p>Clarify the definition of generator interconnection facility to include who this applies to as shown in the conclusions above in #3. A Generator Interconnection Facility is considered as though part of the generating facility specifically for purposes of applying Reliability Standards to a Generator Owner or Generator Operator.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>E.ON U.S.</p>	<p>No</p>	<p>E.ON U.S. has already determined a Division of Responsibilities between the GO/TO and therefore does not see the need for auditable reliability standards to be added between the GO/TO. Also, it is not necessary to include the phrase “including the Generator Interconnection Facility” in all the applicable requirements. Since the term Generator Interconnection Facility is proposed to be included in the Glossary definitions for Generator Operator, then it would be redundant to also add the phrase throughout the applicable standards.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>		
<p>Public Utility District #1 of Clark County</p>	<p>No</p>	<p>Many of the new requirements place excessive demands on generators that do not increase system reliability.</p> <p>In EOP-003 Generator Operators are added to the applicability and as a result R7 is a newly applicable requirement to Generator Operators. However, this requirement now implies that Generator Operators are required to engage in the coordination efforts (with the BA and TOP) of automatic underfrequency load shedding. Generators do not have the option of determining what levels of frequency to ride through and what levels of frequency to trip on. Those quantities are defined by the RC and the BA and Generator Operators are required to have generator protection system settings that allow this ride through. Generators should have frequency and voltage ride through requirements that are coordinated with automatic load shedding programs by the RC, BA and/or TOP but should simply be required to comply with these requirements and should not have a role in the coordination. The comments in the GOTO Final report indicate that this addition is required to ensure that a generator frequency trip set point is appropriately included in the currently required coordination between the BA and TOP. Clark believes that generators should not participate in the coordination but simply be required to comply with frequency ride through requirements dictated by the RC, BA and/or TOP.</p> <p>Clark believes that FAC-002 clearly applies to Generator Owners and this standard requires that generator integration facilities address reliability impacts in the interconnected transmission system. Additionally, the proposed change to EOP-003 appears to have nothing to do with the issue at hand (i.e. removal of TOP status to a generator because of a Generator Interconnection Facility).</p> <p>Clark believes it is inappropriate to make EOP-003 applicable to Generator Operators and to imply that a Generator</p>

Organization	Yes or No	Question 4 Comment
		<p>Operator has any participation in coordination of underfrequency load shedding other than to comply with frequency ride through requirements of the RC, BA and/or TOP.</p> <p>Clark agrees that the changes to FAC-003 are appropriate, will lead to increased reliability and do not result in unnecessary reporting or paperwork. The applicability section clearly limits the scope of what Generation Interconnection Facilities would be included in this standard by having a “two span” limit in the length of the facility. This limit appropriately will exclude those generators that have arranged for a Transmission switchstation owned and operated by a Transmission Operator located immediately adjacent to the generator.</p> <p>In IRO-005, R13, the standard proposes to require a Generator Operator to immediately inform the TOP of status changes to SPS. While Clark is not opposed to this change, it is unclear why the issue at hand (i.e. removal of TOP status to a generator because of a Generator Interconnection Facility) has led to this addition. The SAR implies that the industry need leading to the SAR is the “registration of Generator Owners and Generator Operators as Transmission Owners and Transmission Operators, based on the facilities that connect the generators to the interconnected grid.” IRO-005, R13 does not appear to have any connection to this industry need.</p> <p>In PER-001, Generator Operators are added to the applicability and as a result of the new R2 Generator Operators will be required to demonstrate the authority of operating personnel over Generation Facilities and Generation Interconnection Facilities. This level of authority is unnecessary. Transmission Operators already have this authority (refer to PER-001, R1). Generator Operators are already required to comply with reliability directives issued by RCs, BAs, and TOPs in other reliability standards. The requirement to demonstrate that a generator needs this authority over its generating facility is unnecessary and has no connection with the industry need the SAR is based on. A generator operator has authority over its generator by virtue of its registration as a Generator Operator. The need for further proof that a GOP can operate generation facilities for which it is a registered GOP has not been demonstrated. The requirement to demonstrate that a generator needs authority over a Generation Interconnection Facility is; for the same reason, unnecessary. A generator operator has authority over its generator by virtue of its registration as a Generator Operator for that facility. The need for further proof that a GOP can operate Generation Interconnection Facilities for which it is a registered GOP has not been demonstrated.</p> <p>In PER-002, Generator Operators are added to the applicability and as a result of the new R3 Generator Operators will be required to demonstrate training programs similar to TOP training requirements. Clark is not opposed to training its GOP personnel; however, including the training program within the PER-002 training requirements elevates this training to a level that has not been demonstrated to be necessary in all cases. Currently, this requirement is applicable to a TOP. By removing the TOP classification to certain GO/GOP registered entities that are only a TOP by virtue of Generation Interconnection Facilities, the potential exists that inadequately trained personnel may be directing the operation of a Generation Interconnection Facility. However, as stated earlier, when the Generation Interconnection Facility is short in length and more importantly when this facility has no devices which can be operated (i.e. direct connection between the generator step-up transformer or generator protection circuit breaker (owned or</p>

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Organization	Yes or No	Question 4 Comment
		<p>operated by the GOP) and the TOP owned and operated transmission breaker) there is no gap in having adequately trained personnel operating transmission facilities. Clark believes the applicability section should include minimal limits for applicable Generation Interconnection Facilities or that the definition of Generation Interconnection Facilities should be amended such that PER-002 applicability is limited to GOPs that own facilities that are similar in nature to the New Harquahala Generation Interconnection Facilities that have led to this SAR.</p> <p>The proposed changes to TOP-004 are confusing. The proposal does not add GOP in the applicability section but the newly proposed R7 appears to obligate GOPs. The requirement should be revised to obligate a TOP to ensure that a GOP operates within its applicable limits. These limits should have already been established.</p> <p>In FAC-008 Transmission Owners and Generator Owners are required to have a ratings methodology.</p> <p>In FAC-009 TOs and GOs are required to calculate facility ratings. In both of these standards, documentation is to be made available to RCs, TOPs, PAs and TPs that have responsibility. At the very least, the applicability section of a standard should be coordinated with the entities having obligations due to the requirements of a standard.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.)</p>		
Luminant	No	<p>No, for the bulk of the Generator Owners whose Generation Interconnection Facilities (GIF) are connected in close proximity (i.e., one-half mile or less) to the BES, the requirements will only add additional unduly burdensome documentation, paperwork and compliance risk, with no reliability benefit</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Independent Electricity System Operator	No	<p>Please see our comments under Q5 where we comment on both the additions and modifications to the standards.</p>
ISO RTO Council Standards Review Committee	No	<p>Please see our comments under Q5 where we comment on both the additions and modifications to the standards.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Prairie Power, Inc.	No	<p>PPI considers the phrase “for SPS relay or control equipment under its control” to be confusing and ambiguous in the new requirement IRO-005 R13. We suggest deletion of this phrase maintains the intent of the requirement and removes the unclear reference to the subject associated with the word “its”.</p>

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Organization	Yes or No	Question 4 Comment
		<p>PPI questions why the sub-elements of new requirement TOP-001 R9 are stipulated in bullet item format rather than sub-requirement format.</p> <p>PPI agrees with the first portion of new requirement PER-001 R2. Regarding the second portion of new PER-001 R2, the Generator Operator is already required to comply with Reliability Coordinator directives as established in IRO-001 R8 and TOP-001 R3, and further the Generator Operator is already required to comply with Transmission Operator directives also as established in TOP-001 R3. PPI does not see any benefit in reiterating the Generator Operator responsibility and authority to follow directives in this new requirement. PPI would suggest stipulating the Generator Operator be responsible for following directives of the Balancing Authority in a separate Requirement or sub-requirement, and not lumped into this new requirement.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT. The bulleted items in TOP-001 R9 should have been numbered. We'll pass this comment on to the SDT.</p>		
Duke Energy	No	See detailed comments under Question 5 below.
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
AmerenUE, Power Operations Services	No	See response to Item #2.
<p>Response: The SAR DT thanks you for your comment. The SAR has been modified to allow the SDT the option of merging the changes into one new standard or an existing standard(s).</p>		
Midwest ISO Standards Collaborators	No	The requirement additions to the TOP standards parallel requirements that the Real-Time Operations standards drafting team has already proposed for removal. This project needs to be coordinated with the Real-Time Operations project.
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Tenaska, Inc.	No	TOP-001 R10 should be amended such that the proposed R10 reads as follows: The Transmission Operator shall have decision-making authority over operation of the Generator Interconnection Operational Interface at all times in order to preserve interconnection reliability, unless by exercising that authority such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances the Generator Operator shall immediately inform the Reliability Coordinator or Transmission Operator of the inability to perform the directive so that the Reliability

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Organization	Yes or No	Question 4 Comment
		Coordinator or Transmission Operator can implement alternate remedial actions.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
North Carolina Electric Membership Corporation	No	<p>We agree with most of the new requirements with the exception of two:</p> <p>1) New requirement R9 of TOP-001 appears to be very similar to existing requirements of TOP-001 (req R7) and TOP-003 (req R1). Further clarification is needed to distinguish the differences between this new requirement and existing requirements.</p> <p>2) New requirement R5 of TOP-008 directs the GOP to disconnect the GIF when “safety is jeopardized” or... which triggers the immediate question: Who’s safety does the Ad Hoc group refer to, the personnel of the GO/GOP or the safety of the transmission system or its personnel or both possibly? Please clarify. If it the safety of the transmission, its personnel or the system grid in general, then why would it not be the TOP's responsibility to provide a directive of this nature since the TOP would have a greater perspective/visibility than the GO/GOP of the system operating conditions in real time?</p>
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
Energy Standards Working Group	No	<p>We are supportive of most of the new requirements being suggested with the following two exceptions:</p> <p>IRO-005 R13 which states:R13. The Generator Operator shall immediately inform the Transmission Operator of the status ofthe Special Protection System, including any degradation or potential failure to operate as expected for SPS relay or control equipment under its control.We believe that this proposed additional requirement is redundant as it is already covered by the requirements of PRC-001-1</p> <p>ANDTOP-001 R10 which states:The Transmission Operator shall have decision-making authority over operation of theGenerator Interconnection Operational Interface at all times in order to preserveInterconnection reliability.</p> <p>We would amend the proposed R10 as follows: The Transmission Operator shall have decision-making authority over operation of the Generator Interconnection Operational Interface at all times in order to preserve interconnection reliability, unless by exercising that authority such actions would violate safety, equipment, regulatory or statutory requirements. Under these circumstances the Generator Operator shall immediately inform the Reliability Coordinator or Transmission Operator of the inability to perform the directive so that the Reliability Coordinator or Transmission Operator can implement alternate remedial actions.</p>
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		

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Organization	Yes or No	Question 4 Comment
Electric Market Policy	No	We feel it is not necessary to include the phrase “including the Generator Interconnection Facility” in all the applicable requirements. The term Generator Interconnection Facility is proposed to be included in the Glossary definitions and the proposed definition of Generator Operator includes the following language “also operates the Generator Interconnection Facility and is responsible for coordinating with the Transmission Operator when the facility is energized or about to be energized to/de-energized from the transmission system” which we feel is sufficient and superior to having the phrase repeated throughout the applicable standards.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
First Wind	No	We feel it is not necessary to include the phrase “including the Generator Interconnection Facility” in all the applicable requirements. The term Generator Interconnection Facility is proposed to be included in the Glossary definitions and the proposed definition of Generator Operator includes the following language “also operates the Generator Interconnection Facility and is responsible for coordinating with the Transmission Operator when the facility is energized or about to be energized to/de-energized from the transmission system” which we feel is sufficient and superior to having the phrase repeated throughout the applicable standards.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
California ISO	Yes	
Competitive Power Ventures, Inc.	Yes	
El Dorado Energy LLC	Yes	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	Yes	
Florida Municipal Power Agency	Yes	
Ingleside Cogeneration,	Yes	

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Organization	Yes or No	Question 4 Comment
LP		
Manitoba Hydro	Yes	
Mesquite Power	Yes	
PSEG Companies	Yes	
Sempra Generation	Yes	
SERC Planning Standards Subcommittee	Yes	
South Carolina Electric and Gas	Yes	
Southern California Edison co.	Yes	Additional clarification would be useful as it/ they would cut down on future requests for interpretation.
Response: The SAR DT thanks you for your comment.		
Pepco Holdings, Inc - Affiliates	Yes	Application of FAC-003 for Gen Interconnect Facilities that are "two spans, generally 1/2 mile or more past the property line" is reasonable as long as the "property line" remains in the definition. OK.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
Constellation Power Source Generation Inc.	Yes	Constellation agrees with the proposed new requirements in principal. However, further clarity is needed in the requirements so that there isn't any added confusion. Either an implementation plan or a "frequently asked questions" document would be recommended.
Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.		
Bonneville Power Administration	Yes	However, believe there is a problem with #8 referring to TOP-008. The solution to the generator facility line overload may be a transmission system problem so the Generator should not disconnect unless the TOP directs it to do

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Organization	Yes or No	Question 4 Comment
		so(confer unless a safety issue). Also, TOP-001 needs careful work. The transmission system doesn't want environmental issues turning off generators during emergency or critical transmission conditions.
Entegra Power Group LLC	Yes	SEE COMMENTS FOR QUESTION 2.
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		

5. Do you agree with the proposed *modified* requirements intended to add clarity around expectations for generator owners and operators at the transmission interface?

Summary Consideration: A number of responses expressed concern about the proposed modifications. An in-depth review of the comments indicated that most of the concerns could be addressed by the SDT during the standards drafting process. Based on discussions with FERC and NERC staffs regarding previous Commission actions and NERC compliance filings, the SAR DT modified the SAR to give the SDT the flexibility to consider further modifications not identified in the Ad Hoc Report.

Organization	Yes or No	Question 5 Comment
Independent Electricity System Operator		<p>(1) We realize that the SDT needs to make changes to “approved standards” but there are a number of standards involved in this project whose newer versions have either received the BoT approval, or about to be adopted by the BoT or at the stage of being finalized or balloted. To make changes to the soon to be outdated versions is confusion and will require a subsequent change when FERC approves the standards. We therefore suggest the SDT to also mark up those which have newer versions already or soon to be adopted by the BoT and those that are being balloted. Alternatively, the SDT may want to post the changes to those FERC approved standards only, and defer actions on those that have not been approved by FERC and those that are being revised/balloted until FERC approves them.</p> <p>(2) EOP-001: R7.3 has been changed to add the term “..., including outages to the Generator Interconnection Facility, to maximize”. It is not clear whom the TOP and the BA should coordinate with and it does not place a requirement on the entity that is responsible for the Generator Interconnection Facility outage planning and scheduling. We suggest to add the appropriate responsible entity (Generator Owner?) to the Applicability Section, and add this entity to R7.3.</p> <p>(3) In EOP-008 R1.3, is it the intent of the revised requirement that the plan address monitoring and control of ALL Generator Interconnection Operational Interface[s] or just the critical ones (as with the critical transmission facilities)?</p> <p>(4) R10 of TOP-001 is not written in the form of a requirement. We suggest replacing “have” with “exercise”. Thus, the requirement would read “The Transmission Operator shall exercise decision-making authority over operation of the Generator Interconnection Operational Interface...”</p> <p>(5) TOP-004: The Applicability Section needs to be revised to add Generator Operator to reflect the new requirement R7. We also suggest the SDT to evaluate if there is an alternative or more suitable place for this requirement than the TOP standard.</p> <p>(6) A number of standards are missing their VSLs. Most VSLs have similar wording in the requirements so many of them will need to be revised to reflect changes to the requirements proposed in this project.</p>

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Organization	Yes or No	Question 5 Comment
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT. The redlines were only intended to provide stakeholders with an idea of the proposed scope of changes – the team recognizes that any new/revised requirement may result in associated changes to the VRFs, Time Horizons, VSLs, data retention, measures, etc.</p>		
<p>Energy Standards Working Group</p>	<p>No</p>	<p>Comments: see my note re FAC-003</p> <p>We are supportive of the modified requirements being suggested with the following exception:</p> <p>FAC-003:We offer the following suggested changes for greater clarity.</p> <p>4. Applicability:Replace the proposed sections 4.4 and 4.5 with the following:4.4. Generator Owner that owns a Generator Interconnection Facility above 200 kV that exceed two spans from the generator property line or are below 200 kV and deemed critical to the reliability of the electric system by the Regional Entity (subject to the two-span criteria.)</p> <p>Furthermore, the Standard Drafting Team should insure that in drafting the requirements and subsequent sections of the standards, it is clear that the use of the words “Generator Owner” refers only to the subset of Generator Owners as specified by section 4.4, not to all Generator Owners included in the NERC Registry.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Constellation Power Source Generation Inc.</p>	<p>No</p>	<p>Constellation agrees with the proposed changes for BAL-5, EOP-1, EOP-4, EOP-8, FAC-1, FAC-8, FAC-9, IRO-5, MOD-10, MOD-12, PER-1, PRC-1, PRC-5, TOP-1, TOP-2, TOP-3, VAR-1, and VAR-2. Furthermore, the changes made to CIP-2 are especially valuable in that the clarity it brings with the added terminology would assist in identifying individual assets.</p> <p>Constellation does not agree with (or has comments for) the proposed changes to:</p> <ul style="list-style-type: none"> oEOP-3 - GOs/GOPs should not be included in this standard oFAC-3 - Constellation agrees in principal with this change, but further work is needed in regards to which GOs fall into this category. The wording may be changed to “two or more spans exceeding ½ mile in total length,” but further discussions is needed on this topic. oPER-2 - Constellation agrees in principal with this change, but believes that this requirement should be combined into PRC-001 R1, and eliminate the redundancy. oPRC-5 - Testing of the Protection System of the Generator Interconnection Facility is not always the sole responsibility of the GO. Some verbiage attesting to that is needed. Otherwise, it is wise to include the Generator Interconnection Facility into this standard so that no gap may exist in the testing of a Protection System that may impact the BES.

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Organization	Yes or No	Question 5 Comment
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
E.ON U.S.	No	E.ON U.S. has already determined a Division of Responsibilities between the GO/TO and therefore does not see the need for auditable reliability standards to be added between the GO/TO.
<p>Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that there is a reliability need for this SAR.</p>		
Duke Energy	No	<ul style="list-style-type: none"> o General Comment - The Standards Drafting Team (SDT) will need to make sure that Measures are developed or modified to correspond to new or revised requirements of the standards. o Process Question - Will the SDT fold these standards revisions into other projects, or will new versions be created as part of this project? o FAC-003-1 - Applicability sections 4.4 and 4.5 should be combined to make it clear that the standard only applies to the Generator Owner’s GIF. Does the 2-span limit mean that there are three towers? What criteria will the Regional Entity use to deem a GIF critical? The language about the generator property line is confusing - how does it compare to the Right-of-Way (ROW) definition? In some cases the TO may own the ROW, while the GO owns the GIF. o FAC-008-1 - Requirement R1 raises a question regarding whether a GIF can be jointly owned by a TO and a GO. If a TO is an owner, then the GIF is not a GIF but a transmission facility, right? o FAC-009-1 - We don’t think revisions are needed to R1 and R2, since the term “Facilities” already implicitly includes GIF. If you don’t agree, then perhaps a more straightforward approach would be to revise the definition of “Facility” to explicitly include the GIF. o IRO-005-2 - We think that you don’t need to specifically add the GIF to R9 because it would have to already be included in the requirement as part of any generation outage coordination. Under R13 we would change “the Special Protection System” to “any Special Protection System”. We also note that this new R13 propagates the poor language of R12 (i.e., how does anyone define “a potential failure to operate”?). o PER-001-0 - Applicability section 4.3 should be expanded to make it clear that Requirement R2 only applies to the Generator Operator with respect to the GIF, and R2 should be likewise revised. The GOP is already obligated under TOP-001-1 Requirement R3 to comply with RC and TOP directives unless such actions would violate safety, equipment, regulatory or statutory requirements. Suggested rewording of Applicability section 4.3 : “Generator Operators -This standard shall apply to Generator Operators who own a Generator Interconnection Facility.” Suggested rewording of Requirement R2 : “For Generation Facility Interconnection equipment under their direct control, each Generator Operator shall provide operating personnel with the responsibility and authority to implement real-time actions and to follow reliability

Organization	Yes or No	Question 5 Comment
		<p>directives of Reliability Authorities, Transmission Operators and Balancing Authorities, to ensure the stable and reliable operation of the Generation Interconnection Facility.”</p> <ul style="list-style-type: none"> o PER-002-0 - Applicability section 4.3 should be expanded to make it clear that Requirement R2 only applies to the Generator Operator with respect to the GIF. Suggested rewording of Applicability section 4.3 : “Generator Operators -This standard shall apply to Generator Operators who own a Generator Interconnection Facility.” o PRC-001-1 - Changes to PRC-001-1 should probably not be made right now, because it is already a vague standard, and was the subject of an Interpretation (Project 2009-30) which was voted down in February. o TOP-003-0 - Requirement R1 and its sub-requirements are poorly written. We suggest folding R1.3 into R1 with this suggested rewording: “Generator Operators and Transmission Operators shall provide planned outage information by 1200 Central Standard Time for the Eastern Interconnection and 1200 Pacific Standard Time for the Western Interconnection, as follows : “ o TOP-004-2 - We question whether Requirement R7 is appropriate, since by definition the GIF is not part of the transmission system network and does not fit with the Purpose statement of this standard. If R7 is retained, then you need to add Generator Operator to the Applicability section. o TOP-008-1 - Need to add GOPs to the Purpose statement.
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
California ISO	No	<p>Please see our comments under Question 2 above. In addition, with regard to the proposed change to Standard PRC-001, the California ISO (CAISO) questions the need for a BA to understand the purpose and limitations of protection schemes associated with all of the Generator Interconnection Facilities in its area given a BA’s role is to balance load/generation/interchange which does not require the BA to operate any generator or BES facilities, or to understand the characteristics or limitations of any equipment. Any potential loss of one or more generator due to protection or equipment issues will need to be communicated by the GO or GOP to the BA for consideration in reserve calculation</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Prairie Power, Inc.	No	<p>PPI does not agree with the modification to EOP-003 R7. The Generator Operator does not have load to be shed, therefore none to be coordinated. If the drafting team is intending to require the Generator Operator to coordinate the underfrequency relay settings on their resources with load shedding plans established by the Transmission Operator and Balancing Authority, this is an appropriate requirement. The modification, though, does not accomplish this.PPI questions why the sustained line outages reported quarterly to the RRO pursuant to FAC-003 R3 by the Generator Owner, as modified, are not reported to NERC in Requirement 4 of the same Standard.</p>

Organization	Yes or No	Question 5 Comment
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
AmerenUE, Power Operations Services	No	See response to Item #2.
<p>Response: The SAR DT thanks you for your comment. The SAR has been modified to allow the SDT the option of merging the changes into one new standard or an existing standard(s).</p>		
Luminant	No	<p>The following comments are specific to each standard</p> <p>CIP-002 - This standard is currently under revision and any change should be addressed by the Cyber Security Standards Revision Team.</p> <p>EOP-003 - Application of this reliability standard to a GOP is incorrect. The Generator Operator has no direct responsibility for load shedding. Only the TOP and BA have load shedding responsibility.</p> <p>EOP-004 - The inclusion of GIF in this reliability standard is redundant as the GOP has responsibility for all of its facilities, including any generators. . Since generation units are not independently identified with a particular GOP, the GIF does not need to be independently identified. Also, there is a NERC project currently underway to revise this standard (Project 2009-01).</p> <p>FAC-003 - Luminant agrees this standard should apply in those instances when the generator is connected to the BES through its GIF over a substantial distance. However, the applicability of this standard to a GIF needs to specify a distance (such as one-half (½) mile from the plant property boundary) not a number of spans since the spacing between spans can vary from extensively. Defining the applicability of this standard in terms of a number of spans will create inconsistency in the application of the requirements.</p> <p>IRO-005 - New requirement R13 presumes that a Special Protection System (SPS) is the sole responsibility of a GOP, which, in most cases, it is not. Most SPS are the responsibility of the TO, not the GOP. This requirement does not define which SPS is being monitored. A requirement of this nature should define an SPS on the GIF.</p> <p>PER-001 - The addition of a requirement applicable to GOP in this standard goes well beyond the scope of this project's purpose. A NERC Standards Drafting Team, under Project 2006-01, did not add any GOP requirements to the PER standards. This proposed GOP requirement is redundant. Current NERC Reliability Standard TOP-001, R3 requires Generator Operators to follow reliability directives, as does IRO-001, R8. This proposed requirement should be deleted. It adds paperwork, documentation and compliance risk with no reliability benefit. The PER-001 standards were intended for overall grid management, not the operation of a power plant.</p>

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Organization	Yes or No	Question 5 Comment
		<p>PER-002 - The recent NERC Standards Drafting Team, under Project 2006-01, specifically declined to make this standard applicable to GOP. In addition, the 2006-01 project is retiring this standard with the adoption of the revised PER-005.</p> <p>PRC-001 - The inclusion of Generator Interconnection Facility is redundant. However, there is a current NERC Drafting team revising PRC-001 and this issue should be referred to that team.</p> <p>PRC-005 - Any revisions to PRC-005 should be referred to the current PRC-005 drafting team.</p> <p>TOP-001 - Draft Requirements R9 and R10 are extremely broad. These should only apply to narrowly defined GIFs such as long span connections or GIFs with transmission load flowing through the GIF. Care should be taken in this requirement not to duplicate requirements such as coordination of outage planning. The requirements should be specific, and not fill in the blank for the TOP or region.</p> <p>TOP-004 - Draft Requirement R7 is redundant to requirements in other standards and is not needed.</p> <p>IRO-005-2, R13, and IRO-005-3, R10, require the GOP to operate the BES to its most limiting factor, which is, by definition, implicitly within its facility ratings.</p> <p>TOP-008 - Does draft requirement R5 fit in this standard that addresses IROL and SOL? This requirement should only apply to the same long connection GIF facilities identified in TOP-003.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Florida Municipal Power Agency</p>	<p>No</p>	<p>The modification of EOP-003-1, R7 is inconsistent with the requirement. The original requirement requires the BA and TOP to coordinate with others (presumably DPs, TOs and GOPs) in their area for various automatic action (e.g., UFLS, automatic tripping of cap banks, and frequency capabilities of generators for instance). The GOP has no “area” to coordinate and no one within its area to coordinate with. So, it is the BA and TOP that coordinate within their area, not the entities embedded within the BA or TOP area. Otherwise, we ought to add at a minimum DPs, LSEs, and TOs to the list.</p> <p>The modifications to EOP-004-1 R2; FAC-001-0 R1.1; FAC-008-1; FAC-009-1; MOD-010, MOD-012, PRC-001, PRC-004; PRC-005; TOP-001-1 R7; TOP-002 R3 and R18; TOP-003 R1 and R1.1; and VAR-002 R3.2 are redundant with no need to specifically call out the Generator Interconnection Facility. The interconnection facilities are facilities and already included in the term “on its system or facilities” and “generating facilities”, etc. And, the Generator Owner and Operator are already responsible for their interconnection facilities in the definition of those Entities. Specifically calling out the interconnection facilities calls into question why other facilities are not specifically called out.</p> <p>As discussed in the response to #2 above, addition of the Generator Owner to FAC-003 over-steps Federal Power Act Section 215 since radial transmission lines to generating plants will not participate in a cascading outage since the loading of radial facilities to power plants will not change significantly with outages on the interconnected system.</p>

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Organization	Yes or No	Question 5 Comment
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>North Carolina Electric Membership Corporation</p>	<p>No</p>	<p>We agree with most all of the modified requirements with one exception: For FAC-003, regarding the "two-span criteria" or "about 0.5 miles" test for generator applicability, we would like the ad hoc team to consider providing more direction or greater specificity that makes a GIF of two or less spans to become exempt, while one of greater than two spans (0.5 mile) but less than 5 spans (0.8 miles) to suddenly become subject to the FAC-003 standard requirements. The "generator's line-of sight" rule as described in response to item #3 in the Final Report in our opinion should be clearly specified in the FAC-003 proposed standard change at a minimum to avoid mis-interpretations. Also, regarding item #10 issue in the report, we would like the ad hoc team to consider proposing a 4th proposal which would be a hybrid between Proposal 2 and Proposal 3 as reported within the Final Report which would provide a "bright-line test" as to what generators are exempt or not to the FAC-003 standard, rather than solely relying on Proposal 2 which relies on the physical attributes of the GIF in ruling out generators subject to FAC-003. If the GIF is 3-4 spans or 0.53 miles in length, but still within the "line of sight" of the GOP, then allow the GOP working with the RE and TOP to rule out smaller generators that are immaterial to the reliability of the grid.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Tenaska, Inc.</p>	<p>No</p>	<p>We are supportive of the modified requirements being suggested with the following exception related to the suggested changes on FAC-003 for which we offer the following modification for greater clarity: 4. Applicability: Replace the proposed sections 4.4 and 4.5 with the following: 4.4. Generator Owner that owns a Generator Interconnection Facility above 200 kV that exceed two spans from the generator property line or are below 200 kV and deemed critical to the reliability of the electric system by the Regional Entity (subject to the two-span criteria.) Furthermore, the Standard Drafting Team should insure that in drafting the requirements and subsequent sections of the standards, it is clear that the use of the words "Generator Owner" refers only to the subset of Generator Owners as specified by section 4.4, not to all Generator Owners included in the NERC Registry.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>Midwest ISO Standards Collaborators</p>	<p>No</p>	<p>We do not agree with the modification to EOP-003 R7. The Generator Operator does not have load shed to coordinate. We believe the drafting team is intending to require the Generator Operator to coordinate underfrequency relay settings on their generators with the BA and TOP load shedding plans. We agree this is appropriate but the modification does not</p>

Organization	Yes or No	Question 5 Comment
		<p>accomplish this.</p> <p>EOP-004 R2 seems to be modified unnecessarily. System and facilities are already included in the requirement and, thus, would include the Generator Interconnection Facility.</p> <p>We do not agree adding Generator Interconnection Operational Interface to R1.3 in EOP-008. The sub-requirement already requires the contingency plan to consider generation control which would require consideration of the Generator Interconnection Operational Interface. Furthermore, there is a lack of coordination with the project to update this standard. A newer, significantly modified version of this standard has already been through an initial ballot period.</p> <p>IRO-005 R9 modifications are not needed. The requirement already requires an RC to coordinate pending generation outages. This would have to include any outage such as the Generator Interconnection Facility. Many of the changes to the TOP standard are modifying requirements that the Real-Time Operations standards drafting team has already proposed for removal. This project needs to be coordinated with the Real-Time Operations project.</p> <p>VAR-001 R8 modifications are not necessary because the TOP is already required to operate reactive generation scheduling. They can't do this without considering the Generator Interconnection Facility.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
<p>ISO RTO Council Standards Review Committee</p>	<p>No</p>	<p>While we generally agree with the proposed wording change, we have a number of comments the first of which is a timing decision issue.</p> <p>(1) We realize that the SDT needs to make changes to “approved standards” but there are a number of standards involved in this project whose newer versions have either received the BoT approval, or about to be adopted by the BoT or at the stage of being finalized or balloted. To make changes to the soon to be outdated versions is confusing and will require a subsequent change when FERC approves the standards. We therefore suggest the SDT to coordinate their changes with the other drafting teams that are working on the newer versions already or soon to be adopted by the BoT and those that are being balloted. Alternatively, the SDT may want to post the changes to those FERC approved standards only, and defer actions on those that have not been approved by FERC and those that are being revised/balloted until FERC approves them.</p> <p>(2) EOP-001: R7.3 has been changed to add the term “..., including outages to the Generator Interconnection Facility, to maximize”. It is not clear with whom the TOP and the BA should coordinate with and it does not place a requirement on the entity that is responsible for the Generator Interconnection Facility outage planning and scheduling. We suggest removing the changes on this requirement all together. Generator maintenance will include the Generator Interconnection Facility. These are extra words that are not needed.</p> <p>(3) A number of standards are missing their VSLs. Most VSLs have similar wording in the requirements so many of them</p>

Organization	Yes or No	Question 5 Comment
		<p>will need to be revised to reflect changes to the requirements proposed in this project.</p> <p>(4) We do not agree with the modification to EOP-003 R7. The Generator Operator does not have load shed to coordinate. We believe the drafting team is intending to require the Generator Operator to coordinate underfrequency relay settings on their generators with the BA and TOP load shedding plans. We agree this is appropriate but the modification does not accomplish this.</p> <p>(5) EOP-004 R2 seems to be modified unnecessarily. System and facilities are already included in the requirement and, thus, would include the Generator Interconnection Facility.</p> <p>(6) We do not agree adding Generator Interconnection Operational Interface to R1.3 in EOP-008. The sub-requirement already requires the contingency plan to consider generation control which would require consideration of the Generator Interconnection Operational Interface. Furthermore, there is a lack of coordination with the project to update this standard. A newer, significantly modified version of this standard has already been through an initial ballot period.</p> <p>(7) IRO-005 R9 modifications are not needed. The requirement already requires an RC to coordinate pending generation outages. This would have to include any outage such as the Generator Interconnection Facility.</p> <p>(8) PRC-001: We question the need for a BA to understand the purpose and limitations of protection schemes associated with all of the Generator Interconnection Facilities in its area given a BA's role is to balance load/generation/interchange which does not require the BA to operate any generator or BES facilities, or to understand the characteristics or limitations of any equipment. Any potential loss of one or more generator due to protection or equipment issues will need to be communicated by the GO or GOP to the BA for consideration in reserve calculation.</p> <p>(9) Many of the changes to the TOP standard are modifying or adding parallel requirements that the Real-Time Operations standards drafting team has already proposed for removal. This project needs to be coordinated with the Real-Time Operations project to assess the need for these additions/modifications.</p> <p>(10) VAR-001 R8 modifications are not necessary because the TOP is already required to operate reactive generation scheduling. They can't do this without considering the Generator Interconnection Facility.</p>
<p>Response: The SAR DT thanks you for your comment. Several stakeholders had similar concerns, and all will be referred to the SDT.</p>		
Bonneville Power Administration	Yes	
Competitive Power Ventures, Inc.	Yes	

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Organization	Yes or No	Question 5 Comment
Detroit Edison Company	Yes	
El Dorado Energy LLC	Yes	
Electric Market Policy	Yes	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	Yes	
First Wind	Yes	
Ingleside Cogeneration, LP	Yes	
Kansas City Power & Light	Yes	
Mesquite Power	Yes	
PSEG Companies	Yes	
Sempra Generation	Yes	
SERC Planning Standards Subcommittee	Yes	

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Organization	Yes or No	Question 5 Comment
South Carolina Electric and Gas	Yes	
Southern California Edison co.	Yes	Additional clarification would be useful as it/ they would cut down on future requests for interpretation
Response: The SAR DT thanks you for your comment.		
American Electric Power	Yes	AEP feels that a majority of the standards that were modified add clarity. We reserve the right to comment when the Standard Drafting Team posts the draft Standard(s).
Response: The SAR DT thanks you for your comment. There will be additional opportunities to comment on the specific proposed modifications when the project progresses to standard drafting.		
Public Utility District #1 of Clark County	Yes	Except as discussed in comments 2, 3, and 4, Clark is in agreement with the proposed changes.
Response: The SAR DT thanks you for your comment.		
American Transmission Company	Yes	<p>For FAC-009 [Establish and Communicate Facility Ratings], we believe that the additional wording to highlight that the term “Facilities” includes “Generation Interconnection Facilities” is superfluous, and therefore, it should not be added. The proposed new and revised definitions provide more than enough clarity</p> <p>For MOD-010 [Steady State Data for System Modeling], we believe that the additional wording of “for plant and Generator Interconnection Facilities” is superfluous, and therefore, it should not be added. The proposed new and revised definitions provide more than enough clarity.</p> <p>For MOD-012 [Dynamic System Data for System Modeling], we believe that the additional wording of “for plant and Generator Interconnection Facilities” is superfluous, and therefore, it should not be added. The proposed new and revised definitions provide more than enough clarity.</p>
Response: The SAR DT thanks you for your comment. It will be referred to the SDT.		
Entegra Power	Yes	SEE COMMENTS FOR QUESTION 2.

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Organization	Yes or No	Question 5 Comment
Group LLC		
<p>Response: The SAR DT thanks you for your comment. Please see the response to your comments on Question 2.</p>		
Manitoba Hydro	Yes	The modifications at this point appear appropriate.
<p>Response: The SAR DT thanks you for your comment.</p>		
Pepco Holdings, Inc - Affiliates	Yes	<p>There should be a clause that the TO shall be responsible for FAC-003 activities inside the TO's substation regardless of ownership of the Generation Interconnection Facility so we don't have to coordinate entry, etc. and they will likely have this handled for the bulk of their property anyway. R3 quarterly reporting of outage caused by vegetation is excessive for GOs. GOs would probably survey and cut as needed their Right of Ways at least once a year and probably already do so. TOs probably perform vegetation management on a multi-year cycle, so they might need to note quarterly if there is a veg. incident that occurs one or two quarters before the next round of survey/management on that line.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT. There were many suggestions for additional or alternate modifications to FAC-003 and these suggestions will be addressed by the SDT.</p>		

6. Do you believe there are any other Transmission Owner or Transmission Operator standards or requirements that should be applicable to the Generator Owner or Generator Operator other than those identified?

Summary Consideration: Stakeholders did not indicate the need to include any requirements or standards that were not already contained in the SAR. However, based on discussions with FERC and NERC staffs regarding previous Commission actions and NERC compliance filings, the SAR DT modified the SAR to give the SDT the flexibility to consider further modifications not identified in the Ad Hoc Report.

Organization	Yes or No	Question 6 Comment
AmerenUE, Power Operations Services	No	
American Transmission Company	No	
Bonneville Power Administration	No	
California ISO	No	
Competitive Power Ventures, Inc.	No	
Constellation Power Source Generation Inc.	No	
Detroit Edison Company	No	
E.ON U.S.	No	
El Dorado Energy LLC	No	
Electric Market Policy	No	
Energy Standards Working Group	No	

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Organization	Yes or No	Question 6 Comment
Entegra Power Group LLC	No	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	No	
First Wind	No	
Florida Municipal Power Agency	No	
Independent Electricity System Operator	No	
Ingleside Cogeneration, LP	No	
ISO RTO Council Standards Review Committee	No	
Luminant	No	
Mesquite Power	No	
Midwest ISO Standards Collaborators	No	
North Carolina Electric Membership Corporation	No	
Pepco Holdings, Inc - Affiliates	No	
Prairie Power, Inc.	No	
PSEG Companies	No	

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Organization	Yes or No	Question 6 Comment
Public Utility District #1 of Clark County	No	
Sempra Generation	No	
SERC Planning Standards Subcommittee	No	
South Carolina Electric and Gas	No	
Tenaska, Inc.	No	
American Electric Power	No	At this point in time, AEP cannot identify any other TO/TOP requirements that should be considered.
Response: The SAR DT thanks you for your comment.		
Southern California Edison co.	No	Do not feel that this question is in the scope of Project 2010-07 as written
Response: The SAR DT thanks you for your comment.		
Duke Energy	No	However the SDT should perform a complete review.
Response: The SAR DT thanks you for your comment. The SDT will review all applicable standards changes as needed and required by the scope and purpose of the SAR.		
Manitoba Hydro	No	No manpower available at this time to examine all possibilities and scenarios.
Response: The SAR DT thanks you for your comment.		
Kansas City Power & Light	No	Not at this time.
Response: The SAR DT thanks you for your comment.		

7. The next posting of the proposed revisions to these standards will include conforming changes to the measures and compliance elements, and will include an implementation plan. Please identify how much time you feel an entity will need to become fully compliant with the following new/revised requirements:

The Generator Operator who has responsibility for monitoring the status of a special protection system or remedial action scheme at the generating facility for the benefit of Bulk Electric System reliability should notify the Transmission Operator when a change in status or capability occurs. (IRO-005)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question and its subcomponents. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration.

Organization	Time	Question 7 Comment
Pepco Holdings, Inc - Affiliates		No SPS currently in system.
Response: The SAR DT thanks you for your comment.		
California ISO		<p>We are not a GOP and hence we are unable to comment on this and other questions addressing the GOP compliance. However, the CAISO has the following comments on the effort required for other aspects of this Project:</p> <ul style="list-style-type: none"> o As discussed under the answer to Question 5 above, it is not clear if the proposed changes to PRC-001 will require the Balancing Authority (BA) to understand the purpose and limitations of protection schemes associated with all of the Generator Interconnection Facilities in its area, even if such facilities are not under the control of the BA. If this is the case, significant and time-consuming effort will be required to identify the technical details of all of the Generator Interconnection Facilities in the BA and develop a training program to train applicable personnel on them. This is estimated to require up to 24 months. o If the proposed changes are approved they will affect 16 Standards affecting CAISO registrations. Most, if not all, of these changes will require modifications to the Reliability Standards Agreements (RSAs) between the CAISO and its Participating Transmission Operators to reflect the new wording and any delegated tasks. This may require 12 to 24 months to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		

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Organization	Time	Question 7 Comment
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
Bonneville Power Administration	1 year, if agreements need to be renegotiated.	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards Subcommittee	12 months	
Kansas City Power & Light	12 months	Basically this is a training issue. It takes time to prepare the training materials and to train all Generator Operators considering shift schedules and to implement the training as part of an ongoing process.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Prairie Power, Inc.	12 months following Regulatory Approval	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	18 months	
Luminant	18 months	

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Organization	Time	Question 7 Comment
South Carolina Electric and Gas	18 months	
Electric Market Policy	18 months to two years	We feel that, in most cases, such monitoring will only require RTU connectivity of the data points as well as incorporation into GOP control room displays.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Duke Energy	Approximately 3 months.	Depends upon measures and data requirements, but would probably be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	Immediately unless status requires change to additional requirements which might be 18 months to two years)	The Generator Interconnection Facilities are already considered to be part of our Generator Plant and therefore have already been included in our existing compliance program.
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No time	Clark has no SPS or RAS for which it is responsible.
Response: The SAR DT thanks you for your comment.		

Organization	Time	Question 7 Comment
Florida Municipal Power Agency	The amount of time it takes to compile documentation to fulfill the data retention requirements of the requirement	For most of these new requirements, the Entities are most likely fulfilling the requirements, but, may be missing the documentation to prove that they are doing so. So, to be auditably (“fully”) compliant, the Entities will need the amount of time it takes to build up sufficient evidence of compliance. This may only be a month to develop documentation, to a longer period of time to prove periodicity (e.g., a PRC-005 type of requirement - not PRC-005 itself - but a requirement that may need to be done periodically such as training to show that it is done periodically.
<p>Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.</p>		

- a. Each Generator Operator shall provide its operating personnel with the responsibility and authority to implement real-time actions to ensure the stable and reliable operation of the Generation Facility and the Generation Interconnection Facility, and to implement directives of the Transmission Operator and Balancing Authority. (PER-001)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question and its subcomponents. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration.

Organization	Time	Question 7a Comment
American Electric Power		AEP believes that this requirement is not needed and should be out of the scope for this SAR.
Response: The SAR DT thanks you for your comment. These comments will be referred to the SDT.		
Pepco Holdings, Inc - Affiliates		These responsibilities and authorities are already in place for other standards.
Response: The SAR DT thanks you for your comment. These comments will be referred to the SDT.		
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	12 months	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards Subcommittee	12 months	
South Carolina Electric and Gas	12 months	
Prairie Power, Inc.	12 months following	

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Organization	Time	Question 7a Comment
	Regulatory Approval	
Luminant	18 months	
Energy Standards Working Group	2 years	
Tenaska, Inc.	2 years	
Constellation Power Source Generation Inc.	2 years	Time is needed for training and terminology to percolate throughout the Generation Facility and that it be ingrained with the Operators.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Bonneville Power Administration	6 months	
Duke Energy	Approximately 24 months.	Multiple shifts and multiple facilities will require time to get training developed and delivered.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	Less than 1 year	Memo from management should suffice.
Electric Market Policy	Less than one year	Memo from management should suffice.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Kansas City Power & Light	N/A	The Generator Operator should be operating equipment within the Generator Interconnection Facility at the

Consideration of Comments on Generator Requirements at the Transmission Interface — Project 2010-07

Organization	Time	Question 7a Comment
		direction of the Transmission Operator.
Response: The SAR DT thanks you for your comment. We will refer these comments to the SDT.		
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No Time.	Clark’s Generator Operator personnel have responsibility and authority to implement real-time actions to ensure the stable and reliable operation of the Generation Facility and the Generation Interconnection Facility, and to implement directives of the Transmission Operator and Balancing Authority.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		

- b. Each Generator Operator shall implement an initial and continuing training program for all personnel responsible for operating the Generator Interconnection Facility to ensure the ability to operate the equipment in a reliable manner. (Per-002)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7b Comment
E.ON U.S.		A training program for this would need to be created, procedures approved, implemented, and instituted at all power plants for all shifts. E.ON U.S. recommends that the addition of PER-002 R3 be coordinated with the existing standard PRC-001 R1, to eliminate redundancy.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
American Electric Power		AEP believes that this requirement is not needed and should be out of the scope for this SAR.
Response: The SAR DT thanks you for your comment. We will refer these comments to the SDT.		
Pepco Holdings, Inc - Affiliates	0-2 years	Currently establish training based on the RTO requirements. It would be Conectiv's policy to continue this training for this requirement. If other training is imposed upon the Entities, it may require up to two years to develop and initiate full training.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Entegra Power Group LLC	1 YEAR	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	12 months	
North Carolina Electric	12 months	

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Organization	Time	Question 7b Comment
Membership Corporation		
SERC Planning Standards Subcommittee	12 months	
South Carolina Electric and Gas	12 months	
Energy Standards Working Group	2 years	
Tenaska, Inc.	2 years	
First Wind	2 years	Developing the training and providing it while accommodating shift employees will require a substantial amount of time.
<p>Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.</p>		
Constellation Power Source Generation Inc.	2 years	Time is needed to implement a training plan and revise it based on feedback from those being trained.
<p>Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.</p>		
Bonneville Power Administration	2-3 years, depending on the extent of equipment involved and size of facility.	
Luminant	24 months	
Prairie Power, Inc.	24 months following Regulatory Approval	

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Organization	Time	Question 7b Comment
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment.		
Duke Energy	Approximately 24 months.	Multiple shifts and multiple facilities will require time to get training developed and delivered.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Kansas City Power & Light	N/A	The Generator Operator should be operating equipment within the Generator Interconnection Facility at the direction of the Transmission Operator.
Response: The SAR DT thanks you for your comment. We will refer these comments to the SDT.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment.		
Public Utility District #1 of Clark County	Twelve months.	Clark’s generating operating personnel regularly engage in training however, to implement a Training Program as rigorous as the TOP Training Program will take some time to complete.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Electric Market Policy	two years	Developing the training and providing it while accommodating shift employees will require a substantial amount of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		

c. The Generator Operator shall coordinate the operation of its Generator Interconnection Facility with the Transmission Operator to whom it interconnects to preserve Interconnection reliability. (TOP-001)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7c Comment
E.ON U.S.		Appears redundant with point e) below. There are already generator-outage reporting protocols in place. This would be an unnecessary addition to existing processes.
Response: The SAR DT thanks you for your comment.		
Pepco Holdings, Inc - Affiliates	0-2 years	Entity currently coordinates this operation with the TOP. If additional requirements are instituted by NERC, there may be a need to have time to develop new programs and policies to comply with additional requirements.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
Bonneville Power Administration	1 year, if agreements need to be renegotiated.	

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Organization	Time	Question 7c Comment
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	12 months	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards Subcommittee	12 months	
Luminant	18 months	
South Carolina Electric and Gas	18 months	
Prairie Power, Inc.	24 months following Regulatory Approval	
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment.		
Kansas City Power & Light	6 months	If this is not already going on, this should not take long to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Duke Energy	Approximately 3 months.	Depends upon measures and data requirements, but should be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	Less than 1 year	There is already generator outage reporting protocols in place. This is just an addition to existing processes. Additionally, the Generator Interconnection Facility is already considered to be part of the Generating Facility and is likely already part of our existing compliance program.

Consideration of Comments on Generator Requirements at the Transmission Interface – Project 2010-07

Organization	Time	Question 7c Comment
Response: The SAR DT thanks you for your comment.		
Electric Market Policy	Less than one year	There is already generator outage reporting protocols in place. This is just an addition to existing processes.
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No Time.	Clark believes the operation of its generator is already under the direction of its TOP and that coordination has already occurred since the TOP has included the operation of Clark’s generator in its TOP-002 Normal Operations Plan.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above

d. The Transmission Operator has decision-making authority for the Generator Interconnection Operational Interface. (TOP-001)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7d Comment
Pepco Holdings, Inc - Affiliates	0-2 years	Coordination is required for the TOP to notify the GO/GOP of the decisions being implemented.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
Bonneville Power Administration	1 year, if agreements need to be renegotiated.	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	12 months	
North Carolina Electric Membership Corporation	12 months	

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Organization	Time	Question 7d Comment
SERC Planning Standards Subcommittee	12 months	
Prairie Power, Inc.	12 months following Regulatory Approval	
Luminant	18 months	
South Carolina Electric and Gas	18 months	
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment. Please see the response to question 8.		
Kansas City Power & Light	6 months	If this is not already going on, this should not take long to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Duke Energy	Approximately 3 months	Depends upon measures and data requirements, but should be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	less than 1 year	Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this because the Generator Interconnection Facility is already considered to be part of the Generating Facility.
Response: The SAR DT thanks you for your comment.		
Electric Market Policy	Less than one year	Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this.
Response: The SAR DT thanks you for your comment.		

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Organization	Time	Question 7d Comment
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No time.	Clark believes that existing standards already grant the TOP decision-making authority for the Generator Interconnection Operational Interface.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment.		

e. The Generator Operator shall notify the Transmission Operator of a change in status of the Generation Interconnection Facility.

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7e Comment
Pepco Holdings, Inc - Affiliates	0-2 years	Entity currently coordinates this operation with the TOP. If additional requirements are instituted by NERC, there may be a need to have time to develop new programs and policies to comply with additional requirements.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards Subcommittee	12 months	
South Carolina Electric and Gas	12 months	
Prairie Power, Inc.	12 months following Regulatory Approval	

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Organization	Time	Question 7e Comment
Luminant	18 months	
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment.		
Kansas City Power & Light	6 months	If this is not already going on, this should not take long to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Bonneville Power Administration	6 months.	
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	8 months	
Duke Energy	Approximately 3 months	Depends upon measures and data requirements, but should be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	less than 1 year	Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this.
Response: The SAR DT thanks you for your comment.		
Electric Market Policy	Less than one year	Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this.
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC	NO COMMENT	

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Organization	Time	Question 7e Comment
Public Utility District #1 of Clark County	No time.	Clark’s Generation Interconnection Facility status is already provided to the TOP in real time over the TOP’s SCADA system.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment.		

f. The Generator Operator shall operate the Generation Interconnection Facility within Facility Ratings. (TOP-004)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7f Comment
American Electric Power		AEP does not believe that the added requirement is necessary as the Generator Interconnection Facility should be adequately sized to handle the output of the generator.
Response: The SAR DT thanks you for your comment. Based on a review of the full body of industry comments, we believe that the standards actions proposed in this SAR are appropriate. Specific modifications will be determined by the SDT.		
Bonneville Power Administration	0 months.	
Pepco Holdings, Inc - Affiliates	0-2 years	Entity currently operates within the facility ratings as required under FAC. If additional requirements are instituted by NERC, there may be a need to have time to develop new programs and policies to comply with additional requirements
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards	12 months	

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Organization	Time	Question 7f Comment
Subcommittee		
Prairie Power, Inc.	12 months following Regulatory Approval	
Luminant	18 months	
South Carolina Electric and Gas	18 months	
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	6 months	
Kansas City Power & Light	6 months	If this is not already going on, this should not take long to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Duke Energy	Approximately 3 months.	Depends upon measures and data requirements, but should be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	less than 1 year	The Generator Interconnection Facility is already considered to be part of the Generator Unit and the facility should be compliant currently with FAC standards.
Response: The SAR DT thanks you for your comment.		
Electric Market Policy	less than one year	Facility should be compliant currently with FAC standards.

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Organization	Time	Question 7f Comment
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No time.	The Generation Interconnection Facilities of Clark have ratings that exceed the maximum generating capability of the interconnected generation facility.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment.		

g. The Generator Operator shall disconnect the Generation Interconnection Facility immediately in coordination with the Transmission Operator when time permits or as soon as practical thereafter if an overload or other abnormal condition threatens equipment or personnel safety. (TOP-008)

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. This series of questions was meant to provide input for the SDT in development of the required implementation plan that will accompany this project as it moves forward. The SAR DT would like to note that the three challenges most cited were training, agreements, and technical details. This information will be referred to the SDT for their consideration. The time needed to comply varied from 0-3 years.

Organization	Time	Question 7g Comment
E.ON U.S.		In case of overload, the E.ON U.S. GOP has an overload current relay that already removes a generating unit from the grid immediately. Moreover, it is expected that in most cases an Interconnection Agreement between the generator and TO that it connects with already contains language supportive of this.
Response: The SAR DT thanks you for your comment.		
Pepco Holdings, Inc - Affiliates	0-2 years	Entity currently coordinates this operation with the TOP. If additional requirements are instituted by NERC, there may be a need to have time to develop new programs and policies to comply with additional requirements.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Constellation Power Source Generation Inc.	1 year	
Energy Standards Working Group	1 year	
Tenaska, Inc.	1 year	
Bonneville Power Administration	1 year, if agreements need to be renegotiated.	

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Organization	Time	Question 7g Comment
Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners	12 months	
North Carolina Electric Membership Corporation	12 months	
SERC Planning Standards Subcommittee	12 months	
South Carolina Electric and Gas	12 months	
Prairie Power, Inc.	12 months following Regulatory Approval	
Luminant	36 months	
Southern California Edison co.	3yrs	Pls refer to question No. 8
Response: The SAR DT thanks you for your comment.		
Kansas City Power & Light	6 months	If this is not already going on, this should not take long to implement.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
Duke Energy	Approximately 3 months.	Depends upon measures and data requirements, but should be a short period of time.
Response: The SAR DT thanks you for your comment. All timing issues related to the implementation plan will be addressed by the SDT.		
First Wind	less than 1 year	The Generator Interconnection Facility is already considered to be part of the Generator Unit. Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this.

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Organization	Time	Question 7g Comment
Response: The SAR DT thanks you for your comment.		
Electric Market Policy	less than one year	Expect that, in most cases, the Interconnection Agreement between the generator and the TO or DP that it connects with already contains language that supports this.
Response: The SAR DT thanks you for your comment.		
Entegra Power Group LLC	NO COMMENT	
Public Utility District #1 of Clark County	No time.	Clark has experienced no operating conditions where it had to disconnect the Generation Interconnection Facility immediately due to an overload or other abnormal condition that threatened equipment or personnel safety.
Response: The SAR DT thanks you for your comment.		
Florida Municipal Power Agency	See above	See above
Response: The SAR DT thanks you for your comment.		

8. If you have any other comments on this SAR or proposed standard revisions and NERC Glossary modifications that you have not already provided in response to the prior questions, please provide them here.

Summary Consideration: The SAR DT thanks all stakeholders for their response to this question. Many of the comments were addressed in earlier responses. Based on discussions with FERC and NERC staffs regarding previous Commission actions and NERC compliance filings, the SAR DT modified the SAR to give the SDT the flexibility to consider further modifications not identified in the Ad Hoc Report. Finally, revisions to the SAR also allow the SDT the option of merging the changes into one new standard or into several different existing standards.

Organization	Question 8 Comment
<p>Constellation Power Source Generation Inc.</p>	<p>Constellation would like to thank the Ad-Hoc group for the excellent work they did in creating the GOTO Final Report. In particular, here are a few excerpts that Constellation agrees with, and would like the future SDT to consider:</p> <ul style="list-style-type: none"> oThe Generator Owner or Generator Operator that owns and/or operates a Generator Interconnection Facility, that is, a sole-use facility that interconnects the generator to the grid, should not be registered as a Transmission Owner or Transmission Operator by virtue of owning or operating its Generator Interconnection Facility. oA Generator Interconnection Facility is considered as though part of the generating facility specifically for purposes of applying Reliability Standards to a Generator Owner or Generator Operator. oAfter review of the existing Transmission Operator requirements that are not currently applicable to Generator Operators, no existing Transmission Operator requirements should apply to Generator Operators as a result of the Generator Interconnection Facility.
<p>Response: The SAR DT thanks you for your comments. The SAR DT supports the three concepts identified.</p>	
<p>EI Dorado Energy LLC</p>	<p>EI Dorado Energy commends the efforts of the NERC Ad Hoc Group, and supports the Final Report from the Ad Hoc Group for Generator Requirements at the Transmission Interface, and Standards Authorization Request addressing the various Standards containing GO/GOP and TO/TOP Requirements. The Final Report and SARs are products of detailed analysis and thoughtful consideration of the myriad issues surrounding the reliability implications of ownership and operation of Generator Interconnection Facilities. It is noteworthy - though hardly surprising - that, after many months of study, the GO/TO Task Force, a balanced group comprised of members from a broad spectrum of functional categories, concluded that only modest changes to the Reliability Standards would be required in order to ensure that generator interconnection facilities are operated reliably. When implemented, the recommendations included in the Final Report and SARs should go a long way toward providing the regulatory and compliance certainty needed by generators who own or operate Generator Interconnection Facilities. Accordingly, EI Dorado Energy encourages the Standards Drafting Team to act quickly to implement the SARs.</p>

Organization	Question 8 Comment
<p>Response: The SAR DT thanks you for your comment.</p>	
<p>Competitive Power Ventures, Inc.</p>	<p>Every effort should be made to precisely describe requirements that directly correspond to, and address, the reliability issues framed by the GO/TO Ad Hoc Group. Particularly, "interconnection facilities" should be defined to account for and exclude various transmission configurations on the generator side of the interconnection point that do not create network power flows or otherwise operate as bona fide transmission systems.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>	
<p>Entegra Power Group LLC, i.e., Gila River Power and Union Power Partners</p>	<p>FAC-003 - Applicability apply to GIF above 200 kV that exceed two spans should be revised to "less than one-half mile" as span lengths vary considerably. For example we have 3 spans over 1/4 mile. R1. requirement to "keep current, a formal TVMP" should allow latitude for those entities with one-quarter mile of radial connecting transmission, all visible from the office window, to have a less than a formal program, or at least a very SIMPLE program.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>	
<p>First Wind</p>	<p>FAC-003 - Step 4.5 should be clearly identified as a “qualifier” for Generator Owner applicability. Although not the intent of the standard, as currently drafted, the requirements apply to all Generator Owners. Additionally we recommend modifications to address a disqualifier if the plant is located in an environment whose natural environment would prevent vegetation from growing that could interfere with the reliability of the bulk Electric System. The following changes are recommended.</p> <p>4.4. Generator Owner.</p> <p>4.5. This standard shall apply to the Generator Interconnection Facility above 200 kV that exceed two spans from the generator property line or are otherwise deemed critical by the Regional Entity below 200 kV (subject to the two-span criteria.). This standard does not apply to all Generator Interconnection Facilities outside this threshold and those facilities located in an area whose environment would prevent vegetation from growing. A generating facility located underground, in the high desert or within a fully developed urban area where vegetation disturbances could not occur should not be required to have a vegetation management program.</p> <ul style="list-style-type: none"> o MOD-010 - The changes made in this standard are not reflected in the associated standard, MOD-011 (possibly because MOD-011 is not FERC approved). o MOD-012 - The changes made in this standard are not reflected in the associated standard, MOD-013 (possibly because MOD-013 is not FERC approved). o PER-001 - The Purpose statement in the Standard needs to be modified to include GOP.

Organization	Question 8 Comment
	<p>o PER-002 - The Purpose statement in the Standard needs to be modified to include GOP. We recommend the addition of PER-002 R3 is coordinated with the existing standard PRC-001 R1 to eliminate redundancy. While PER-002 R3 more clearly calls for training, PRC-001 R1 implies training. The two standards should be combined into one training requirement. PRC-001 R1 "Each Transmission Operator, Balancing Authority, and Generator Operator shall be familiar with the purpose and limitations of protection system schemes applied in its area." We recommend retiring PRC-001 R1 and modifying the proposed standard PER-002 R3 as shown below:</p> <p style="padding-left: 40px;">Each Generator Operator shall implement an initial and continuing training program for all operating personnel that are responsible for operating the Generator Protection System Equipment, including the Generator Interconnection Facility that verifies the personnel's ability and understanding to operate the equipment in a reliable manner.</p> <p>o TOP-002 - Requirement R14 contains sub-requirements R14.1 and R14.2 that were retired August, 1, 2007. Suggest deleting the retired requirements with the proposed revision.</p> <p>o TOP-004 - Requirement R7 has been added for the Generator Operator; however, the Generator Operation has not been added to the Applicability.</p> <p>o TOP-008 - The Purpose statement in the Standard needs to be modified to include GOP.</p>
<p>Response: The SAR DT thanks you for your comments. They will be referred to the SDT.</p>	
California ISO	<p>It does not appear that any of the Measures in the proposed Standards have been revised to reflect the new and/or revised requirements.</p>
<p>Response: The SAR DT thanks you for your comment. The intent was to post just the initial set of proposed requirements to provide stakeholders with a sense of the scope of the project. The SDT assigned to this project will need to work with stakeholders to develop not only the requirements, but all the other elements needed to support those requirements, including measures, violation risk factors, time horizons, violation severity levels, evidence retention, etc.</p>	
North Carolina Electric Membership Corporation	<p>NC EMC is concerned with the decision to use "revisions to the latest versions of the following standards" that were included in red-line format in this SAR: o BAL-005 o CIP-002 o EOP-001, -003, -004, -008 o FAC-001, -003, -008, -009 o IRO-005 o MOD-010, -012 o PER-001, -002 o PRC-001, -004, -005 o TOP-001, -002, -003, -004, -008 o VAR-001, -002</p> <p>The use of these versions of the standards, many of which have been revised, approved by the NERC Board of Trustees and filed with FERC emphasizes the flaw in a regulatory approval process that is not uniform throughout North America. Not all registered entities are FERC jurisdictional, therefore, are already required to comply with Reliability Standards upon NERC Board of Trustees approval. Of the standards that are included in this SAR, three projects not including interpretations have been retired, modified, or new standards created that are now complied with by some registered entities. The projects include; Project 2006-01 "System Personnel Training" PER-002, PER-004, and PER-005, Pre-2006 "Operate Within Interconnection Reliability Operating Limits" IRO-007 through IRO-010 and Project 2008-06 "Cyber Security" Order</p>

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	<p>706 – CIP-002 through CIP-009. In addition, it is difficult to determine whether there is any coordination between the activities of this SAR drafting team and those of the many existing drafting teams that are also revising standards. NCEMC understands the dilemma of how to revise standards in a regulatory environment that has no defined time-line guidelines for approval of standards upon filing with FERC, but reminds NERC, the Standards Committee and drafting teams that the process must address the varying regulatory approval processes in North America.</p>
<p>Response: The SAR DT thanks you for your comments. They will be referred to the SDT. The SDT will work with the latest BOT approved versions of the standards in support of your comment.</p>	
SERC Planning Standards Subcommittee	No other comments
Kansas City Power & Light	No other comments.
South Carolina Electric and Gas	none
National Rural Electric Cooperative Association (NRECA)	<p>NRECA is concerned with the decision to use “revisions to the latest versions of the following standards” that were included in red-line format in this SAR: o BAL-005 o CIP-002 o EOP-001, -003, -004, -008 o FAC-001, -003, -008, -009 o IRO-005 o MOD-010, -012 o PER-001, -002 o PRC-001, -004, -005 o TOP-001, -002, -003, -004, -008 o VAR-001, -002 The use of these versions of the standards, many of which have been revised, approved by the NERC Board of Trustees and filed with FERC emphasizes the flaw in a regulatory approval process that is not uniform throughout North America. Not all registered entities are FERC jurisdictional, therefore, are already required to comply with Reliability Standards upon NERC Board of Trustees approval. Of the standards that are included in this SAR, three projects not including interpretations have been retired, modified, or new standards created that are now complied with by some registered entities. The projects include; Project 2006-01 – System Personnel Training – PER-002, PER-004, and PER-005, Pre-2006 – Operate Within Interconnection Reliability Operating Limits – IRO-007 through IRO-010 and Project 2008-06 – Cyber Security – Order 706 – CIP-002 through CIP-009. In addition, it is difficult to determine whether there is any coordination between the activities of this SAR drafting team and those of the many existing drafting teams that are also revising standards. NRECA understands the dilemma of how to revise standards in a regulatory environment that has no defined time-line guidelines for approval of standards upon filing with FERC, but reminds NERC, the Standards Committee and drafting teams that the process must address the varying regulatory approval processes in North America.</p>
<p>Response: The SAR DT thanks you for your comments. They will be referred to the SDT. The SDT will work with the latest BOT approved versions of the standards in support of your comment.</p>	
Electric Market Policy	oEOP-003 - I do not understand the addition of GOP to this standard. Additionally, the Purpose statement is not in

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Organization	Question 8 Comment
	<p>alignment with the additional GOP applicability.</p> <ul style="list-style-type: none"> oFAC-003 - Step 4.5 should be clearly identified as a “qualifier” for Generator Owner applicability. Although not the intent of the standard, as currently drafted, the requirements apply to all Generator Owners. oMOD-010 - The changes made in this standard are not reflected in the associated standard, MOD-011 (possibly because MOD-011 is not FERC approved). oMOD-012 - The changes made in this standard are not reflected in the associated standard, MOD-013 (possibly because MOD-013 is not FERC approved). oPER-001 - The Purpose statement is not in alignment with the additional GOP applicability.
<p>Response: The SAR DT thanks you for your comments. They will be referred to the SDT.</p>	
American Electric Power	<p>Overall, AEP supports the concept of this SAR, but we question the number of new requirements that are being brought in scope. Some of the requirements added appear to encourage this SAR to reach farther than the scope of addressing the Generator Interconnection Facilities.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT. The intent of the SAR was to collect feedback on the proposed scope of this project.</p>	
Prairie Power, Inc.	<p>PPI contends this SAR and associated requirement additions and revisions go well beyond the recommendations from the Group needed to resolve the barrier issue between Transmission Operator and Generator Operator. The FAC-003 standard revision, so that vegetation management can be enforced for transmission lines which interconnect generators to transmission, is really all that is necessary. All these other changes just add confusion to already overlapped requirements.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT. One of the goals of this project is to eliminate ‘overlaps’ so there is a clear line of responsibility for each facility.</p>	
Southern California Edison co.	<p>SCE believes that implementing changes type of changes proposed in 2010-07 should be looked at as a whole/ one entire project rather than piece meal as alluded to in question number 7 of the comments form. As such, it is the company’s position that approximately 3yrs is right amount of time to reliably implement the proposed revisions to the suite of standards as identified in Project 2010-07. A 3 yr timeline would enable the project to be fully scoped out and budgeted, and allow for: completion of the necessary engineering studies; design, procurement and construction of any new facilities necessitated by the revisions; development of any new operations and communications procedures with respect to both the transmission and generation facilities; and the training of personnel related to any new procedures.</p>
<p>Response: The SAR DT thanks you for your comment. The SAR has been modified to allow the SDT the option of merging the changes into one new standard or an</p>	

Organization	Question 8 Comment
	<p>existing standard(s). All timing issues related to the implementation plan will be addressed by the SDT. As envisioned, all requirements would become effective at the same time as the proposed definitions to ensure that there are no gaps in the body of NERC requirements.</p>
Sempra Generation	<p>Sempra Generation commends the efforts of the NERC Ad Hoc Group, and supports the Final Report from the Ad Hoc Group for Generator Requirements at the Transmission Interface, and Standards Authorization Request addressing the various Standards containing GO/GOP and TO/TOP Requirements. The Final Report and SARs are products of detailed analysis and thoughtful consideration of the myriad issues surrounding the reliability implications of ownership and operation of Generator Interconnection Facilities. It is noteworthy - though hardly surprising - that, after many months of study, the GO/TO Task Force, a balanced group comprised of members from a broad spectrum of functional categories, concluded that only modest changes to the Reliability Standards would be required in order to ensure that generator interconnection facilities are operated reliably. When implemented, the recommendations included in the Final Report and SARs should go a long way toward providing the regulatory and compliance certainty needed by generators who own or operate Generator Interconnection Facilities. Accordingly, Sempra Generation encourages the Standards Drafting Team to act quickly to implement the SARs.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT.</p>	
AmerenUE, Power Operations Services	<p>The items in Question #7 illustrate the need for a written Agreement or Procedure between the GO, GOP, TO and TOP on how to comply with these new, and modified, Requirements. An Agreement or Procedure would provide the certainty of:</p> <ul style="list-style-type: none"> o Assignable and measurable responsibilities, o Mutual agreement on specific actions, and o Implementation deadlines. <p>Without such an Agreement or Procedure, there will be no auditable commitment to defined specific actions, predetermined responsibilities and closure of the reliability gap in total.</p>
<p>Response: The SAR DT thanks you for your comment. The SDT will discuss these kinds of issues, but such agreements are covered by the NERC Rules of Procedures and it is outside the scope of both the SAR DT and the SDT to propose changes to the NERC Rules of Procedure.</p>	
ERCOT ISO	<p>The proposed language in Requirements 9 and 10 (hereafter R9 and R10) for NERC Standard TOP-001-X, Reliability Responsibilities and Authorities, clouds the responsibilities among different functional entities that are and are not held accountable to this Standard. Specifically, the first part of the sentence in R9 states: “The Generator Operator, in accord with the expectations defined by the Transmission Operator, shall coordinate...” This statement is overly broad and vague. For instance, is the statement meant to refer to Interconnection Agreements that have been entered into between Generator Operators and Transmission Operators? Or, is the statement intended to include other agreements as well? In addition, there</p>

Consideration of Comments on Generator Requirements at the Transmission Interface – Project 2010-07

Organization	Question 8 Comment
	<p>are items listed in R9 (i.e., switching elements, outage planning, and real-time and anticipated emergency conditions) which are normally the responsibilities of the Transmission Owner and/or the Reliability Coordinator; however, NERC Standard TOP-001-X is not applicable to the Transmission Owner or the Reliability Coordinator. Also, the item “other conditions mutually agreed-upon by the Generator Operator and Transmission Operator” is vague and ambiguous and should be clarified in order not to confuse tasks that may be more aligned with the responsibilities of the Transmission Owner or the Reliability Coordinator. Furthermore, R9 and R10 strongly imply and explicitly give the Transmission Operator authority to take action “in order to preserve Interconnection reliability.” This type of wide-area authority is meant to describe Reliability Coordinator-related obligations. The NERC Function Reliability Model is clear in defining the function and tasks of reliability operations. The Reliability Coordinator is responsible, in concert with other Reliability Coordinators, for the Interconnection as a whole; not the Transmission Operator. Lastly, it is unclear how an entity registered for multiple functions (for example, Reliability Coordinator and Transmission Operator) would be held accountable under this NERC Standard. If the intent is that R9 and R10 are to be the obligations only of those functional entities for which the NERC Standard is applicable, then the language in the NERC Standard should clearly state that intent.</p>
<p>Response: The SAR DT thanks you for your comment. It will be referred to the SDT. As envisioned, the SDT will coordinate its work with the Functional Model Working Group to ensure that any new functional entities are identified with a clear definition, and a clear scope of responsibilities and tasks.</p>	
PSEG Companies	<p>The PSEG Companies support this approach to ensure that all components of the BES are adequately covered by the reliability standards. The drafting team has done a good job of identifying the appropriate areas of concern.</p>
<p>Response: The SAR DT thanks you for your comment.</p>	
Transmission Owner/Generation Owner	<p>The SAR for Project 2010-07 proposes a number of specific changes to existing Reliability Standards based on the GOTO Report. FPL believes that identifying the exact standards and language for revision should be the purview of a Standards Drafting Team and not embedded within the SAR itself. The Standards Drafting Team should be empowered to review the GOTO Report and make independent recommendations. Many of the questions contained in this SAR comment form are more appropriate for a Standard's drafting comment form and not for a SAR. The place to discuss and evaluate specific wording changes as applicable to standards revisions should be contained in the Standard Drafting process. The SAR should lay the foundation for the need for changes, not disseminate or debate exact changes. FPL would recommend that the sections “Brief” and “Detailed Description” of the SAR should be amended as follows: “Taking into consideration the GOTO Final Report from November 2009, the need for revisions to existing standards may exist. The Standards Drafting Team will evaluate the recommendations of the GOTO Final Report and recommend changes as necessary.”</p>
<p>Response: The SAR DT thanks you for your comment and agrees. The SAR DT has assembled the specific suggestions for revisions to definitions and requirements provided in response to this SAR. As envisioned, the SDT will consider those comments. Note that the SAR has been modified to give the SDT the flexibility to address this concern.</p>	

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Organization	Question 8 Comment
Northeast Power Coordinating Council	The term “two spans” is used in the Introductory Section of this Comment Form (Conclusions Item 6, Recommendations Item 3), and will need a clear, and specific definition. “Generally” is not a word to be used in a definition.
Response: The SAR DT thanks you for your comments.They will be referred to the SDT.	
Xcel Energy	There are many other standards development projects underway that are modifying the same standard. It is unclear as to how the changes will be coordinated amongst the many teams.
Xcel Energy	There are many other standards development projects underway that are modifying the same standard. It is unclear as to how the changes will be coordinated amongst the many teams.
Response: The SAR DT thanks you for your comment. It will be referred to the SDT. As envisioned, the SDT will work with the latest BOT approved versions of the standards and will coordinate its work with all other SDTs that are actively working on the same standards.	
ISO RTO Council Standards Review Committee	These SAR and associated draft standards changes go beyond what is needed to resolve the GO/TO GOP/TOP registration issue. The only real changes that are needed are to include adding GO and GOP applicability in the FAC-003 standard so that vegetation management can be enforced for lines built to interconnect generators without registering the GO/GOP as a TO/TOP. All additional changes just add confusion and cause significant coordination issues with other draft standard changes.This proposed SAR and associated standards’ modifications does not appear to have been coordinated with any other drafting team. There are many standards and requirements that are in various states of change. For instance, the TOP standards have been significantly modified and are nearing the ballot phase. Coordination needs to occur before these changes are balloted.
Midwest ISO Standards Collaborators	These SAR and associated draft standards changes go beyond what is needed to resolve the GO/TO GOP/TOP registration issue. The only real changes that are needed are to include adding GO and GOP applicability in the FAC-003 standard so that vegetation management can be enforced for lines built to interconnect generators without registering the GO/GOP as a TO/TOP. All additional changes just add confusion and cause significant coordination issues with other draft standard changes.This proposed SAR and associated standards’ modifications does not appear to have been coordinated with any other drafting team. There are many standards and requirements that are in various states of change. For instance, the TOP standards have been significantly modified and are nearing the ballot phase. Coordination needs to occur before these changes are balloted.
Response: The SAR DT thanks you for your comment. It will be referred to the SDT. The purpose of this SAR was to seek stakeholder views on the scope of requirements that may need modification, and most stakeholders who participated in this comment period support modifications that go beyond modifying only the Transmission Vegetation Management standard.	

Organization	Question 8 Comment
E.ON U.S.	<p>This SAR should only apply to those separate entity GOPs that already adhere to an OATT. Those GOPs should be required to register additionally as a TO/TOP. This should not apply to a GOP within a Corporation that includes TO/TOP that adhere to an OATT, and have already defined an internal division of responsibilities for the Transmission Interface between the GOP and TOP.</p>
<p>Response: Based on a review of the full body of industry comments, we believe that there is a reliability need for this SAR. Further, registration issues are outside the scope of the SAR DT.</p>	
Energy Standards Working Group	<p>We commend the work of the team that produced the report and this SAR and suggest that the Standard Drafting Team give due deference to the report with the modifications that we have suggested in questions 4 and 5 above. In addition, EPSC would highlight the following conclusions that follow from the report:</p> <ul style="list-style-type: none"> o The Generator Owner or Generator Operator that owns and/or operates a Generator Interconnection Facility, that is, a sole-use facility that interconnects the generator to the grid, should not be registered as a Transmission Owner or Transmission Operator by virtue of owning or operating its Generator Interconnection Facility o A Generator Interconnection Facility is considered as though part of the generating facility specifically for purposes of applying Reliability Standards to a Generator Owner or Generator Operator o After review of the existing Transmission Operator requirements that are not currently applicable to Generator Operators, no existing Transmission Operator requirements should apply to Generator Operators as a result of the Generator Interconnection Facility
<p>Response: The SAR DT thanks you for your comment. The SAR DT agrees with your conclusions.</p>	
Tenaska, Inc.	<p>We commend the work of the team that produced the report and this SAR and suggest that the Standard Drafting Team give due deference to the report with the modifications that we have suggested in questions 4 and 5 above. In addition, we would highlight the following conclusions that follow from the report:</p> <ul style="list-style-type: none"> o The Generator Owner or Generator Operator that owns and/or operates a Generator Interconnection Facility, that is, a sole-use facility that interconnects the generator to the grid, should not be registered as a Transmission Owner or Transmission Operator by virtue of owning or operating its Generator Interconnection Facility o A Generator Interconnection Facility is considered as though part of the generating facility specifically for purposes of applying Reliability Standards to a Generator Owner or Generator Operator o After review of the existing Transmission Operator requirements that are not currently applicable to Generator Operators, no existing Transmission Operator requirements should apply to Generator Operators as a result of the Generator Interconnection Facility

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	Response: The SAR DT thanks you for your comment. The SAR DT agrees with your conclusions.