

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

The Certifying System Operators SAR drafting team thanks all commenters who submitted comments on the first draft of the Certifying System Operators SAR. This SAR was posted for a 30-day public comment period from July 17 through August 15, 2007. The drafting team asked stakeholders to provide feedback on the SAR through a special SAR Comment Form. There were 29 sets of comments, including comments from more than 80 different people from more than 50 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages.

Based on the comments received and FERC Order 693, the drafting team made the following changes to the SAR:

- Removed language about the certification of the generator operators and transmission operators at local control centers.
- Removed the following functions from the applicable functions section of the SAR: Interchange Authority, Transmission Owner, Generator Owner, and Generator Operator.

The Certifying System Operators SAR Drafting Team is recommending the SAR be approved as revised above and that the SAR move forward to standard drafting.

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

http://www.nerc.com/~filez/standards/Certifying_SOs_Project_2007-04.html

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

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

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The Industry Segments are:

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

Commenter		Organization	Industry Segment											
			1	2	3	4	5	6	7	8	9	10		
1.	Anita Lee (G4)	Alberta Electric System Operator		✓										
2.	William J. Smith	Allegheny Power	✓											
3.	Anita Lee	Alberta Electric System Operator		✓										
4.	Jeffrey V. Hackman	Ameren	✓											
5.	Jason Shaver	American Transmission Co.	✓											
6.	Michael Scott	APS Power Operations	✓											
7.	Dave Rudolph (G6)	Basin Electric Power Coop.	✓		✓			✓	✓					
8.	Tony Krosky	Brazos Electric Power Coop., Inc.	✓											
9.	Brent Kingsford (G4)	California ISO		✓										
10.	Brad Calhoun	CenterPoint Energy	✓											
11.	Alan Gale	City of Tallahassee (TAL)						✓						
12.	Edwin Thompson (G1)	ConEd	✓											
13.	Michael Gildea (G1)	Constellation Energy						✓						
14.	Jeanne Kurzynowski (G5)	Consumers Energy			✓	✓								
15.	Greg Mason (G5)	Dynegy						✓						
16.	Wayne Mitchell	Entergy Services, Inc.	✓											
17.	William Franklin	Entergy Services, Inc. SPO							✓					
18.	Jerry Stout	Entergy Services, Inc. SPO							✓					
19.	Steve Myers (G4)	ERCOT		✓										
20.	W. Vann Weldon	ERCOT, Inc.												✓
21.	Larry Hartley (G2)	FE Solutions	✓		✓			✓	✓					
22.	Eric Bryant (G2)	FE Solutions Assets Utilization	✓		✓			✓	✓					

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Commenter		Organization	Industry Segment											
			1	2	3	4	5	6	7	8	9	10		
23.	Jim Eckels (G5)	FirstEnergy	✓											
24.	David Folk (G2)	FirstEnergy Corp.	✓		✓			✓	✓					
25.	Joe Knight (G5) (G6)	Great River Energy	✓											
26.	Dick Pursley (G5)	Great River Energy	✓											
27.	David Kiguel (G1) (G3)	Hydro One Networks, Inc.		✓										
28.	Tom Irvine (G3)	Hydro One Networks, Inc.	✓											
29.	Rob MacDonald (G3)	Hydro One Networks, Inc.	✓											
30.	Chris Cooper (G3)	Hydro One Networks, Inc.	✓											
31.	Archie Kotopoulos (G3)	Hydro One Networks, Inc.	✓											
32.	Roger Champagne (G1)	Hydro Quebec TransEnergie	✓											
33.	Ron Falsetti (I) (G1) (G4)	IESO		✓										
34.	Kathleen Goodman (I) (G1)	ISO New England		✓										
35.	Matt Goldberg (G4)	ISO New England		✓										
36.	Brian Thumm	ITC Transco	✓											
37.	Jim Cyrulewski (G5)	JDRJC Associates										✓		
38.	Jay Chase	KAMO Power												
39.	Michael Gammon	Kansas City Power & Light (KCPL)	✓											
40.	Eric Ruskamp (G6)	Lincoln Electric System							✓					
41.	Donald Nelson (G1)	MA/DUP-EPD											✓	
42.	Joseph DePoorter (G5)	Madison Gas & Electric				✓								
43.	Craig McLean	Manitoba Hydro	✓		✓	✓	✓							
44.	Jason Marshall (G5) (G6)	Midwest ISO, Inc.		✓										
45.	Terry Bilke (G6)	Midwest ISO, Inc.		✓										
46.	William Phillips (G4)	Midwest ISO, Inc.		✓										
47.	Michael Brytowski (G6)	Midwest Reliability Organization												✓
48.	Laura Elsenpeter (G6)	Midwest Reliability Organization												✓
49.	Mark Pinney (G6)	Minnesota Power	✓		✓			✓	✓					
50.	Mac Bohman (G6)	Minnesota Power	✓		✓			✓	✓					
51.	Carol Gerou (G6)	Minnesota Power	✓		✓			✓	✓					
52.	Bill DeVries (G1)	New York ISO		✓										
53.	Jim Castle (G4)	New York ISO		✓										
54.	Diane Barney (G1)	New York PSC											✓	
55.	Michael Shiovone (G1)	NGrid	✓											
56.	Mike Rinalli (G1)	NGrid	✓											

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57.	Rick White (G6)	Northeast Utilities	✓											
58.	Guy V. Zito (G1)	NPCC												✓
59.	Brian Hogue (G1)	NPCC												✓
60.	Ralph Rufrano (G1)	NYPA	✓											
61.	Al Adamson (G1)	NYSRC												✓
62.	Stan Southers	Oncor Electric Delivery	✓											
63.	Ellis Rankin	Oncor Electric Delivery	✓											
64.	Larry Larson (G5)	Otter Tail Power Company	✓											
65.	Alicia Daugherty (G4)	PJM		✓										
66.	Phil Riley (G7)	Public Service Commission of SC											✓	
67.	Mignon L. Clyburn (G7)	Public Service Commission of SC											✓	
68.	Elizabeth B. Fleming (G7)	Public Service Commission of SC											✓	
69.	G. O'Neal Hamilton (G7)	Public Service Commission of SC											✓	
70.	John E. Howard (G7)	Public Service Commission of SC											✓	
71.	Randy Mitchell (G7)	Public Service Commission of SC											✓	
72.	C. Robert Moseley (G7)	Public Service Commission of SC											✓	
73.	David A. Wright (G7)	Public Service Commission of SC											✓	
74.	Mike Pfeister	Salt River Project (SRP)	✓											
75.	Marc Butts (G8)	Southern Co. Services, Inc.	✓											
76.	James Ford (G8)	Southern Co. Services, Inc.	✓											
77.	Jim Busbin (G8)	Southern Co. Services, Inc.	✓											
78.	J.T. Wood (G8)	Southern Co. Services, Inc.	✓											
79.	Roman Carter (G8)	Southern Co. Services, Inc.	✓											
80.	Gary Gorham (G8)	Southern Co. Services, Inc.	✓											
81.	Jim Griffith (G8)	Southern Co. Services, Inc.	✓											
82.	Charles Yeung (G4)	Southwest Power Pool		✓										
83.	Mike Pelligrini (G1)	United Illuminating	✓											
84.	Karl A. Bryan	US Army Corps of						✓						

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			1	2	3	4	5	6	7	8	9	10		
		Engineers												
85.	Michael J. Roluti	US Bureau of Reclamation					✓							
86.	Jim Haigh (G6)	Western Area Power Admin.	✓					✓						
87.	Pam Oreschnick (G6)	Xcel	✓		✓		✓	✓						

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

G1 – NPCC Standards Review Committee (NPCC RSC)

G2 – FirstEnergy Corp. (FE)

G3 – Hydro One Networks, Inc.

G4 – ISO/RTO Council

G5 – Midwest ISO Stakeholders (MISO)

G6 – Midwest Reliability Organization (MRO)

G7 – Public Service Commission of South Carolina (PSC SC)

G8 – Southern Company Transmission (SOCO)

Index to Questions, Comments, and Responses

1. Do you agree that there is a reliability-related reason for the proposed SAR? If not, please explain in the comment area.7

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3. Do you agree with the applicability of the proposed standard action? If not, what function entities do you think need to be added or delete? 23

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6. If you have any other comments on this SAR that you haven't already provided in response to the previous questions, please provide them here. 36

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1. Do you agree that there is a reliability-related reason for the proposed SAR? If not, please explain in the comment area.

Summary Consideration:

Most commenters agreed that there is a reliability-related reason for the proposed SAR. Some of the commenters that did not agree indicated that certification of local control center operators should not be required and others indicated that the standard needs to clearly identify who needs to be certified.

Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function. The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.

Question #1			
Commenter	Yes	No	Comment
City of Tallahassee		<input checked="" type="checkbox"/>	The standard, as it exists today, provides adequate reliability to the Bulk Electric System. The changes are needed from an administrative standpoint to conform to the new format and processes directed by FERC. Clarity is needed to address the Interpretation Request and the Version 0 comments.
<p>Response: The CSO SAR Drafting Team is not changing the applicability of the existing standard. The CSO Standard Drafting Team will address FERC Order 693 directives, as well as incorporate the necessary content, structure, and language to comply with the NERC standards process. The CSO Standard Drafting Team will also address V0 comments that are captured in the SAR.</p>			
ISO/RTO Council		<input checked="" type="checkbox"/>	Certification of Local Control Center Operators is not required if they have no decisional making authority over Bulk Power System facilities and are implementing directives of a certified Operator.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
NPCC RSC ISO New England		<input checked="" type="checkbox"/>	Certification of Local Control Center Operators should not be required if they have no decisional making authority over Bulk Power System facilities. Directives from the FERC Order are centered around concerns regarding what are core competencies. These are strictly training issues and what requirements constitute proper and sufficient training.

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Question #1			
Commenter	Yes	No	Comment
			<p>If this SAR was developed to address the FERC directive then it should be focusing only on what the core competencies should be. There is another Drafting Team working on Transmission Operator Training standard(s) and clarification could also be provided regarding core competencies and coordinated with that team to ensure the FERC directives are met.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC directives, based on the clarification.</p>			
Hydro One	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>There is a need to clearly define who needs to be certified. At the moment within the industry there is a difference in understanding and credentials across the board and there is no consistency. Some TOs' staff are certified while others are not, same for TOPs. At some locations they certify the Senior operator only. A unified approach is necessary for certification.</p> <p>There is an opportunity for the drafting team to clarify issues related to any type and level of certification that may be required for TOP's staff performing (a) supporting functions (e.g. outage planning), (b) reliability impactive real-time independent actions, (c) switching operations under the supervision of certified supervisors, or (d) responding to changes in equipmnt status and system conditions in real time (i.e. alarms, trips, etc.).</p> <p>We believe TOP staff who are at the board and able to control devices that affect reliability, should be certified. This should be the case regardless of whether they answer to a RC or a senior position. They should understand how their operations affect reliability. For example, there may be emergencies that require independent action, loss of communication, etc.</p>

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Question #1			
Commenter	Yes	No	Comment
			<p>Certification of Local Control Center Operators should not be required only if they have no decision making authority over Bulk Power System facilities. Directives from the FERC Order are centered around concerns regarding what are core competencies. These are strictly training issues and what requirements constitute proper and sufficient training. If this SAR was developed to address the FERC directive then it should be focusing only on what the core competencies should be. There is another Drafting Team working on Transmission Operator Training standard(s) and clarification could also be provided regarding core competencies and coordinated with that team to ensure the FERC directives are met.</p>
<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p> <p>The CSO SAR Drafting Team disagrees that this standard should address support personnel certification. NERC Project 2010-01, Support Personnel Training, is intended to determine the training needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 (ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf). A similar project and SAR will need to be prepared to determine the scope of a standard for the certification of support personnel.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC directives, based on the clarification.</p>			
IESO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Operating Personnel certification is critical to maintaining the reliability of the system but at the same time certification of Local Control Center Operators should not be required if they have no decision making authority over Bulk Power System facilities.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from</p>			

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Question #1			
Commenter	Yes	No	Comment
<p>the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ATC	<input checked="" type="checkbox"/>		<p>ATC agrees that there is a reliability related need for NERC to expand the certification requirements for "operating positions" that have primary responsibility, either directly or through communications with others, for the real-time operation of the interconnected Bulk Electric System. The expansion must include local transmission control center "operating positions" that meet requirement 1.1.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Brazos	<input checked="" type="checkbox"/>		<p>Need to clarify some requirements. For example switching operations under the supervision of certified supervisors.</p>
<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p>			
Entergy	<input checked="" type="checkbox"/>		<p>I'm note sure that all TO need to be NERC Certified. In our case we have sub-transmission dispatches that monitor and address switching at the local level and receive operational directions from our Transmission Operators. We recommend that certification requirements for local control centers not be developed.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p>			
Ameren	<input checked="" type="checkbox"/>		

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Question #1			
Commenter	Yes	No	Comment
APS Power Operations	<input checked="" type="checkbox"/>		
CenterPoint Energy	<input checked="" type="checkbox"/>		
KAMO Power	<input checked="" type="checkbox"/>		
Allegheny Power	<input checked="" type="checkbox"/>		
Oncor	<input checked="" type="checkbox"/>		
US ACE	<input checked="" type="checkbox"/>		
US BRC	<input checked="" type="checkbox"/>		
Entergy SPO	<input checked="" type="checkbox"/>		
ERCOT	<input checked="" type="checkbox"/>		
FirstEnergy	<input checked="" type="checkbox"/>		
ITC Transco	<input checked="" type="checkbox"/>		
KCPL	<input checked="" type="checkbox"/>		
MISO Stakeholders	<input checked="" type="checkbox"/>		
MRO	<input checked="" type="checkbox"/>		
Northeast Utilities	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		
SRP	<input checked="" type="checkbox"/>		
SOCO	<input checked="" type="checkbox"/>		
Manitoba Hydro	<input checked="" type="checkbox"/>		

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2. Do you agree with the scope of the proposed SAR? If not, please explain in the comment area.

Summary Consideration:

Almost half of the comments did not agree with the scope of the proposed SAR, suggesting that the certification credentials should not be established for local control center operators. Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.

Question #2			
Commenter	Yes	No	Comment
MRO		<input checked="" type="checkbox"/>	<p>1. In the SAR detailed description (second paragraph which starts with the text "During 2006, the standards staff received a request ..."), there is a sentence which states "the certification requirements for local transmission control center operators and local generation control center operators need to be identified and then the standard needs to be modified to address their certification." In the FERC Final Order 693 dated 03/16/07, paragraph 1407 (on page 372) disagrees with this purposed methodology since the commission was persuaded that a requirement of this nature would be too burdensome on labor relations and labor rention issues.</p> <p>2. The MRO strongly recommends that the SDT take a hard look at which type of personnel will require certification and to what level. The MRO further recommends that certification is established by functions that are performed by personnel. For example, an engineer performing a next day transmission security study to meet NERC IRO-004 standard should be required to be certified as an Reliability Coordinator operator.</p> <p>3. In this standard (NERC PER-003), measure 1.2 should be included in the requirement so that it is not an exception for the requirement.</p> <p>4. The MRO requests clarification on how competences for each different operating classification will be identified?</p>
<p>Response: 1. The CSO SAR Drafting team removed this language from the SAR.</p> <p>2. Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the</p>			

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Question #2			
Commenter	Yes	No	Comment
<p>Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>3. M1.2 is being addressed by Project 2006-004 Back-up Facilities, which is revising EOP-008. (http://www.nerc.com/~filez/standards/Backup_Facilities.html)</p> <p>4. In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC directives, based on the clarification.</p>			
MISO Stakeholders		<input checked="" type="checkbox"/>	<p>The applicability of this Standard should not be extended to include Generator Owners or Generator Operators. Generator Owners own and maintain generation facilities. They do not operate generation facilities. Generation Operators operate generation facilities.</p> <p>This Standard should not be extended to include Generator Operators in total. Many positions that routinely operate generating units are staffed by long-tenured union Control Room Operators in Plants who take directions from a centralized Generation Control Center and/or the local RTO/ISO. To require certification of these personnel would be analogous to requiring the certification of the outside field force of a Transmission Operator, including positions that operate and switch electric transmission lines.</p> <p>Many of the VO industry comments are no longer relevant and confusing. For instance many refer to the former operating policies. These policies are retired and thus those comments should be ignored.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The CSO Standard Drafting Team will review and address the VO industry comments as part of the standards development effort.</p>			

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Question #2			
Commenter	Yes	No	Comment
Ameren		<input checked="" type="checkbox"/>	New certification credentials should not be established for LCC operators. To the extent they perform BA or TO duties under authority of an ISO/RTO, they should have the same credentials so that they can understand and appreciate their actions in context of the greater system need. Additionally, to the extent that they have a broader understanding they will be able to offer additional pertinent information to the ISO/RTO operator which may affect his/her decision but was more obvious to the LCC operator. Additionally, the blackout and subsequent events have shaped the new standards and "experience" in the case of "grandfathered" operators is a poor substitute for certification in today's operating climate. Grandfathering should not be part of certification.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>FERC Order 693 Paragraph 1409, FERC "directs the ERO to <u>consider</u> grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process". As captured in the SAR under FERC Order 693 comments, the CSO Standard Drafting Team will address this consideration.</p>			
CenterPoint Energy		<input checked="" type="checkbox"/>	In FERC Order No. 693 paragraph 1407, the Commission states that it "is persuaded not to require generator operators and transmission operators at local control centers to be NERC Certified at this time"; however, this SAR proposes to certify local control center operators. It appears that the SAR seeks to expand the FERC directive in paragraph 1409 of Order No. 693 beyond what FERC intends. There is no benefit to including local control center operators in the NERC certification process, which is more applicable to an entity with the responsibility "for operating a reliable Bulk Electric System." In addition, including local control center operators in PER-003 might impose an unnecessary financial burden without benefit to reliability.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
City of Tallahassee		<input checked="" type="checkbox"/>	The term "scope" is not used in the SAR. Is this supposed to be the "Purpose", "Industry Need", Brief Description", "Detailed Description", or "Background Information"? The Detailed Description indicates that this SAR will address which "system operators" needs to be certified. I am okay with that "scope", but am not okay if it delves more deeply into who should be NERC certified.
<p>Response: The CSO SAR Drafting Team intended the "scope" of the SAR to include the elements that are included in the SAR, which are captured in the Purpose, Industry Need, Brief Description, and the Reliability Functions sections. Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html.</p>			
IESO		<input checked="" type="checkbox"/>	<p>The scope should not be extended to requirements for certification of local control center operators.</p> <p>FERC's directives in Order 693 deal with competencies of operating personnel - these are training issues and should not be mixed up with operating personnel certification. The directives can be better addressed in coordination with another SDT - Transmission Operator Training Standards.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC directives, based on the clarification.</p>			
ISO New England		<input checked="" type="checkbox"/>	The scope should be limited to competencies required for operators and should not be extended to requirements for certification of local control center operators; extending certification requirements beyond the RC, BA and TOP goes beyond the FERC directive.

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
NPCC RSC		<input checked="" type="checkbox"/>	<p>The scope should be limited to competencies required for operators and should not be extended to requirements for certification of local control center operators and this "THOSE" should not be addressed in this standard. Extending certification requirements beyond the RC, BA and TOP has gone beyond the FERC directive and should not be required.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
US ACE		<input checked="" type="checkbox"/>	<p>What role will the Generator Owner play in this standard? Are there going to be requirements for certification of maintenance folks at the project as well as the relay technician? If not, why was the Generator Owner listed as a responsible entity under this standard?</p> <p>I do agree with the requirement for certification of Generator Operators. The generator operators need to have a better understanding of the role they play in supporting the transmission system as well as they need to be certified in Black Start and Black Start capable operations.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
US BRC		<input checked="" type="checkbox"/>	<p>In the Detailed Description the SAR states: "The certification requirements for local transmission control center operators and local generation control center operators need</p>

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
			<p>to be identified and then the standard needs to be modified to address their certification." This request appears to be in direct opposition to the direction of the Commission. In Order 693 (P 1407) the Commission states that they "are persuaded not to require generator operators or transmission operators at local control centers to be NERC-certified at this time."</p> <p>We recommend that certification requirements for local control centers not be developed. In the case of generator operators we recommend that certification requirements be determined only for real-time operational personnel located in a centralized generation control center that interfaces with the plants.</p>
<p>Response: The CSO SAR Drafting Team removed the language from the Detailed Description. Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ATC		<input checked="" type="checkbox"/>	<p>The SAR needs to be expanded to include NERC Standards PER-001 and PER-002. Doing so is the only way to insure the development of a comprehensive set of personnel standards. To limit the effort to only one standard ignores the foreseeable issues.</p> <p>Will ongoing training be required for the applicable individuals? Will applicable individuals be required to protect the BES as established in PER-001? If the answer is no to both of these questions then what will certification achieve?</p> <p>All control center system operators that are responsible for implementing NERC Requirements either independently or under the directions of the TOP should be certified. In addition those individuals should be required to participate in ongoing training activities.</p>
<p>Response: There are other NERC standard projects that are addressing some of the PER standards. The revision to PER-003 is being addressed by this Project, 2007-04 (http://www.nerc.com/~filez/standards/Certifying_SOs_Project_2007-04.html). The revision to PER-001 is being addressed in Project 2007-03, Real-Time Operations (http://www.nerc.com/~filez/standards/Real-time_Operations_Project_2007-03.html). PER-002 is being replaced with PER-005, Project 2006-04, System Personnel Training (http://www.nerc.com/~filez/standards/System-Personnel-Training.html). Ongoing training requirements are required for applicable individuals. Applicable individuals will be required to protect the</p>			

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
<p>BES as established in PER-001. The purpose of certification is to establish the base knowledge level to operate the BES in North America.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Manitoba Hydro		<input checked="" type="checkbox"/>	<p>Manitoba Hydro does not believe that the generator operators need to be NERC Certified. The generator operators are not responsible for the operation of the bulk electric system and do not act unilaterally in response to the bulk electric system. They take their direction from the Transmission Operator/Balancing Authority.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
SOCO		<input checked="" type="checkbox"/>	<p>The scope is too broad. It should be modified to reflect the certification requirements for personnel who perform specific reliability tasks. Personnel who have the authority to independently perform one or more of those tasks on behalf of the functional entity should be certified. The standards drafting team should specify the reliability task that require certification of personnel.</p>
<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Brazos		<input checked="" type="checkbox"/>	<p>The Operating Personnel certification is critical for those with the decision making authority over Bulk Power System facilities ie RC, BA, and TOP. The competencies</p>

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
			required for the local control center operators is better addressed by training. Extending certification requirements beyond the RC, BA and TOP would go beyond the FERC directive and should not be required.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Hydro One	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	See our answer to question 1. The scope should be limited to competencies required for operators whose decisions affect the reliability of the BES. The scope should not be extended to requirements for certification of local control center operators and these should not be addressed in this standard. Extending certification requirements beyond the RC, BA and TOP has gone beyond the FERC directive and should not be required.
<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p> <p>The CSO SAR Drafting Team agrees that this standard is not addressing support personnel. NERC Project 2010-01, Support Personnel Training, is intended to determine the training needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 (ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf). A similar project and SAR will need to be prepared to determine the scope of a standard for the certification of support personnel.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC</p>			

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
directives, based on the clarification.			
KCPL	<input checked="" type="checkbox"/>		Item 3 in the scope refers to incorporation of improvements from the standards development work plan, but I did not find that in the materials. I have indicated "Yes" to this question, with some concern as to what is contained in the standards development work plan that I am not aware of.
<p>Response: The most recent Reliability Standards Development Workplan is posted on the NERC website at the following URL:</p> <p>ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf</p>			
FirstEnergy	<input checked="" type="checkbox"/>		<p>However, the scope should be expanded to include a review of any existing and pending Regional Reliability Organization/Regional Entity standards, policies, requirements, etc. that contain Operator Certification requirements that can and should be elevated to the NERC Operator Certification standard to eliminate duplication wherever possible. This SAR should also include direction on ensuring that this standard development recognizes and is consistent with the Markets that exist and are pending including the methods and concepts used by those markets to ensure reliability related to operator certification. Version 0 comments should be considered in the standard development process with action required only when they are relevant to, applicable to, and will improve the quality and measureability of the standard as it exists today.</p> <p>The scope should include instruction that the standards drafting team determine the functional entities that require certified operators and the tasks performed by those entities that require operator certification. This determination should include the consideration of the impacts on the reliability of the BES of switching operations under the control of operations personnel including the Local Control Centers via electronic methods (supervisory control) or communication with others. In addition, this determination should consider the amount of load under the control of operations personnel via electronic methods (supervisory control) available for load shedding. Load shedding in significant amounts can have a profound impact on the reliability of the interconnection and must be considered in determining operator certification requirements. Any operator that regularly performs one of those reliability-related tasks on behalf of the functional entity should be required to be certified. Thus, some operators at local control centers may require certification if they are performing some of these functions regularly.</p>
<p>Response: The CSO SAR Drafting Team disagrees that the scope should be expanded to include existing and pending</p>			

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
<p>RRO/RE standards. If RRO/RE standards are included the NERC certification requirements, the certification would no longer be applicable to <u>all</u> of North America. The content of the certification exam is based on a job analysis and subsequent content outline among the certified population. Therefore all questions on the exam can be traced specifically back to tasks that system operators perform and the content includes any responsible tasks.</p> <p>The CSO Standard Drafting Team will address the V0 comments when revising the standard.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p>			
Allegheny Power	<input checked="" type="checkbox"/>		Allegheny Power agrees with scope of the proposed SAR. Below are what we feel are the the most important scoping issues: 1) Specify the appropriate levels of certification for all applicable entities; 2) The issue of "Critical Tasks" must be addressed by the Standard Drafting Team. The "Critical Tasks" must be defined as specifically as possible; 3) The phrase "direct, continuous supervision, and observation" must be defined in clear language.
<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard. The CSO Standard Drafting Team will also address your comments that included in comment 2) critical tasks and comment 3) direct, continuous supervision, and observation, as captured in the list of VO Industry Comments in the SAR.</p>			
ITC Transco	<input checked="" type="checkbox"/>		
APS Power Operations	<input checked="" type="checkbox"/>		
KAMO Power	<input checked="" type="checkbox"/>		
Oncor	<input checked="" type="checkbox"/>		
Entergy	<input checked="" type="checkbox"/>		
Entergy SPO	<input checked="" type="checkbox"/>		

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #2			
Commenter	Yes	No	Comment
ERCOT	<input checked="" type="checkbox"/>		
Northeast Utilities	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		
SRP	<input checked="" type="checkbox"/>		

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

3. Do you agree with the applicability of the proposed standard action? If not, what function entities do you think need to be added or delete?

Summary Consideration:

The majority of the commenters did not agree with the applicability of the proposed standard action, not agreeing with the inclusion of local control center operators. A few commenters did not support the inclusion of the Interchange Authority since it has not yet been registered for compliance.

Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.

Question #3			
Commenter	Yes	No	Comment
CenterPoint Energy		<input checked="" type="checkbox"/>	CenterPoint Energy disagrees with the inclusion of Transmission Owners and Generator Owners as local control center operators as discussed in our response to Question 2.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
City of Tallahassee		<input checked="" type="checkbox"/>	Based on the indication that additional system operators may need to be NERC certified as a result of this SAR, applicability should include the Transmission Service Provider, Distribution Provider and the Load-Serving Entity. To not include them from the beginning will "short change" them if the discussions feared in 2 above does take place. These entities do control shedding load, whether as directed by the Reliability Coordinator or by their Transmission Service Provider and should be invited to the party at the beginning.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			

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Question #3			
Commenter	Yes	No	Comment
Allegheny Power		<input checked="" type="checkbox"/>	This standard should apply to the Transmission Operator (Local Control Center), Generator Owner (Market Operations Center) the Generator Operator as well as the Transmission Operator, Reliability Coordinator and the Balancing Authority.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
IESO		<input checked="" type="checkbox"/>	<p>We agree with the inclusion of all operating entities but question the need to include Transmission Owners and Generator Owners. In Functional Model Version 3, there are no real-time responsibilities assigned to these entities. Given the purpose of this standard, i.e., requiring operating personnel to acquire a certain level of credentials, the inclusion of these two entities seems inappropriate.</p> <p>We also believe that these should not apply to other entities including the IA and the GOP.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ISO New England		<input checked="" type="checkbox"/>	The IA, GO, GOP and TO should be removed from applicability. The Interchange Authority has not yet been registered for compliance. Equipment owners do not have any operational impact and, therefore, should not be included. Generator Operators will be trained to operate their specific technology/equipment and, should follow directions of their operational authority (RC, TOP, etc.).
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			

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Question #3			
Commenter	Yes	No	Comment
NPCC RSC		<input checked="" type="checkbox"/>	NPCC participating members believe that IA, GO, GOP and TO should be removed from applicability. The Interchange Authority has not yet been registered for compliance. Equipment owners do not have any operational impact and, therefore, should not be included. Generator Operators will be trained to operate their specific technology/equipment and, should follow directions of their operational authority (RC, TOP, etc.)."
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
US ACE		<input checked="" type="checkbox"/>	I don't see where the Generator Owner has a role in this reliability standard.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
US BRC		<input checked="" type="checkbox"/>	<p>The standard currently applies to the reliability functions Transmission Operator, Balancing Authority, and Reliability Coordinator. In Order 693 (P1409) the Commission finds "...that the Reliability Standard serves an important reliability goal in requiring applicable entities to staff all operating positions that have a primary responsibility for real-time operations or are directly responsible for complying with the Reliability Standards with NERC-certified staff." The SAR seeks to expand the standard to include the additional reliability functions Generator Operator, Generator Owner, Transmission Owner, and Interchange Authority. We agree that including the Generator Operator function supports this reliability goal.</p> <p>However, we question the need to expand the applicability to Generator Owner and Transmission Owner. We have no comment regarding Interchange Authority.</p> <p>NERC has defined (per Statement of Compliance Registry Criteria, Revision 3) the reliability function Transmission Owner as: "the entity that owns and maintains</p>

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Question #3			
Commenter	Yes	No	Comment
			<p>transmission facilities". Likewise the reliability function generator owner is defined as: " the entity that owns and maintains generating units.</p> <p>We fail to see how including these reliability functions serves to assure the credentials of those who have a primary responsibility for real-time operations. We recommend the reliability functions Generator Owner and Transmission Owner be dropped from the SAR.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ATC		<input checked="" type="checkbox"/>	<p>The addition of other entities to have certified "operating positions" is only one piece of the bigger puzzle. NERC must address the group of personnel standards to insure a set of comprehensive reliability standards. (PER-003, PER-002 and PER-001)</p> <p>If other NERC standards are not going to be addressed by this effort then NERC should limit this SAR to only those entities that perform real-time TOP, BA and RC Requirements using non-certified personal.</p> <p>What is the reason to stop at the certification requirement? (PER-003)</p>
<p>Response: There are other NERC standard projects that are addressing the PER standards. The revision to PER-003 is being addressed by this Project, 2007-04 (http://www.nerc.com/~filez/standards/Certifying_SOs_Project_2007-04.html). The revision to PER-001 is being addressed in Project 2007-03, Real-Time Operations (http://www.nerc.com/~filez/standards/Real-time_Operations_Project_2007-03.html). PER-002 is being replaced with PER-005, Project 2006-04, System Personnel Training (http://www.nerc.com/~filez/standards/System-Personnel-Training.html).</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Brazos		<input checked="" type="checkbox"/>	<p>Applicability to local control center operators should not required for reasons stated above.</p>

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #3			
Commenter	Yes	No	Comment
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Entergy		<input checked="" type="checkbox"/>	Not sure that new certification requirements need to be added for all Transmission Dispatchers, I believe NERC has addressed certification and we need to leave it up to the Transmission Owners to establish what level of TO's need to be certified.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Entergy SPO		<input checked="" type="checkbox"/>	Based on the scope of this SAR to determine if entities other than BA, TO and RC should be subject to some type of certification then all functions may be applicable, especially LSE, DP, TSP.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ERCOT		<input checked="" type="checkbox"/>	Should not apply to operators of power plants; e.g., Generator Owners and/or Generator Operators. Should not apply to those who own, but do not operate bulk electric transmission systems; e.g., Transmission Owners.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			

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Question #3			
Commenter	Yes	No	Comment
FirstEnergy		<input checked="" type="checkbox"/>	<p>This standard should not be applicable to Generator owners and Generator operators. The function of Generator Operator and Generator owner is very broad. Generator owners own and maintain generation facilities. They do not operate generation facilities. Centrally located Generation Operator (Dispatchers) should be included under this standard due to the impact they can have on the reliability of the BES. Genertor Operators (control room personnel in direct control of the unit at the plant) that operate two units or less simultaneously should not be included in the applicability of this standard due to the minimal impact they can have on the reliability of the BES.</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Hydro One		<input checked="" type="checkbox"/>	<p>It is difficult to be exact in determining what entities require certification because some do not affect reliability of the. For example, a small generator or local control area may not be significant to impact the reliability in their area. Perhaps, entities should be identified as impactive based on load/generation capability and voltage levels. From the reliability viewpoint, it is better to over certify than under certify.</p> <p>The Interchange Authority has not yet been registered for compliance. Equipment owners who do not have any operational impact should not be included. Generator Operators will be trained to operate their specific technology/equipment and, should follow directions of their operational authority (RC, TOP, etc.).</p>
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
ISO/RTO Council		<input checked="" type="checkbox"/>	<p>We believe that IA, GO, GOP and TO be removed from applicability. The Interchange Authority has not yet been registered for compliance. Equipment owners do not have any operational impact and, therefore, should not be included. Generator Operators will be trained to operate their specific technology/equipment and, should follow directions of their operational authority (RC, TOP, etc.).</p>

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Question #3			
Commenter	Yes	No	Comment
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
MISO Stakeholders		<input checked="" type="checkbox"/>	<p>The applicability of this Standard should not be extended to include Generator Owners or Generator Operators. Generator Owners own and maintain generation facilities. They do not operate generation facilities. Generation Operators operate generation facilities.</p> <p>This Standard should not be extended to include Generator Operators in total. Many positions that routinely operate generating units are staffed by long-tenured union Control Room Operators in Plants who take directions from a centralized Generation Control Center and/or the local RTO/ISO. To require certification of these personnel would be analogous to requiring the certification of the outside field force of a Transmission Operator, including positions that operate and switch electric transmission lines.</p> <p>A limited extension of this Standard to only include the real time operation personnel in a centralized Generation Control Center that interfaces with the Plants and the local RTO/ISO may be appropriate. However, it would not be appropriate in all situations. For example, PJM requires local control center operators to be PJM certified. In this case, there is no need for additional certification of these local control center operators.</p> <p>Additionally, the scope indicates that "grandfathering certification requirements for transmission operator personnel" will be considered. FERC did not give a choice. They ordered that certain operators will not have to be certified due to grandfathering provisions. Thus, the only consideration is how to word this correctly in the standard. This exception should not apply only to transmission operator personnel as well. Any company with unionized operation personnel could have this problem. Modification of job requirements such as requiring certification is a trigger for contract re-negotiations with many collective bargaining agreements. FERC was very clear they did not intend to cause this to occur.</p> <p>FERC did indicate that management personnel at these companies with grandfathered</p>

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Question #3			
Commenter	Yes	No	Comment
			operators must ensure they are qualified to operate the system. The standards drafting team may want to consider including a requirement for these companies to formally do this in the standard through a letter to NERC Operator Certification Personnel or some similar means.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>FERC Order 693 Paragraph 1409, FERC "directs the ERO to <u>consider</u> grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process". As captured in the SAR under FERC Order 693 comments, the CSO Standard Drafting Team will address this consideration.</p>			
MRO		<input checked="" type="checkbox"/>	The transmission owner (TO) and generator owner (GO) should be removed from the scope. These entities don't have a primary responsibility for real-time operations.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
SOCO		<input checked="" type="checkbox"/>	This SAR should be limited to the Reliability Coordinator, Balancing Authority, Interchange Authority, Transmission Operator and Generator Operator (in some entities this is called "Market Operator") This is not to infer that an operator that works inside a power plant should be certified.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Manitoba Hydro		<input checked="" type="checkbox"/>	Manitoba Hydro believes PER-003-0 applicability is right. The generation operators should not be added as they are not responsible for the operation of the bulk electric system. They do not act unilaterally in response to the bulk electric system but take

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #3			
Commenter	Yes	No	Comment
			their direction from the Transmission Operator/Balancing Authority who are and should remain the Certified System Operators.
<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>			
Northeast Utilities	<input checked="" type="checkbox"/>		
PSC SC	<input checked="" type="checkbox"/>		
SRP	<input checked="" type="checkbox"/>		
ITC Transco	<input checked="" type="checkbox"/>		
KCPL	<input checked="" type="checkbox"/>		
Oncor	<input checked="" type="checkbox"/>		
Ameren	<input checked="" type="checkbox"/>		
KAMO Power	<input checked="" type="checkbox"/>		

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4. If you are aware of any Regional Variances associated with the proposed standard action, please identify here.

Summary Consideration:

The majority of the comments were not aware of any Regional Variances associated with the proposed standard action. One commenter suggested that the overlapping certification requirements between NERC and ISOs/RTOs be addressed. The CSO SAR Drafting Team disagreed, explaining that certification programs that are administered and required by ISOs/RTOs are outside the scope of this SAR. A NERC Certification program that addresses regional variances would undermine the intent of a uniform certification for all North America.

Question #4		
Commenter	Regional Variance	Comment
Allegheny Power		The overlapping certification requirements between NERC and ISOs/RTOs should be addressed.
Response: The CSO SAR Drafting Team disagrees. Certification programs that are administered and required by ISO/RTOs are outside the scope of this SAR. A NERC Certification program that addresses regional variances would undermine the intent of a uniform certification for all North America.		
Ameren		No comment.
CenterPoint Energy		No comment.
City of Tallahassee		None
IESO		None
ISO New England		No comment.
NPCC RSC		No comment.
Oncor		No comment.
US ACE		No comment.
US BRC		No comment.
ATC		No
Brazos		No comment.
Entergy		No comment.
Entergy SPO		No comment.
ERCOT		No comment.
FirstEnergy		Not aware of any.
Hydro One		No
ISO/RTO Council		No comment.

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Question #4		
Commenter	Regional Variance	Comment
ITC Transco		No comment.
KCPL		No
MISO Stakeholders		No comment.
MRO		N/A
Northeast Utilities		No comment.
PSC SC		No comment.
SRP		No comment.
SOCO		We are not aware of any regional variances needed .
Manitoba Hydro		No comment.

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5. If you are aware of the need for a business practice to support the proposed standard action, please identify it here.

Summary Consideration:

The majority of the comments were not aware of the need for a business practice to support the proposed standard action. One comment suggested that there should be a ban on the practices of entities having formal or informal agreements that limit a certified operator’s employment opportunities. The CSO SAR Drafting Team believes this is a personnel issue and that personnel practices are outside the scope of the SAR.

Question #5	
Commenter	Comment
KAMO Power	There should be a ban on the practice of entities having formal or informal agreements that limit a certified operator's employment options without the prior knowledge and written consent of the operator.
Response: The CSO SAR Drafting Team believes that entity personnel practices are outside the scope of this SAR.	
Ameren	No comment.
CenterPoint Energy	No comment.
City of Tallahassee	None
Allegheny Power	None
IESO	No
ISO New England	No comment.
NPCC RSC	No comment.
Oncor	No comment.
US ACE	No comment.
US BRC	No comment.
ATC	No
Brazos	No comment.
Entergy	No comment.
Entergy SPO	No comment.
ERCOT	No comment.
FirstEnergy	Not aware of any.
Hydro One	No
ISO/RTO Council	No comment.
ITC Transco	No comment.
KCPL	None
MISO Stakeholders	No comment.
MRO	N/A

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Question #5	
Commenter	Comment
Northeast Utilities	No comment.
PSC SC	No comment.
SRP	No comment.
SOCO	No comment.
Manitoba Hydro	No comment.

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6. If you have any other comments on this SAR that you haven't already provided in response to the previous questions, please provide them here.

Question #6	
Commenter	Comment
APS Power Operations	<p>On the subject of PER-003-0, B., R1, we agree with the Industry Comment listed that personnel who MEET BOTH requirements R1.1 AND R1.2 shall be NERC certified, not MEET EITHER.</p> <p>On the subject of PER-003-0, M1, we believe that a qualified individual providing technical direction to a trainee will observe the work in progress to the extent necessary to verify the performance is proper. Providing direction does not imply continuous observation, but does imply control of the performance and observation appropriate to the difficulty and sensitivity of the work. We do not believe that value will be added by creating a requirement to conduct a comprehensive cataloging of task criticality in order to determine the proper amount of work supervision for the trainee. These decisions can be made most effectively by the qualified operator based on the trainee's progress to date, the existing circumstances, and their knowledge of the task at hand.</p> <p>On the subject of the compliance monitoring process, we agree that the wording "staffing plan" would be more clearly stated as "staffing schedule".</p>
<p>Response: The existing SAR captures your comment on R1 and will be addressed by the CSO Standard Drafting Team.</p> <p>The existing SAR captures your comment comment on M1 with respect to the critical tasks. The CSO Standard Drafting Team will address the V0 comment to clarify "What constitutes a "critical task? What duties performed in a typical control center are not "critical?" Inclusion of "critical tasks" is most likely a reference to the Critical Task List that has been established to guide operators in determining which of the four certification credentials (BIO, TO, BIT, RO) they are required to attain." The CSO SAR Drafting Team does not agree that M1.1 should be changed beyond addressing the existing comment on critical tasks. To comply with the NERC standards process to ensure the standard is enforceable, the CSO Standard Drafting Team will review and revise the requiements and measures to ensure they are unambiguous.</p> <p>The existing SAR captures your comment on the compliance monitoring process and will be addressed by the CSO Standard Drafting Team.</p>	
KAMO Power	<p>This will not only improve the reliability of the bulk electric system, it will also save money by assuring that operators are knowledgeable of their system and are operating lines and equipment in a safe and efficient manor. Maintaining certification will assure that every operator is constantly gaining the expertise required to operate in normal and emergency conditions.</p>
<p>Response: The CSO SAR Drafting Team agrees and thanks you for your comment.</p>	
IESO	<p>The drafting team must clarify issues related to any type of certification that may be required for TOP's staff performing (a) supporting functions (e.g. outage planning), (b) reliability impactive real-time independent actions, or (c) switching operations under the supervision of certified supervisors. These are critical issues and unless clarity is obtained on these issues, it will be difficult to move</p>

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Question #6	
Commenter	Comment
	forward to the next stage.
	<p>Response: This SAR and standard are not addressing support personnel. NERC Project 2010-01, Support Personnel Training, is intended to determine the <u>training</u> needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 (ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf). A similar project and SAR will need to be prepared to determine the scope of a standard for the <u>certification</u> of support personnel.</p> <p>The CSO SAR Drafting team believes your comment (b) and (c) are captured in the existing SAR by the following statement "The standard needs to be modified to clarify which system operators need to be NERC certified."</p>
NPCC RSC ISO New England	<p>As cited in FERC 693 under PER-003, Commission determination, no requirements were to be added for LCC, TO or GO certification:</p> <p>"1407. Northern Indiana and APPA raise persuasive arguments regarding labor relations and labor retention issues that may arise if generator operators are required to be NERCcertified. The Commission understands these concerns and is persuaded not to require generator operators or transmission operators at local control centers to be NERCcertified . In addition, the Commission understands that there are some long tenured unionized transmission operators who are very capable operators but who are unable to secure certification. This is not a new problem and has been addressed in various collective bargaining negotiations through grandfathering such capable operators who are unable to become certified. However, the Commission directs that if grandfathering is implemented, the entity must attest that the operators are competent. The Commission directs the ERO to consider grandfathering certification requirements for these personnel so that the industry can retain the knowledge and skill of these longtenured operators. Personnel that are subject to such grandfathering still must comply with applicable training requirements pursuant to PER-002-0."</p> <p>Furthermore, the Commission's determination appearing in PER-002 of FERC Order 693:</p> <p>"1348. Several commenters express concern about requiring local control center operators to become fully trained to the same extent as transmission operators, balancing authorities and reliability coordinators. This is not the Commission's intent. As we stated in the NOPR, the proposed modifications do not imply a "one-size-fits-all" approach but rather ensure the creation of training programs that are structured and tailored to the</p>

Consideration of Comments on 1st Draft of Certifying System Operators SAR (Project 2007-04)

Question #6	
Commenter	Comment
	<p>different functions and needs of the personnel involved.369 Therefore the Commission agrees with Entergy that the training program should be tailored to the functions local control center operators, generator operators and operations planning staff perform that impact the reliable operation of the Bulk-Power System for both normal and emergency operations."</p> <p>"1408. No comments were received on the proposed modifications to direct the ERO to modify the Reliability Standard to specify the minimum competencies that must be demonstrated to become and remain a certified operator and to identify the minimum competencies operating personnel must demonstrate to be certified. The Commission finds that these modifications improve the Reliability Standard by focusing on necessary competencies. Accordingly, the Commission directs the ERO to develop these modifications to the Reliability Standard.</p> <p>1409. We find that the Reliability Standard serves an important reliability goal in requiring applicable entities to staff all operating positions that have a primary responsibility for real-time operations or are directly responsible for complying with the Reliability Standards with NERC-certified staff. Accordingly, the Commission approves Reliability Standard PER-003-0. In addition, pursuant to section 215(d)(5) of the FPA and § 39.5(f) of our regulations, the Commission directs the ERO to develop a modification to PER-003-0 through the Reliability Standards development process that: (1) specifies the minimum competencies that must be demonstrated to become and remain a certified operator and (2) identifies the minimum competencies operating personnel must demonstrate to be certified. The Commission also directs the ERO to consider grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process."</p> <p>Also, if the SAR proceeds, there is an opportunity for the drafting team to clarify issues related to any type of certification that may be required for TOP's staff performing (a) supporting functions (e.g. outage planning), (b) reliability impactful real-time independent actions, or (c) switching operations under the supervision of certified supervisors.</p> <p>Finally, as to the Exelon Corporation suggestion "that Version 1 of this Standard be initiated to address the requirement to have NERC Certified Operators that perform functions that are formally delegated similar to the requirement of Policy 9B Req. 3." It is our understanding that only tasks may be delegated, not functions.</p>

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Question #6	
Commenter	Comment
	<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>This SAR and standard are not addressing support personnel. NERC Project 2010-01, Support Personnel Training, is intended to determine the <u>training</u> needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 (ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC Filing Volumes I II III Reliability Standards Development Plan 2008 2010.pdf). A similar project and SAR will need to be prepared to determine the scope of a standard for the <u>certification</u> of support personnel.</p> <p>The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p>
ATC	<p>Item 1: Using existing NERC rules some Transmission Operators (TOP) have delegated critical real-time operating control to local transmission control centers while at the same time avoiding certification requirements. (PER-003) Because of this situation NERC should review existing rules surrounding the delegation of Requirements and determine if modifications are needed. That effort may result in achieving the same goal as this SAR.</p> <p>ATC believes that a TOP should not be able to delegate Requirements that address real-time operations to non-certified system operators.</p> <p>Item 2: ATC is concerned with the use and weight placed on comments submitted during the Version 0 effort in the developed and justification if this SAR. The standard drafting team should place greater weight and consideration on comments submitted during this effort.</p>
	<p>Response: Item 1. The existing SAR captures your comment on R1 (see Exelon's comments in the V0 Comments section). The CSO Standard Drafting Team will address this comment during the development of the standard.</p> <p>Item 2: The existing SAR captures V0 comments. The CSO SAR Drafting Team has responded to all comments received on version 1 of the SAR and has revised the SAR based on industry feedback. The CSO Standard Drafting Team uses the revised SAR to develop the standard.</p>

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Question #6	
Commenter	Comment
Entergy SPO	<p>We agree that new certification credentials may need to be developed based on local control center operations, or at least the requirements clarified in the standard with respect to these operators; especially to clarify the RTO/ISO and sub entity responsibilities.</p> <p>The proposal to consider grandfathering certification requirements for transmission operator personnel should be used only as a short transition period to allow proper testing/training/certification of all identified personnel.</p> <p>Please also consider the following aspects of the standard: R1 "Each...shall staff all operating positions..." The term "operating positions" needs better definition. For example, does this include technical/engineering personnel on shift that run short term and real time studies?</p> <p>M1, 1.1, 1.2 are actually "Requirements" and should be moved into that section.</p> <p>M1.1 "Critical tasks" needs definition, even if only to clarify that they are defined by the entity.</p> <p>M1.2 is out of place here. Where did the 4 hour limit come from? Should the requirement really be stated in EOP-009 Loss of Control Center Functionality as the time required in which to establish control at a site with NERC certified operators?</p> <p>D1 "...Staffing schedules and certification numbers will be compared to ensure that positions that require NERC certified operating personnel were covered as required. Certification numbers from the Transmission Operator, Balancing Authority, and Reliability Coordinator will be compared with NERC records..." is actually a Measure and should be moved into that section. The statement regarding exception reporting is no longer needed with the compliance programs that each region has established that require self reporting of violations.</p> <p>Many organizations have NERC certified personnel who are not necessarily "operators". The requirements to maintain NERC certification are not geared for these support/technical planning personnel. There are benefits to having these individuals knowledgeable of the NERC standards and the operational/reliability concepts behind the NERC certification, but now with the major commitment required for maintaining the 'operator' credential, these individuals will most likely not remain NERC certified. While a training program for non-operators might still encompass these aspects, there should be consideration given as to having a "NERC generic fundamentals" or "technical" certification. This may not be applicable to this standard but more so to the overall</p>

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Question #6	
Commenter	Comment
	certification program.
	<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p> <p>FERC Order 693 Paragraph 1409, FERC "directs the ERO to <u>consider</u> grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process". As captured in the SAR under FERC Order 693 comments, the CSO Standard Drafting Team will address this consideration.</p> <p>In FERC Order 693, FERC directs the ERO to (1) "specify minimum competencies that must be demonstrated to become and remain a certified operator" and (2) "identify minimum competencies operating personnel must demonstrate to become certified". The CSO SAR Drafting team received clarification from FERC on the difference between these two directives. FERC staff explained that these two directives have the same intent. The CSO Standard Drafting Team will address the FERC directives, based on the clarification. Your comment on M1.1 is currently included in the VO Comments section and will be addressed by the CSO Standard Drafting Team.</p> <p>M1.2 is being addressed by Project 2006-004 Back-up Facilities, which is revising EOP-008. http://www.nerc.com/~filez/standards/Backup_Facilities.html</p> <p>The CSO Standard Drafting Team will revise the compliance section to conform with the revised standard format.</p> <p>NERC Project 2010-01, Support Personnel Training, is intended to determine the training needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf). A SAR will need to be prepared to determine the scope of a standard for the certification of support personnel.</p>
ERCOT	Continuing training of Certified System Operators should remain as a requirement to maintain certification.
	<p>Response: The CSO SAR Drafting Team does not believe that continuing training of Certified System Operators is within the scope of this SAR. The NERC System Operator Certification Program Manual addresses continuing training requirements for certification.</p>

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	http://www.nerc.com/~training/certification/files/SOC_Program_Manual.pdf
Hydro One	<p>NERC should encourage certification of operating trainees within their first 6 months of employment. If unable to become certified after a number of attempts (e.g. 3), they are to be seen as not having the minimum competencies needed to operate, and should be removed from the operator training program.</p> <p>NERC certification represents a minimum requirement of needed knowledge. If trainees are training for a position that requires certification, they should all have to be NERC certified before they are allowed to operate, supervised or not. We need to have NERC should encourage certification of operating trainees within their first 6 months of employment. If unable to become certified after a number of attempts (e.g. 3), they are to be seen as not having the minimum competencies needed to operate, and should be removed from the operator training program.</p> <p>NERC certification represents a minimum requirement of needed knowledge. If trainees are training for a position that requires certification, they should all have to be NERC certified before they are allowed to operate, supervised or not. We need to have rigour, professionalism, and minimum standards for our industry.</p> <p>We support NERC's move toward CEH requirements as the way to maintain certification. It ensures minimum training is delivered which is inconsistent across the industry, professionalism, and minimum standards for our industry.</p> <p>We support NERC's move toward CEH requirements as the way to maintain certification. It ensures minimum training is delivered which is inconsistent across the industry.</p>
	<p>Response: The NERC Certification process and the SAR/Standard do not intend to dictate the amount of time that an entity takes to have operating trainees become certified.</p> <p>The CSO SAR Drafting Team agrees with your last statement.</p>
ISO/RTO Council	<p>As cited in FERC 693 under PER-003, Commission determined that no requirements were to be added for LCC, TO or GO certification:</p> <p>"1407. Northern Indiana and APPA raise persuasive arguments regarding labor relations and labor retention issues that may arise if generator operators are required to be NERCcertified. The Commission understands these concerns and is persuaded not to require generator operators or transmission operators at local control centers to be NERCcertified . In addition, the Commission understands that there are some long tenured unionized transmission operators who are very capable</p>

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	<p>operators but who are unable to secure certification. This is not a new problem and has been addressed in various collective bargaining negotiations through grandfathering such capable operators who are unable to become certified. However, the Commission directs that if grandfathering is implemented, the entity must attest that the operators are competent. The Commission directs the ERO to consider grandfathering certification requirements for these personnel so that the industry can retain the knowledge and skill of these longtenured operators. Personnel that are subject to such grandfathering still must comply with applicable training requirements pursuant to PER-002-0."</p> <p>Furthermore, the Commission's determination appearing in PER-002 of FERC Order 693 "1348. Several commenters express concern about requiring local control center operators to become fully trained to the same extent as transmission operators, balancing authorities and reliability coordinators. This is not the Commission's intent. As we stated in the NOPR, the proposed modifications do not imply a "one-size-fits-all" approach but rather ensure the creation of training programs that are structured and tailored to the different functions and needs of the personnel involved. Therefore the Commission agrees with Entergy that the training program should be tailored to the functions local control center operators, generator operators and operations planning staff perform that impact the reliable operation of the Bulk-Power System for both normal and emergency operations."</p> <p>"1408. No comments were received on the proposed modifications to direct the ERO to modify the Reliability Standard to specify the minimum competencies that must be demonstrated to become and remain a certified operator and to identify the minimum competencies operating personnel must demonstrate to be certified. The Commission finds that these modifications improve the Reliability Standard by focusing on necessary competencies. Accordingly, the Commission directs the ERO to develop these modifications to the Reliability Standard.</p> <p>1409. We find that the Reliability Standard serves an important reliability goal in requiring applicable entities to staff all operating positions that have a primary responsibility for real-time operations or are directly responsible for complying with the Reliability Standards with NERC-certified staff. Accordingly, the Commission approves Reliability Standard PER-003-0. In addition, pursuant to section 215(d)(5) of the FPA and § 39.5(f) of our regulations, the Commission directs the ERO to develop a modification to PER-003-0 through the Reliability Standards development process that: (1) specifies the minimum competencies that must be demonstrated to become and remain a certified operator and (2) identifies the minimum competencies operating personnel must demonstrate to be certified. The Commission also directs the ERO to consider grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process."</p>

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	<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p>
ITC Transco	<p>The SAR proposes "grandfathering certification requirements for transmission operator personnel as part of the standards development process." We would like clarification on what, specifically, the grandfathering will cover, and for how long. Depending on the answer, grandfathering may or not be appropriate for inclusion in the SAR/Standard.</p>
	<p>Response: FERC Order 693 Paragraph 1409, FERC "directs the ERO to <u>consider</u> grandfathering certification requirements for transmission operator personnel in the Reliability Standards development process". As captured in the SAR under FERC Order 693 comments, the CSO Standard Drafting Team will address this consideration.</p>
KCPL	<p>This standard should be careful to not include a certification requirement for any personnel who take direct orders from others to operate equipment on the BES and who cannot deviate from that direction and take independent actions that could affect the BES. This standard should also be careful not to include personnel who support the systems and tools for system operators.</p>
	<p>Response: Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p> <p>The CSO SAR Drafting Team agrees that this standard is not addressing support personnel. NERC Project 2010-01, Support Personnel Training, is intended to determine the training needs of generator operators and operations support staff with a direct impact on reliable operations of the bulk power system. A high-level description of the project can be found in the NERC Reliability Standards Development Plan: 2008-2010 (ftp://www.nerc.com/pub/sys/all_updl/standards/sar/FERC_Filing_Volumes_I_II_III_Reliability_Standards_Development_Plan_2008_2010.pdf). A similar project and SAR will need to be prepared to determine the scope of a standard for the certification of support personnel.</p>
MISO Stakeholders	<p>The scope should reflect that the standards drafting team should determine which functional entities require certified operators and which specific requirements in the standards should require operator</p>

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	certification. Then, any operator that regularly performs a task to meet compliance with one of these specific requirements should be required to be certified. Thus, some operators at local control centers may require certification if they are performing tasks to meet compliance on behalf of a registered entity. FERC clearly supports this position in Order 693. They specified that operators at local control centers should not be required to be certified unless they are performing functions that impact the BES. If the specific requirements is limited to those affecting the BES, any local control center operator regularly performing one of those functions would meet this exception.
	<p>Response: The SAR includes a statement that "The standard needs to be modified to clarify which system operators need to be NERC certified." The CSO Standard Drafting Team will address this issue during the development of the standard.</p> <p>Based on FERC Order 693, industry feedback, and the NERC Functional Model Version 3, the CSO SAR Drafting Team has removed the Interchange Authority, Transmission Owner, the Generator Owner, and the Generator Operator from the functions to which the standard will apply. The applicability to the Reliability Coordinator, the Balancing Authority, and the Transmission Operator is based on the NERC Functional Model Version 3 definitions. Each entity needs to review the NERC Functional Model to determine applicability based on the task lists that are included in each function.</p> <p>http://www.nerc.com/~filez/functionalmodel.html</p>
Northeast Utilities	We agree that the standard needs to be modified to clarify which operating personnel need to be NERC certified.
	Response: The CSO SAR Drafting Team agrees and thanks you for your comment.
PSC SC	One typographical suggestion: On Page SAR-2 under "Industry Need", I believe "stand up" should be "start up".
	Response: The CSO SAR Drafting Team believes stand up is the appropriate term.
SRP	No comment.
SOCO	No comment.
Manitoba Hydro	No comment.
FirstEnergy	No other comments.
Brazos	No comment.
MRO	N/A
Entergy	No comment.
Oncor	No comment.
US ACE	No comment.
US BRC	No comment.
Allegheny Power	None
CenterPoint Energy	No comment.
City of Tallahassee	None

