

Consideration of Comments on Definition of Bulk Electric System— Project 2010-17

Following the development of this report, the leadership of the BES Definition SDT and Rules of Procedure teams met with the leadership of the Standards Program and the Standards Committee and determined that the BES Definition SDT will assume responsibility for working with stakeholders to identify what evidence is needed to support a request for an exception to the BES definition.

The BES Definition team will solicit stakeholder input to identify the evidence an entity will need to provide when submitting a request for an exception to the definition of BES. While the determination of what evidence will be needed to support a request for a BES Definition Exception will be developed using NERC's standard development process, a decision on where the final product will reside - in the definition of BES, or as an attachment (e.g., a procedure identifying what evidence to produce when applying for a BES exception) to the Rules of Procedure will be made jointly by the leadership of the Standards Program and the Standards Committee at a later stage. Given the time constraints of this project, having all the technical clarity associated with this project developed by a single team seemed the most efficient decision.

The Definition of Bulk Electric System Drafting Team thanks all commenters who submitted comments on the SAR and proposed modification to the definition of Bulk Electric System. These standards were posted for a 30-day public comment period from December 17, 2010 through January 21, 2011. The stakeholders were asked to provide feedback on the standards through a special Electronic Comment Form. There were 82 sets of comments, including comments from more than 175 different people from approximately 129 companies representing 10 of the 10 Industry Segments as shown in the table on the following pages.

http://www.nerc.com/filez/standards/Project2010-17_BES.html

Prior to the issuance of Order 743a, the SDT carefully weighed the many suggestions received in these comments as well as reviewing numerous documents from Regional Entities and other sources in coming up with a revised definition shown here:

Bulk Electric System (BES): All Transmission Elements operated at 100 kV or higher, Real Power resources as described below, and Reactive Power resources connected at 100 kV or higher unless such designation is modified by the list shown below.

Inclusions:

- 11 - Transformers, other than generator step-up (GSU) transformers, including phase angle regulators, with two windings of 100 kV or higher unless excluded under Exclusions E1 and E3.

- I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.
- I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.
- I4 - Blackstart Resources and the designated blackstart Cranking Paths identified in the Transmission Operator's restoration plan regardless of voltage.
- I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.

Exclusions:

- E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:
 - a) Only serving Load. A normally open switching device between radial systems may operate in a 'make-before-break' fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or,
 - b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or,
 - c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5.
- E2 - A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer's side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.
- E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following:
 - a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices;
 - b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation;
 - c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN;
 - d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and
 - e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a

comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

Elements may be included or excluded on a case-by-case basis through the Rules of Procedure exception process.

The SDT has made corresponding changes to the appropriate wording of the SAR and is now asking the Standards Committee for approval to move this project to the definition development phase.

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

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

Index to Questions:

1.	Should the following be classified as part of the BES?	16
	• Transformers, other than Generator Step-up (GSU) transformers, including Phase Angle Regulators, with both primary and secondary windings of 100 kV or higher	16
2.	Should the following be classified as part of the BES?	30
	• Individual generation resources (including GSU transformers and the associated generator interconnecting line lead(s)) greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above	30
3.	Should the following be classified as part of the BES?	46
	• Generation plants (including GSU transformers and the associated generator interconnecting line lead(s))with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above.....	46
4.	Should the following be classified as part of the BES?	59
	• Blackstart Resources and the designated blackstart Cranking Paths identified in the Transmission Operator’s (TOP’s) restoration plan.....	59
5.	Should the following be classified as part of the BES?	71
	• Transmission Elements or Facilities operated at voltages below 100kV where the exemption process deems the Element or Facility to be included in the BES.....	71
6.	Should the following be classified as part of the BES?	81
	• Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation resources to be included in the BES	81
7.	Should the following be classified as part of the BES?	94
	• Generation plants with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation plants to be included in the BES	94
8.	Should the following be excluded from the Elements and Facilities classified as part of the BES?	106
	• Any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6, and 7 above are excluded from the BES	106
9.	Should the following be excluded from the Elements and Facilities classified as part of the BES?	119
	• Elements and Facilities identified through application of the exemption process, consistent with the criteria, where the exemption process deems that the Element or Facility should be excluded from the BES (with concurrence from the ERO)	119

10. Should the following be excluded from the Elements and Facilities classified as part of the BES? 129
 - Generating plant control and operation functions which include relays and systems that control and protect the unit for boiler, turbine, environmental, and/or other plant restrictions..... 129
11. Do you believe that the proposed definition of BES, accompanied by a separate BES Definition Exception Process meets the reliability-related intent of the directives in Order 743?..... 138
12. If you have a proposal for an equally efficient and effective method of achieving the reliability- related intent of the directives in Order 743, please provide your proposal here.
157
13. Please provide any other information that you feel would be helpful to the drafting team working on the definition of BES. 171

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

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

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
1.	Group	Guy Zito	Northeast Power Coordinating Council										X
Additional Member	Additional Organization	Region	Segment Selection										
1.	Alan Adamson	New York State Reliability Council, LLC	NPCC	10									
2.	Gregory Campoli	New York Independent System Operator	NPCC	2									
3.	Kurtis Chong	Independent Electricity System Operator	NPCC	2									
4.	Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1									
5.	Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC	3									
6.	Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10									
7.	Dean Ellis	Dynegy Generation	NPCC	5									
8.	Brian Evans-Mongeon	Utility Services	NPCC	8									
9.	Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	5									
10.	Brian L. Gooder	Ontario Power Generation Incorporated	NPCC	5									
11.	Kathleen Goodman	ISO - New England	NPCC	2									
12.	Chantel Haswell	FPL Group, Inc.	NPCC	5									
13.	David Kiguel	Hydro One Networks Inc.	NPCC	1									
14.	Michael R. Lombardi	Northeast Utilities	NPCC	1									

Consideration of Comments on Definition of Bulk Electric System – Project 2010-17

Group/Individual	Commenter	Organization	Registered Ballot Body Segment																		
			1	2	3	4	5	6	7	8	9	10									
15.	Randy MacDonald	New Brunswick System Operator	NPCC	2																	
16.	Bruce Metruck	New York Power Authority	NPCC	6																	
17.	Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10																	
18.	Robert Pellegrini	The United Illuminating Company	NPCC	1																	
19.	Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1																	
20.	Saurabh Saksena	National Grid	NPCC	1																	
21.	Michael Schiavone	National Grid	NPCC	1																	
22.	Bohdan Dackow	US Power Generating Company (USPG)	NPCC	NA																	
2.	Group	Charles W. Long	SERC EC Planning Standards Subcommittee	X																X	
Additional Member Additional Organization Region Segment Selection																					
1.	Pat Huntley	SERC Reliability Corporation	SERC	10																	
2.	Bob Jones	Southern Company Services	SERC	1																	
3.	Darrin Church	Tennessee Valley Authority	SERC	1																	
4.	Jim Kelley	PowerSouth Energy Cooperative	SERC	1																	
5.	John Sullivan	Ameren Services Co.	SERC	1																	
6.	Phil Kleckley	South Carolina Electric & Gas Co.	SERC	1																	
3.	Group	Patricia Hervochon	Public Service Enterprise Group Company	X			X		X	X											
Additional Member Additional Organization Region Segment Selection																					
1.	Jim Hubertus	PSE&G	RFC	1, 3																	
2.	Scott Slickers	PSEG Fossil	RFC	5																	
3.	Jim Hebson	PSEG ER&T	RFC	6																	
4.	Dominic Grasso	PSEG Power CT	NPCC	5																	
5.	Peter Dolan	PSEG ER&T	NPCC	6																	
6.	Dominic DiBari	PSEG Fossil Odessa Ector Power Partners	ERCOT	5																	
7.	Eric Schmidt	PSEG ER&T	ERCOT	6																	
4.	Group	Carol Gerou	MRO's NERC Standards Review Subcommittee																		X

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
Additional Member		Additional Organization	Region	Segment Selection									
1.	Mahmood Safi	Omaha Public Utility District	MRO	1, 3, 5, 6									
2.	Chuck Lawrence	American Transmission Company	MRO	1									
3.	Tom Webb	Wisconsin Public Service Corporation	MRO	3, 4, 5, 6									
4.	Jason Marshall	Midwest ISO Inc.	MRO	2									
5.	Jodi Jenson	Western Area Power Administration	MRO	1, 6									
6.	Ken Goldsmith	Alliant Energy	MRO	4									
7.	Alice Ireland	Xcel Energy	MRO	1, 3, 5, 6									
8.	Dave Rudolph	Basin Electric Power Cooperative	MRO	1, 3, 5, 6									
9.	Eric Ruskamp	Lincoln Electric System	MRO	1, 3, 5, 6									
10.	Joe DePoorter	Madison Gas & Electric	MRO	3, 4, 5, 6									
11.	Scott Nickels	Rochester Public Utilities	MRO	4									
12.	Terry Harbour	MidAmerican Energy Company	MRO	6, 1, 3, 5									
13.	Richard Burt	Minnkota Power Cooperative, Inc.	MRO	1, 3, 5, 6									
5.	Group	Al DiCaprio	IRC Standards Review Committee		X								
Additional Member		Additional Organization	Region	Segment Selection									
1.	Bill Phillips	MISO	MRO	2									
2.	James Castle	NYISO	NPCC	2									
3.	Matt Goldberg	ISO-NE	NPCC	2									
4.	Greg Van Pelt	CAISO	WECC	2									
5.	Charles Yeung	SPP	SPP	2									
6.	Dan Rochester	IESO	NPCC	2									
7.	Mark Thompson	AESO	WECC	2									
8.	Steve Myers	ERCT	ERCOT	2									
6.	Group	Frank Gaffney	Florida Municipal Power Agency		X		X	X	X	X	X		
Additional Member		Additional Organization	Region	Segment Selection									
1.	Tim Beyrle	City of New Smyrna Beach	FRCC	4									
2.	Greg Woessner	KUA	FRCC	3									

Consideration of Comments on Definition of Bulk Electric System – Project 2010-17

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			1	2	3	4	5	6	7	8	9	10		
3. Jim Howard	Lakeland Electric	FRCC 3												
4. Lynne Mila	City of Clewiston	FRCC 3												
5. Joe Stonecipher	Beaches Energy Services	FRCC 1												
6. Cairo Vanegas	FPUA	FRCC 4												
7. Randy Hahn	Ocala Electric Utility	FRCC 3												
7. Group	Denise Koehn	Bonneville Power Administration	X		X		X	X						
Additional Member	Additional Organization	Region	Segment Selection											
1.	Sara Sundborg	BPA, Transmission, Technical Operations	WECC	1										
2.	John Anasis	BPA, Transmission, Technical Operations	WECC	1										
3.	Jim Gronquist	BPA, Transmission, Technical Operations	WECC	1										
4.	James O'Brien	BPA, Transmission, Technical Operations	WECC	1										
5.	Siraji Hirsi	BPA, Transmission, Technical Operations	WECC	1										
6.	Daniel Goodrich	BPA, Transmission, Technical Operations	WECC	1										
7.	Lorissa Jones	BPA, Transmission Reliability Program	WECC	1										
8. Group	Doug Hohlbaugh	FirstEnergy Corp		X		X	X	X	X					
Additional Member	Additional Organization	Region	Segment Selection											
1. Rob Martinko	FirstEnergy Corp	RFC	1, 3, 4, 5, 6											
9. Group	Mike Garton	Electric Market Policy		X		X		X	X					
Additional Member	Additional Organization	Region	Segment Selection											
1.	Michael Gildea	Dominion Resources Services, Inc.	NPCC	5										
2.	Louis Slade	Dominion Resources Services, Inc.	SERC	3										
3.	Connie Lowe	Dominion Resources Services, Inc.	RFC	5										
4.	John Loftis	Dominion Virginia Power	SERC	1										
10. Group	Jim Case	SERC OC Standards Review Group		X		X								

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

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	Additional Member	Additional Organization	Region	Segment Selection									
	1.	Gerald Beckerle	Ameren	SERC	1, 3								
	2.	Andy Burch	EI	SERC	1, 5								
	3.	Randy Castello	Mississippi Power	SERC	1, 3, 5								
	4.	Dan Roethemeyer	Dynegy	SERC	5								
	5.	Melinda Montgomery	Entergy	SERC	1, 3								
	6.	Sam Holeman	Duke Energy	SERC	1, 3, 5								
	7.	Joel Wise	TVA	SERC	1, 3, 5, 9								
	8.	Alvis Lanton	SIPC	SERC	1, 3, 5								
	9.	Hamid Zakery	Dynegy	SERC	5								
	10.	John Neagle	AECI	SERC	1, 3								
	11.	Mike Hirst	Cogentrix	RFC	5, 6								
	12.	Tim Hattaway	PowerSouth	SERC	1, 3, 5, 9								
	13.	Robert Thomasson	BREC	SERC	1, 3, 5, 9								
	14.	Shardra Scott	Gulf Power	SERC	1, 3, 5								
	15.	Patrick Woods	EKPC	SERC	1, 3, 5, 9								
	16.	Alisha Ankar	Prairie Power	SERC	1, 3, 5								
	17.	Bill Hutchison	SIPC	SERC	1, 3, 5								
	18.	J. T. Wood	Southern	SERC	1, 3, 5								
	19.	John Troha	SERC	SERC	10								
11.	Individual	Sandra Shaffer	PacifiCorp			X		X		X	X		
12.	Individual	Sylvain Clermont / Alain Pageau	Hydro-QuÃ©bec			X							
13.	Individual	William J. Gallagher	Transmission Access Policy Study Group			X		X	X	X			
14.	Individual	John Cummings	PPL Energy Plus						X	X			

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

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				1	2	3	4	5	6	7	8	9	10
15.	Individual	Jack Cashin	Competitive Suppliers			X		X	X				
16.	Individual	Marty Kaufman	ExxonMobil Research and Engineering	X				X		X			
17.	Individual	John Seelke	NERC Staff										
18.	Individual	Janet Smith	Arizona Public Service Company	X		X		X	X				
19.	Individual	Brian J. Murphy	NextEra Energy Inc.	X		X		X	X				
20.	Group	David Dworzak	Edison Electric Institute	X									
http://www.eei.org/howeare/ourmembers/USElectricCompanies/Pages/USMemberCoLinks.aspx													
21.	Individual	Brent Ingebrigtsen	LG&E and KU Energy LLC	X		X		X	X				
22.	Individual	Steve Alexanderson	Central Lincoln			X	X						
23.	Individual	David Thorne	Pepco Holdings Inc.	X		X							
24.	Individual	Martyn Turner	LCRA Transmission Services Corporation	X									
25.	Individual	David W Proebstel	PUD No.1 of Clallam County			X							
26.	Individual	Joe Petaski	Manitoba Hydro	X		X		X	X				
27.	Individual	Kevin Koloini	American Municipal Power				X						
28.	Individual	Robert Beadle	North Carolina EMC			X	X	X					
29.	Individual	Jim Uhrin	ReliabilityFirst										X

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
30.	Individual	Elroy Switlishoff	on behalf of Teck Metals Ltd.	X				X					
31.	Individual	Rex A Roehl	Indeck Energy Services					X					
32.	Individual	Samuel Stonerock	Southern California Edison	X		X		X					
33.	Individual	Patrick Farrell	Southern California Edison Company	X		X		X	X				
34.	Individual	E Switlishoff	on behalf of Catalyst Paper Corporation	X		X							
35.	Individual	Jeff Mead	City of Grand Island					X					
36.	Individual	Michelle D'Antuono	Occidental Energy Ventures Corp					X					
37.	Individual	Manny Robledo	City of Anaheim			X	X						
38.	Individual	Josh Dellinger	Glacier Electric Cooperative	X		X							
39.	Individual	Kathleen Goodman	ISO New England Inc.		X								
40.	Individual	Ed Davis	Entergy Services	X		X		X	X				
41.	Individual	John D. Martinsen	Snohomish County PUD	X		X	X		X				
42.	Individual	Rick Paschall	PNGC Power			X							
43.	Individual	Bud Tracy	Blachly-Lane Electric Co-op			X					X		
44.	Individual	Dave Hagen	Clearwater Power Co.			X					X		
45.	Individual	Dave Sabala	Douglas Electric Cooperative			X							

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

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46.	Individual	Dave Markham	Central Electric Cooperative, Inc. (Redmond Oregon)			X							
47.	Individual	Heber Carpenter	Raft River Rural Electric Cooperative			X							
48.	Individual	Jon Shelby	Northern Lights Inc.			X							
49.	Individual	Ken Dizes	Salmon River Electric Cooperative	X		X							
50.	Individual	Ray Ellis	Okanogan Country Electric Cooperative			X							
51.	Individual	Richard Reynolds	Lost River Electric			X							
52.	Individual	Rick Crinklaw	Lane Electric Cooperative			X							
53.	Individual	Roger Meader	Coos-Curry Electric Cooperative			X							
54.	Individual	Roman Gillen	Consumer's Power Inc.	X		X							
55.	Individual	Steve Eldrige	Umatilla Electric Co-op	X		X							
56.	Individual	Marc Farmer	West Oregon Electric Cooperative			X							
57.	Individual	Michael Henry	Lincoln Electric Cooperative			X							
58.	Individual	Bryan Case	Fall River Electric Cooperative			X							
59.	Individual	Jonathan Appelbaum	United Illuminating Company	X									
60.	Individual	David Burke	Orang and Rockland Utilities, Inc.	X		X							

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
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61.	Individual	Andrew Z. Puzstai	american Transmission company	X									
62.	Individual	John A. Gray	The Dow Chemical Company										
63.	Individual	Brian Evans-Mongeon	Utility Services	X		X	X	X	X		X	X	
64.	Individual	Barry Lawson	National Rural Electric Cooperative Association (NRECA)			X	X						
65.	Individual	Andrew Gallo	City of Austin dba Austin Energy	X		X	X	X	X				
66.	Individual	Laura Lee	Duke Energy	X		X		X	X				
67.	Individual	Hertzel Shamash	The Dayton Power and Light Company	X		X		X					
68.	Individual	Michael Moltane	ITC Holdings Corp	X									
69.	Individual	Bill Keagle	BGE	X									
70.	Individual	Amir Hammad	Constellation Power Source Generation, Inc. ("CPSG") filing on behalf of Constellation Energy Group, Inc. ("CEG"), Constellation Energy Commodities Group, Inc. ("CCG"), Constellation Energy Control and Dispatch, LLC ("CDD"), Constellation NewEnergy, Inc., ("CNE") and Constellation Energy Nuclear Group, LLC, ("CENG")			X		X	X				
71.	Individual	Shaun Anders	City Water Light and Power (CWLP) - Springfield, IL	X		X		X					

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

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				1	2	3	4	5	6	7	8	9	10
72.	Individual	Steven Grega	Lewis County PUD					X					
73.	Individual	Thad Ness	American Electric Power (AEP)	X		X		X	X				
74.	Individual	Marc M. Butts	Southern Company	X		X		X	X				
75.	Individual	David Angell	Idaho Power	X		X		X					
76.	Individual	John P. Hughes	Electricity Consumers Resource Council (ELCON)							X			
77.	Individual	Dan Rochester	Independent Electricity System Operator		X								
78.	Individual	Jeff Nelson	Springfield Utility Board			X							
79.	Individual	Jack Stamper	Clark Public Utilities	X									
80.	Individual	Allen Mosher	APPA			X	X						
81.	Individual	Alice Ireland	Xcel Energy	X		X		X	X				
82.	Individual	Paul Cummings	City of Redding			X	X	X	X				
83.	Individual	Manny Robledo	City of Anaheim			X	X						

1. Should the following be classified as part of the BES?

- **Transformers, other than Generator Step-up (GSU) transformers, including Phase Angle Regulators, with both primary and secondary windings of 100 kV or higher**

Summary Consideration: Stakeholders who responded to this question were evenly divided with about half the respondents indicating support for the proposal, and the other half disagreeing with at least some part of the proposal.

The SDT has clarified the definition based on industry comments regarding the classification of transformers.

Included in the BES: I1 - Transformers, other than generator step-up (GSU) transformers, including phase angle regulators, with two windings of 100 kV or higher unless excluded under Exclusions E1 and E3.

Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:

- a) Only serving Load. A normally open switching device between radial systems may operate in a 'make-before-break' fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or,
- b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or,
- c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5.

Excluded from the BES: E3 - Local distribution networks (LDN): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following:

- a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices;
- b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation;
- c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN;
- d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and
- e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

Organization	Yes or No	Question 1 Comment
Northeast Power Coordinating Council	No	<ol style="list-style-type: none"> 1. Exclusions should be applied to radial non-transmission facilities serving a distribution function. Step-down transformers with the low-side terminals serving non-BES facilities, which are serving a distribution function, should not be part of the definition of BES. 2. Transformers, other than GSUs, with both primary and secondary winding above 100kV, and performing a transmission function, should be classified as BES. 3. Transformers other than GSUs, with both primary and secondary windings above 100kV, and only providing a distribution function should be classified as non-BES. 4. Transformers other than GSUs, with their secondary windings or both primary and secondary windings operated below 100kV should not be included in the definition of BES.
<p>Response:</p> <ol style="list-style-type: none"> 1. The SDT has excluded local distribution networks as shown: <ul style="list-style-type: none"> • Excluded from the BES: E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following: <ol style="list-style-type: none"> a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices; b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation; c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN; d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL). <p>The SDT agrees with your suggestion and has incorporated it in its latest proposal.</p> <ol style="list-style-type: none"> 2. The SDT agrees with your suggestion and has incorporated it in its latest proposal: <p>Included in the BES: I1 - Transformers, other than Generator Step-up (GSU) transformers, including Phase Angle Regulators, with two windings of 100 kV or higher unless excluded under items E1 and E3.</p> <p>Excluded from the BES: Any radial system which is described as connected from a single Transmission source originating with an automatic interruption</p> 		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
		<p>device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions 12, 13, 14 and 15. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions 12, 13, 14 and 15. <p>3. The SDT feels that your comment does not illustrate a readily identifiable bright-line designation as there is no definition for distribution. However, the SDT has determined that such transformers on a radial system will be non-BES.</p> <p>4. The SDT agrees with your suggestion and has incorporated it in its latest proposal.</p>
Electric Market Policy	No	Dominion could respond yes if the sentence read “All transformers, including Generator Step-up (GSU) transformers and Phase Angle Regulators, with both primary and secondary windings of 100 kV or higher.
ExxonMobil Research and Engineering	No	Transformers like all elements should be included based on their function; however, the use of an element's rating or operating voltage may provide a good guideline for selecting elements to review for inclusion in the BES.
<p>Response: The SDT does not share your view on the inclusion of all transformers and feels that transformers used in Transmission and generation should be included. The SDT agrees that operating voltage is a good guideline for applying the definition of BES.</p>		
PacifiCorp	No	<p>In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network. In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology. Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Transformers should not be included or excluded solely based on their voltage classifications (high side and low side). Transformers which are necessary to operate the interconnected network should be included as part of the regulated BES. Transformers which are not “necessary for the operation of the interconnected network” should be excluded. A methodology needs to be developed to determine which transformers may be excluded as part of the</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
		regulated BES.
<p>Response: The SDT is aware of the WECC Bulk Electric System Definition Task Force’s efforts and has considered that work. The SDT has revised the definition and included specific inclusion and exclusion designations. Bright-line designations will be developed as part of this project and the process will handle any exceptions and those will be addressed through the revision of the Rules of Procedure which is a separate parallel effort to the development of the BES definition by another team. Your comments will be forwarded to the Rules of Procedure Team.</p>		
Hydro-Québec	No	For questions 1 to 10, refer to questions 11 to 13.
<p>Response: Please see responses to questions 11 to 13.</p>		
National Rural Electric Cooperative Association (NRECA)	No	This should not be dependent only on the voltage, but also on where the transformer, etc., is located on the system. For example, if such a transformer is on a radial line of any transmission voltage that is serving only load, then it should not be considered part of the BES.
Orange and Rockland Utilities, Inc.	No	Exclusions should be applied to radial non-transmission facilities serving a distribution function. Step-down transformers with the low-side terminals serving non-BES facilities, which are serving a distribution function, should not be part of the definition of BES. Transformers, other than GSUs, with both primary and secondary winding above 100kV should be classified as BES. However, it is our belief that transformers with either a primary or secondary winding below 100kV should not be included directly or through the separate BES Definition Exception Process.
City of Anaheim	No	Transformers with secondary windings of 100kV or less should not be part of the BES if they feed radial load or radial distribution systems; provided, however, to eliminate any reliability gaps, such transformers should be classified as "Distribution" equipment subject to DP standards, and the PRC and vegetation management standards should be made applicable to Distribution Providers and including this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for radial transmission facilities that function as Distribution and are not required for the reliable operation of the BES.
Southern California Edison Company	No	The presence of an Automatic Fault Interrupting Device (or in the instance of a ring bus or breaker-and-a-half configuration) allows the transformer to be considered as a separate unit serving the function of providing connection and transformation of the high-side to the low-side. Where the electric facilities on the low-side are below 100kV, the transformer is simply an extension of non-BES facilities, providing delivery and connectivity from the BES sources.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
PPL Energy Plus	No	Certain transformers with primary and secondary windings greater than 100 kV may serve transmission lines with only radial load and should therefore be excluded from the BES definition (without requiring application for an exemption on a case-by-case basis). The BES definition should be modified to incorporate this exclusion.
LG&E and KU Energy LLC	No	Certain transformers connected with both primary and secondary windings of 100 kV or higher serving only radial load should be excluded from the BES definition (without requiring application for an exemption on a case-by-case basis). The BES definition should be modified to incorporate this exclusion.
Central Lincoln	No	While we believe the SAR is on the right track here, we note that many transformers with both windings above 100 kV may be installed on radial systems. We also note that the FERC order excepted “defined radial facilities,” and expect NERC to provide a definition for “radial” so that facilities that meet this criteria may be excluded by inspection rather than by going through an exemption process. It should also be clarified that transformer protection systems are part of the BES only if installed to protect BES transformers.
PUD No.1 of Clallam County	No	
Lewis County PUD	No	
<p>Response: The SDT agrees with your suggestion and has incorporated it in its latest proposal.</p> <ul style="list-style-type: none"> Included in the BES: I1 - Transformers, other than generator step-up (GSU) transformers, including phase angle regulators, with two windings of 100 kV or higher unless excluded under Exclusions E1 and E3. <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ol style="list-style-type: none"> Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. 		
American Municipal Power	No	
Occidental Energy Ventures Corp	No	This would require further study in order to answer in the affirmative.
<p>Response: Thank you for your comment.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
Indeck Energy Services	No	The threshold issue is whether the equipment affects the reliability of the Bulk Power System, as defined in the FPA. By requesting a BES definition that greatly expands the jurisdiction of the NERC Standards beyond the scope of the BPS, FERC and NERC are outside of their legal jurisdiction. NERC is responsible to the FPA through the FERC, but not to the FERC instead of the FPA. NPCC had the correct approach until FERC required it to register every entity down to 20 MW. Reliability is the issue, and in a 30,000+ MW system like NYISO, a 20, 50 or 150 MW piece of equipment cannot cause a Reportable Disturbance (under NERC's definition), so how can it have a significant impact on reliability? Deferring the development of the exemption process to a separate, and possibly much delayed, process of modifying the Rules of Procedure is disingenuous.
<p>Response: The SDT has been tasked with coming up with a revised definition of the Bulk Electric System. The SDT is following through on this charge. Bright-line designations will be developed as part of this project and the ROP process will handle any exemptions or inclusions and those will be addressed through the revision of the Rules of Procedure which is a separate parallel effort to the development of the BES definition utilizing a different team.</p>		
Glacier Electric Cooperative	No	I think it depends on the transformer. If the loss of the transformer would significantly affect the reliability of the grid, then, yes, it should be included. However, if the loss of the transformer would not significantly affect the reliability of the grid, then, no, it should not be included no matter what voltage it is connected at.
ReliabilityFirst	Yes	In some cases, facilities that need included do not have both windings operated at 100 kV or higher. This needs further detail and definition to be helpful in determining if the facility is included or excluded. An example of this is a distribution transformer (e.g. 138/34 kV) tapped from a BES line with a high side protective device (such as a circuit switcher or ground switch), in which case the BES line to which it is connected will trip (and may or not lockout) for a fault in the transformer. Should the distribution transformer lockout the BES line to which it is connected, and then it should be included in the BES. If the distribution transformer only trips the BES line to which it is connected (and successfully recloses), it could be argued whether it should be included in the BES or not. But this issue needs to be addressed in the revised BES definition.
<p>Response: The SDT feels that your comment does not illustrate a readily identifiable bright-line designation. Bright-line designations will be developed as part of this project and the ROP process will handle any exemptions or inclusions and those will be addressed through the revision of the Rules of Procedure; which is a separate parallel effort to the development of the BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
Snohomish County PUD	No	We note that many transformers with both windings above 100 kV may be installed on radial systems or local networks used to provide local distribution service. Transformers installed on such systems should not be part of the BES regardless of operating voltage. We also note that in Order No. 743, FERC made clear that it
PNGC Power	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
Blachly-Lane Electric Co-op	No	<p>does not intend the Standards Drafting Team to change the exception for radial facilities, and expects the standards development process to provide a definition for “radial” so that facilities that meet this criteria may be excluded by inspection rather than by going through an exemption process.</p> <p>The Standards Drafting Team should also clarify that transformer protection systems are part of the BES only if installed to protect “BES transformers” (transformer with both windings above 200kV).</p>
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	

Organization	Yes or No	Question 1 Comment
Fall River Electric Cooperative	No	<p>Response: The SDT agrees with your suggestion and has incorporated it in its latest proposal.</p> <ul style="list-style-type: none"> Included in the BES: I1 - Transformers, other than generator step-up (GSU) transformers, including phase angle regulators, with two windings of 100 kV or higher unless excluded under Exclusions E1 and E3. <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ol style="list-style-type: none"> Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. <p>The SDT has discussed this issue and will be seeking guidance from FERC staff in regards to the directives in FERC Order No. 743 and how they potentially apply to Protection Systems. Protection Systems are not currently within the scope of the SAR for this project and any significant expansion could potentially jeopardize the ability of the SDT to complete this project and file in accordance with the Commission directed time requirements in FERC Order No. 743.</p>
Utility Services	No	<p>Initially, yes; however, such a classification could be exempted upon a NERC review of the technical justification for exemption.</p> <p>We suggest that the BES definition be changed to: All Transmission and Generation Elements operated at voltages of 100 kV or higher; unless modified by the BES Exemption Process.</p> <p>We note that the term Facility, as defined in the NERC Glossary, implies that it is part of the BES. We suggest that the BES definition just use the term Element since Facility is already defined as being a part of the BES.</p> <p>We envision the BES Exemption Process containing 3 sub-processes; one for Exclusion, one for Exemption, and one for Inclusion. Each sub-process will establish provisions and guidelines for the three different tasks. In order to ensure consistency across the continent, it is our view that NERC will be the facilitator of these processes. We believe that NERC may choose to provide that some of these tasks may be performed at the regional levels through the existing delegation agreements.</p> <p>For “Exclusion”, we envision NERC establishing a first set of Exclusions, with FERC’s acceptance, that Registered Entities can utilize as a means to justify not registering within the ERO or as a means to not have</p>

Organization	Yes or No	Question 1 Comment
		<p>to meet the compliance obligations of specific reliability standards and or requirements. NERC would also be in a position to add or remove Exclusions provided such was performed through notification to the industry and industry's acceptance. If a Registered Entity uses a listed accepted Exclusion, it would be our expectation that the RE would be treated in a manner similar to an unregistered organization, in that penalties or sanctions could not be assessed during the exclusionary period. NERC would have the ability to revoke an RE's use of an Exclusion prospectively only. However, If NERC or the Regional Entity determined that a Registered Entity intentionally claimed an accepted Exclusion; and it turned out to be knowingly false, the Registered Entity would be subject to penalties and or sanctions appropriate to the period of the falsehood. In order for Elements to be "Included" or "Exempted", we envision that NERC will establish a set of criteria including outlining the types of permissible technical studies or documentation necessary to seek inclusion or an exemption.</p> <p>We feel that any inclusion or exemption should be handled on an Element by Element basis, not by broad application of a set of Elements. Each should be judged based upon its technical merits of the Element(s) involved.</p> <p>While an inclusion or exemption is pending, the Registered Entity shall not be subject to the performance obligations under the any reliability standard(s) associated with the Element(s) being considered.</p> <p>For Inclusion, any Registered Entity may submit Element(s) with the appropriate materials meeting the criteria for Inclusion.</p> <p>For there to be consistency within the ERO, NERC must be the evaluator of the requests. We believe there must be a measurable, not subjective, improvement in the reliability of the transmission system for the Element(s) to be included.</p> <p>All Registered Entities, including applicable RCs, BAs, TOPs, and Regional Entities, who would be impacted by the proposed Inclusion must be provided sufficient notice and time to participate in the consideration process. NERC shall render a decision following the timely submission from the potentially impacted Registered Entities.</p> <p>For an Exemption to be granted, any Registered Entity may submit Element(s) with the appropriate materials meeting the criteria for Exemption.</p> <p>For there to be consistency within the ERO, NERC must be the evaluator of the requests. We believe there must be no measurable, not subjective, decrease in the reliability of the transmission system for the Element(s) to be included.</p> <p>All Registered Entities, including applicable RCs, BAs, TOPs, and Regional Entities, who would be impacted by the proposed exemption must be provided sufficient notice and time to participate in the consideration process. NERC shall render a decision following the timely submission from the potentially impacted</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
		<p>Registered Entities.</p> <p>We note that BES Exemption Process must be an active and ongoing aspect of the ERO program. With the addition of new or deletion of existing Transmission and Generation Elements, Facilities, or systems; it needs to be recognized that Exclusions, Inclusions, and Exemptions could possibly need alteration over time. By establishing appropriate guidelines and processes, the ERO will be able to monitor and maintain information of what is the bulk electric system or BES.</p>
<p>Response: The SDT thanks you for your comments on the inclusion of transformers.</p> <p>The SDT agrees with your view that a briefer, more concise definition is beneficial and has incorporated it in the latest proposal.</p> <p>The SDT agrees with the use of the term, “Elements” rather than “Facilities” and has corrected its use throughout the proposal.</p> <p>The SDT does not share your view of the BES exception process. Bright-line designations will be developed as part of this project and the ROP process will handle any exceptions and those will be addressed through the revision of the Rules of Procedure which is a separate parallel effort to the development of the BES definition utilizing a different team. Your comments will be forwarded to the Rules of Procedure Team.</p>		
The Dow Chemical Company		<p>The Dow Chemical Company (“Dow”) recommends that NERC finalize a basic framework for identifying BES facilities before evaluating individual facilities or types of facilities. Such a framework is recommended by Dow in response to questions #11 and #12 below.</p>
<p>Response: See response to Q11 & 12.</p>		
<p>Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)</p>	Yes	<p>Constellation firmly believes that the classifications found in the Compliance Registry Criteria - Section III (Rules of Procedure Appendix 5B), such as that cited in this question, provide a useful basis to create a comprehensive, revised BES definition.</p> <p>Further, we propose that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term “bulk power system” in each criterion with “greater than 100 kV.” This would then include assets that are currently registered as BES elements as well as those that may have been previously excluded due to Regional exemption variances. Structuring the revised BES definition to clarify both the inclusions and exclusions, can, ideally, eliminate the need for an onerous exemption process as well as eliminate the need for Section III of the Registry Criteria.</p> <p>Please see our response to question 12 for more detail on a proposed alternative approach to structuring the BES definition revision.</p>
<p>Response: The SDT agrees and has incorporated as one of its goals that it will not drive a change in the registry criteria if at all possible. .</p>		

Organization	Yes or No	Question 1 Comment
<p>The SDT agrees with your suggestion and has incorporated it in its latest proposal. Please see response to Question 12.</p>		
Florida Municipal Power Agency	Yes	In general, yes, unless it is part of a radial Element that is excluded from the BES.
Transmission Access Policy Study Group	Yes	<p>See FMPA response to Question 12 below. Throughout these comments, FMPA refers to “Elements” and not to “facilities.”</p> <p>This is because “Facility” is defined in the NERC Glossary as “[a] set of electrical equipment that operates as a single Bulk Electric System Element...” Because these comments (and the BES definition) address whether Elements are or are not part of the BES, it is incorrect to refer to the Elements in question as “Facilities,” because a Facility is defined as a BES Element.</p>
<p>Response: The SDT agrees with your suggestion and has incorporated it in its latest proposal.</p> <ul style="list-style-type: none"> Included in the BES: I1 - Transformers, other than generator step-up (GSU) transformers, including phase angle regulators, with two windings of 100 kV or higher unless excluded under Exclusions E1 and E3. <p>Excluded from the BES: Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ol style="list-style-type: none"> Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. <p>See response to Q12.</p> <p>The SDT agrees with the use of the term, “Elements” rather than “Facilities” and has corrected its use throughout the proposal.</p>		
NERC Staff	Yes	Please see additional comments in Attachment 3 at the end of this report.
<p>Response: Please see response to Q13.</p>		
Public Service Enterprise Group Company	Yes	The PSEG Companies consider transformers with primary and secondary windings of greater than 100 kV, and which are not GSU transformers to be part of the BES.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
Competitive Suppliers	Yes	EPISA believes that it is appropriate that transformers other than generator step-up transformers, including Phase Angle Regulators, with primary and secondary windings of 100 kV or higher should be classified as part of the BES under the proposed definition for Project 2010-17.
SERC EC Planning Standards Subcommittee	Yes	
MRO's NERC Standards Review Subcommittee	Yes	Yes, since FERC has directed the bright-line criteria is 100kV or above.
IRC Standards Review Committee	Yes	
Bonneville Power Administration	Yes	
FirstEnergy Corp	Yes	
SERC OC Standards Review Group	Yes	
Arizona Public Service Company	Yes	AZPS agrees that Transformers, other than Generator Step-up (GSU) transformers, including Phase Angle Regulators, with both primary and secondary windings of 100 kV or higher should be classified as part of the BES.
Pepco Holdings Inc.	Yes	Transformers with primary greater than 100kv (connected to a BES facility) but a secondary less than 100kv are not specially addressed. They should be specially “excluded” and not part of an exemption process.
LCRA Transmission Services Corporation	Yes	ERCOT, this would include the 138:345-kV autotransformers.
Manitoba Hydro	Yes	
North Carolina EMC	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
on behalf of Teck Metals Ltd.	Yes	
Southern California Edison	Yes	SCE currently reports on many of its transformers with both primary and secondary windings of 100kV or higher.
on behalf of Catalyst Paper Corporation	Yes	
City of Grand Island	Yes	
ISO New England Inc.	Yes	
Entergy Services	Yes	
United Illuminating Company	Yes	
American Transmission company	Yes	
City of Austin dba Austin Energy	Yes	
Duke Energy	Yes	Only those transformers that are not a radial Transmission Element should be included.
The Dayton Power and Light Company	Yes	
ITC Holdings Corp	Yes	
BGE	Yes	No comment.
City Water Light and Power (CWLP) - Springfield, IL	Yes	
American Electric Power (AEP)	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 1 Comment
Southern Company	Yes	Only non-radial networked transformers with both primary and secondary voltages >_100kV should be included in the BES definition.
Idaho Power	Yes	
Independent Electricity System Operator	Yes	Conditional on having an exemption criteria/process which must still be developed.
Springfield Utility Board	Yes	If BOTH primary AND secondary windings are 100kV or higher
Clark Public Utilities	Yes	
Xcel Energy	Yes	
City of Redding	Yes	Only if the elements or facilities are shown through engineering studies to be necessary to reliably operate an interconnected transmission system.
<p>Response: Thank you for your response. Please see the summary consideration immediately under the question. Several stakeholders made suggestions that were adopted by the drafting team.</p>		

2. Should the following be classified as part of the BES?

- **Individual generation resources (including GSU transformers and the associated generator interconnecting line lead(s)) greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above**

Summary Consideration: Most Stakeholders who responded to this question disagreed with at least some part of the proposal.

The SDT has discussed the history and determination of the 20 MVA threshold for inclusion of generating units in the Statement of Compliance Registry Criteria and subsequently into a draft definition of the BES. Two Regional Entities (FRCC and RFC) specifically use this criterion in each of their current BES definitions. The 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability of the BES and that may be dispatched by Balancing Authorities, but allows for the exclusion of smaller units, such as 10 MVA units, connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes that the 20 MVA threshold for inclusion of generating units connected at 100 kV and above is proper for inclusion in the BES since there is no technical basis to change the values contained in the Statement of Compliance Registry Criteria. The SDT also has carefully discussed the inclusion of generator step-up (GSU) transformers and associated interconnection line leads and believes the BES must be contiguous at this level in order to be reliable. The SDT believes it does not make sense to include generation in the BES without including the Facilities to transfer power from a generating unit to the BES. The GSUs and line leads must be a part of the BES the same as other Facilities are part of the BES.

Commenters have suggested other thresholds (anywhere from 0 to 100 MVA) for generation plants to be included into the BES definition. However, as of this date commenters have not submitted technical justification upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.

Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.

Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.

Included in the BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.

Excluded from the BES: E2 - A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer's side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.

Organization	Yes or No	Question 2 Comment
Northeast Power Coordinating Council	No	Some generators act as a local load modifier, regardless of connected voltage. The power generated is consumed locally and does not flow up onto the BES, nor does its operation materially impact any BES transmission facilities. If a generator functions as a local load modifier and does not materially impact the BES, meaning that it is not necessary to maintain BES reliability, then it should be excluded from the definition of BES under the BES Exemption Process.
Orange and Rockland Utilities, Inc.	No	Some generators act as a local load modifier, regardless of connected voltage. The power generated is consumed locally and does not flow up onto the BES, nor does its operation materially impact any BES transmission facilities. If a generator functions as a local load modifier and does not materially impact the BES, meaning that it is not necessary to maintain BES reliability, then it should be excluded from the definition of BES under the BES Exemption process.
<p>Response: The SDT has discussed the behind-the-meter customer generation issues and has addressed it in the revised BES definition.</p> <p>Excluded from the BES: E2 - A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer's side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in items I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.</p>		
Public Service Enterprise Group Company	No	The concept of a stand-alone generator connected through a single GSU transformer to the grid at greater than 100kV should be included as part of the BES. However, the term "generation resources" is too vague leading to possible misinterpretation as to what associated generator resource elements are to be included within the BES. All those "resources" and any connected element would be part of the BES? The definition should clearly describe (with examples) of the intent of what should be included within the BES scope.. (e.g. Would a station service transformer connected at 26kV which is part of the generation "resource" be included as a BES element)?
<p>Response: The SDT has discussed what constitutes a "generation resource" including balance of generation plant controls and auxiliary equipment and believes that balance of plant equipment is not within the scope of this project. The term "generation resource" is no longer used in the revised definition. Certain equipment, such as protection systems and under-frequency Load shed controls, may not be part of the BES, but may be subject to specific NERC standards requirements. Generation plant controls should be treated in a similar fashion.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
Electric Market Policy	No	Dominion does not agree that a generation resource should be classified as part of the BES. Dominion supports the criteria for registering owners, operators, and users of the bulk power system, as indicated in the current Statement of Compliance Registry Criteria .
<p>Response: The SDT has carefully considered this matter, and believes that generating units and plants are an integral part of the BES, without which it could not function, and therefore, should be included in the BES.</p>		
SERC OC Standards Review Group	No	<p>We do not agree with the inclusion of GSU transformers and associated interconnecting line leads. Lines and transformers should be included based upon the voltage and not the function they serve.</p> <p>We support the inclusion of all non-radial lines operated at a voltage of 100 kV or higher as well as all transformers with both primary and secondary windings operated at 100 kV or higher.</p> <p>We do not support generic inclusions of any radial lines or transformers with primary or secondary windings operated below 100kV. Our response in question 13 amplifies this statement.</p>
<p>Response: The SDT has carefully discussed the inclusion of GSU transformers and associated interconnection line leads and believes the BES must be contiguous at this level in order to be reliable. The SDT believes it does not make sense to include generation in the BES without including the Facilities to transfer power from a generating unit to the BES. The GSUs and line leads must be a part of the BES the same as other Facilities are part of the BES.</p> <p>Please also see the response to Q13.</p>		
PacifiCorp	No	<p>In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network. In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology. Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Generation units should not be included or excluded solely based on a their gross nameplate rating and the operating voltage at which they are connected to transmission facilities. Generation resources which are necessary to operate the interconnected network should be included as part of the regulated BES. Generating units which are not “necessary for the operation of the interconnected network” should be excluded. A methodology needs to be developed to</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
		determine which generating units may be excluded as part of the regulated BES.
Central Lincoln	No	The generation resources so described should be presumed to be part of the BES unless or until they have been through the exemption process and as a result have been classified as non-BES.
PUD No.1 of Clallam County	No	The generation resources so described should be presumed to be part of the BES unless or until they have been through the exemption process and as a result have been classified as non-BES. The 20 MVA threshold is too low for many parts of the system. The interconnecting source impedance and adjacent facilities may have a more significant impact on the BES than the MVA of a machine. A 100 MVA plant connected to a high fault duty/low source impedance system may create little to thermal or transient stability concerns even under delayed clearing. However a 25 MVA plant connected to a low fault duty/high source impedance system may create concerns on a weak system. or above.
Snohomish County PUD	No	The generation resources described should not be presumed to be part of the BES. The criteria above are intended to identify GO/GOP registration as a user/owner/operator rather than to identify BES elements. On this score, we note there has been considerable confusion between the NERC Statement of Registry Criteria, which is merely intended to establish a list of entities that may presumptively be required to comply with Reliability Standards, and the BES definition, which defines which facilities are ultimately protected by Reliability Standards. In defining the BES, those concepts should be kept separate.
<p>Response: The SDT believes the revised definition contains enough criteria (both for exceptions and inclusions) to determine most, if not all, of the Elements that will be part of the BES. The SDT also believes that the criteria for including generating units 20 MVA and greater that are connected to the BES at 100 kV and above provides the “bright-line” criteria that will eliminate the ambiguity the Commission cited in Order 743.</p> <p>The separate exception process will be drafted by the Rules of Procedure Drafting Team with the DBES SDT developing the bright-line criteria. There will be coordination between the two groups in this effort.</p>		
Hydro-Québec		For questions 1 to 10, refer to questions 11 to 13.
<p>Response: Please see response to Q11 to Q13.</p>		
City of Redding	No	The NERC Registration Criteria thresholds were a good start at the time of implementation of the compliance program, however there is no engineering evidence that all of the facilities are necessary to reliably operate an interconnected transmission system.
Independent Electricity System	No	To be totally consistent with the 100 kV bright line approach, any Elements and Facilities that are not operated at voltages of 100 kV or higher should be excluded unless otherwise determined to be included

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
Operator		through the exemption/inclusion process being developed.
Lewis County PUD	No	20MVA generation resources should not be part of the BES. This size generating resource is too small to affect the BES. Suggest the minimum size BES resource be changed to 100MVA for a single generator. If a smaller threshold is used then the RE or BA should demonstrate to the GO that this resource is critical to the BES
ITC Holdings Corp	No	20 MVA is too small a unit to be included in the BES definition. The definition should include units or plants with 75 MVA or more
Glacier Electric Cooperative	No	Once again, I believe it depends on the facility and whether or not it has a significant impact on the grid.
American Municipal Power	No	Suggest 50 MVA
Arizona Public Service Company	No	The minimum size should be 50 MVA connected to 200 kV or higher. Small generators or plants do not materially impact the reliability of the BES and do not need to be included.
PPL Energy Plus	No	The 20 MVA threshold appears to be arbitrary and will include many small generation facilities that have minimal impact on BES reliability, A 200 MVA aggregate threshold for generating units at the same site would be more appropriate. Generators that are smaller than 200 MVA are not likely to have a significant impact on the BES and should be excluded from the definition (without requiring application for an exemption on a case-by-case basis). The BES definition should be modified to incorporate this exclusion.(See also response to Question 8.)
LG&E and KU Energy LLC	No	
<p>Response: The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units connected to the BES is proper.</p>		
ExxonMobil Research and Engineering	No	I have reservations about the removal of the ability to use the net rating of a generation asset as the generator rating (i.e. the use of gross rating of a machine instead of net rating of the energy provided to the BES). Many industrial companies have back up power agreements with utilities to cover the loss of internal generation assets. The requirement to ensure that this back up power can be provided should be part of the NERC requirements for Transmission Operators and Balancing Authorities (e.g. the VAR-001 requirement for TOPs to obtain the necessary reactive resources to cover normal and contingency operations). The reliability goals and strategy of some large electricity consumers that this change is targeting differ from the bulk

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
		<p>electric system. For instance, a petrochemical facility that utilizes generation to offset the load seen by the BES may desire to disconnect from the bulk electric system during an event in order to preserve the stability of the private use network that supplies electricity to the equipment that control its chemical processes. As history has demonstrated, the most dangerous activities that petrochemical facilities undertake are the shutdown and startup of their processes.</p> <p>As a side note, the term 'directly connected' should be added to the NERC glossary. The concept of 'directly connected' is the key to understanding which generators are included in the BES and which generators are exempted.</p>
<p>Response: The SDT has carefully considered “behind-the-meter” generation, and considers it to be an exclusion to the BES. The SDT agrees with the language currently contained in the Statement of Compliance Registry Criteria regarding the exemption of net capacity associated with a retail meter.</p> <p>Excluded from the BES: A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer’s side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.</p> <p>With the revised definition and designations, the SDT does not believe that the term ‘directly connected’ needs to be utilized or defined.</p>		
on behalf of Teck Metals Ltd.	No	
Indeck Energy Services	No	Same response as Question 1
on behalf of Catalyst Paper Corporation	No	
Clark Public Utilities	No	
<p>Response: Please see response to Question 1.</p>		
City of Grand Island	No	<p>This is a registration criteria issue. Can this project directly cause changes in the registration criteria?</p> <p>20 MVA is too low. That size of generator can not affect the Adequate Level of Reliability of the BES. 100 MVA is appropriate for this region.</p>
<p>Response: The goal of the SDT is not to change registration criteria if at all possible. In this case, the SDT has adopted the registration criteria and no changes are necessary.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
<p>The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, directly connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units directly connected to the BES is proper.</p>		
City of Anaheim	No	<p>Unless the generator is required to maintain BES reliability, i.e. black start, etc., the GSU and gen tie should be excluded from the BES; provided, however, to eliminate any reliability gaps, such generation-tie equipment should be classified as "Generator" equipment subject to GO/GOP standards, and the PRC and vegetation management standards should be made applicable to GO/GOPs and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for non-critical generation-tie transmission elements that are not required for the reliable operation of the BES.</p>
<p>Response: The SDT has carefully discussed the inclusion of GSU transformers and associated interconnection line leads and believes the BES must be contiguous at this level in order to be reliable. The SDT believes it does not make sense to include generation in the BES without including the Facilities to transfer power from a generating unit to the BES. The GSUs and line leads must be a part of the BES the same as other Facilities are part of the BES. The SDT has carefully considered additional Facilities that may be included in the BES due to this project and the ramifications on registration of GO/GOPs and TO/TOPs. However, the SDT must satisfy the Commission Order and do what is best for reliability of the BES. The development of the BES definition is not meant to result in registration of GO/GOPs as TO/TOPs. That issue will be addressed as needed in Project 2010-07: Generator Requirements at the Transmission Interface.</p>		
PNGC Power	No	<p>The generation resources described should not be presumed to be part of the BES. The criteria above are intended to identify GO/GOP registration as a user/owner/operator rather than to identify BES elements. On this score, we note there has been considerable confusion between the NERC Statement of Registry Criteria, which is merely intended to establish a list of entities that may presumptively be required to comply with Reliability Standards, and the BES definition, that defines which facilities are ultimately protected by Reliability Standards. In defining the BES, those concepts should be kept separate. In general, we do not believe that every generator rated at, or greater than, 20MVA should automatically be 'assumed' to be part of the BES. We do believe that some of the Mandatory Reliability Standards should apply however. This leads to an issue which might be somewhat philosophical, but, in this case, has real-world implications. We do not believe that the BES is contiguous. That is, say every generator which is greater than 20MVA is assumed to be part of the BES, does that mean that all the lines and equipment associated with this generator are also part of the BES? We do not think so, hence the possibility that the BES is non-contiguous. We also believe that some of the Mandatory Reliability Standards can apply to non-BES facilities, and equipment. A good example is the UFLS standards. As you might realize some UFLS relays are on lines rated well below 100kV. So in this case, a generator rated at 20MVA might not be part of the BES, but still the standards that apply to</p>
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.		
Douglas Electric Cooperative		
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
Salmon River Electric Cooperative	No	a generator could still apply.
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
<p>Response: The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability and adequacy of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, directly connected to the BES that are not dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units directly connected to the BES is proper. The SDT also believes that the criteria of including generating units 20 MVA and greater that are connected to the BES at 100 kV and above provides the “bright-line” criteria that will eliminate the ambiguity the Commission cited in Order 743. The SDT has carefully discussed the inclusion of GSU transformers and associated interconnection line leads and believes the BES must be contiguous at this level in order to be reliable. The SDT believes it does not make sense to include generation in the BES without including the Facilities to transfer power from a generating unit to the BES. The GSUs and line leads must be a part of the BES the same as other Facilities are part of the BES.</p>		
United Illuminating Company	No	Any Generator connected at 100 kV or above should be part of BES. There should not be a MVA threshold
<p>Response: The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
<p>an effect on the reliability of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, directly connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units directly connected to the BES is proper. The SDT also believes that the criteria of including generating units 20 MVA and greater that are connected to the BES at 100 kV and above provides the “bright-line” criteria that will eliminate the ambiguity the Commission cited in Order 743.</p>		
Southern Company	No	<p>Lines and transformers should be included based upon the voltage and not the function they serve. We support the inclusion of all non-radial lines operated at a voltage of 100 kV or higher as well as all transformers with both primary and secondary windings operated at 100 kV or higher. We do not support generic inclusions of any radial lines or transformers with primary or secondary windings operated below 100kV. Our response in question 13 amplifies this statement. Individual, non-blackstart, generator resources of 20MVA are too small to impact the reliability of the BES. We recommend single resource (unit) inclusion threshold be increased to 75MVA to match the threshold indicated in Q3 below for the aggregated case. Units smaller than 75MVA could be included using the “exemption process” or the NERC Compliance Registry Criteria could be changed.</p>
<p>Response: Lines and transformers are discussed as part of Questions 1 and 5.</p> <p>The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, directly connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units connected to the BES is proper.</p>		
The Dow Chemical Company		<p>As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.</p>
<p>Response: See response to Q12.</p>		
Bonneville Power Administration	Yes	<p>Generation resources should also define how wind generation is included in this clarification (by turbine, by string, etc)</p>
<p>Response: Wind generating units would be included or excluded based upon the criteria for dispersed generation, generating units, and multiple generating units.</p> <p>Included in the BES: 15 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.</p>		
Florida Municipal Power Agency	Yes	<p>1. For the sake of clarity and consistency, the BES should track the Statement of Compliance Registry Criteria</p>

Organization	Yes or No	Question 2 Comment
Transmission Access Policy Study Group	Yes	<p>wherever possible. In this case, for example, generation resources with respect to which an entity is registered as a Generator Owner or Generator Operator should be included in the BES, while non-registered generation resources should not be included in the BES.</p> <p>2. FMPA' proposal, as further explained in response to the questions below, is introduced here in the interests of clarity. FMPA proposes that the BES definition should establish the universe of Elements that are, absent other factors, considered part of the BES. FMPA supports continuing to use a general 100 kV threshold, and basing the inclusion of generators in the BES on whether the generation is registered pursuant to the Statement of Compliance Registry Criteria. There is one "exclusion" in the definition proposed by FMPA, i.e., the existing exclusion for radial transmission serving only load with one transmission source (with a proposed clarification). Unlike the definition proposed in the draft SAR, therefore, but like the current definition, FMPA' proposal treats radial transmission Elements serving only load with one transmission source like sub-100 kV Elements, in that they are presumed to be non-BES unless a showing has been made, on a case-by-case basis, that a particular radial Element is necessary for operating the interconnected electric transmission network. The current definition of the BES excludes "radial transmission facilities serving only load with one transmission source," and FERC stated in Order 743 that it did not intend to require a change to that exclusion. It is very important that radial transmission serving only load with one transmission source remain excluded from the BES; if such radials instead had to go through an exemption process, as the SDT's proposed definition suggests, the burden on small entities and on NERC and the Regional Entities would be staggering since it would be presumed that the radial would be part of the BES until exempted (opt-out), where it should be that the radial should be excluded from the BES unless there is a determination that it should be part of the BES (opt-in).</p> <p>3. As explained in more detail in response to Question 8 below, FMPA supports adding the clarification that radials serving generation that is not registered pursuant to the Statement of Compliance Registry Criteria are covered by the exclusion of radials serving only load with one transmission source. Of course, the application of the definition of the BES is dynamic. For example, in considering whether new generation connected by what had previously been a radial to load should be registered, NERC may also reevaluate the exclusion of the radial.</p> <p>4. FMPA' proposed definition of the BES is: In general, the Bulk Electric System includes all Transmission Elements operated at voltages of 100 kV or higher, and all generation resources registered pursuant to the Statement of Compliance Registry Criteria. Radial Transmission Elements serving only load with one Transmission source are generally not included in this definition. A radial Transmission Element may be considered as "serving only load" for purposes of the foregoing general exclusion even if it connects generation, so long as that generation is not registered pursuant to the Statement of Compliance Registry Criteria. An Element that nominally meets the general BES criteria, but which an entity demonstrates, on a case-by-case basis, is not necessary for operating the interconnected electric transmission network, shall be exempted from the BES pursuant to the NERC exemption process. An Element that does not nominally meet the general BES criteria, but which NERC demonstrates, on a case-by-case basis, is necessary for</p>

Organization	Yes or No	Question 2 Comment
		<p>operating the interconnected electric transmission network, shall be included in the BES pursuant to the NERC inclusion process.</p> <p>5. As FMPA' proposed definition suggests, FMPA proposes that entities be able to seek "exemptions" for Elements nominally included in the BES; obtaining an exemption would require a demonstration that the Element to be exempted is not necessary for operating the interconnected electric transmission network. Elements for which NERC has approved exemptions would not be part of the BES.</p> <p>Conversely, FMPA proposes that NERC have the authority, upon a case-by-case demonstration that a particular Element that is not nominally included in the BES is necessary for operating the interconnected electric transmission network, to add such an Element to the BES.</p> <p>6. Please see also FMPA' Official Comment Form for BES Definition Exception Process, submitted today.</p>
<p>Response:</p> <ol style="list-style-type: none"> The SDT agrees that the definition should track the registry criteria. One of the basic tenets of the SDT scope is to not expand the registry criteria if at all possible. The SDT has revised the definition and included specific inclusion and exclusion criteria that address these issues. The SDT also believes that the revised definition provides the "bright-line" criteria that will eliminate the ambiguity the Commission cited in Order 743. The separate exception process will be drafted by the Rules of Procedure Team with the DBESSDT developing the criteria. There will be coordination between the two groups in this effort. See response to Q8. See response to #2 above. The separate exception process will be drafted by the Rules of Procedure Team with the DBESSDT developing the criteria. There will be coordination between the two groups in this effort. See response to definition exception process. 		
ReliabilityFirst	Yes	<p>It is recommended that the term "directly connected" be defined and examples of this term are included in the ERO definition.</p> <p>Also, most wind farms have multiple transformations when connected to the BES and the intent should be to capture these wind farms in the BES, so more specific language is most likely needed in the definition to capture them.</p>
<p>Response: The SDT has revised the definition and "directly connected" is no longer utilized in the revised draft definition.</p> <p>The SDT has addressed the issue of wind generation in the revised draft definition.</p> <p>Included in the BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.</p>		

Organization	Yes or No	Question 2 Comment
NERC Staff	Yes	Please see additional comments at the end of this report.
<p>Response: Please see response to Q13.</p>		
<p>Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)</p>	Yes	<p>Constellation firmly believes that the classifications found in the Compliance Registry Criteria - Section III (Rules of Procedure Appendix 5B), such as that cited in this question, provide a useful basis to create a comprehensive, revised BES definition.</p> <p>Further, we propose that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term “bulk power system” in each criterion with “greater than 100 kV.” This would then include assets that are currently registered as BES elements as well as those that may have been previously excluded due to Regional exemption variances. Structuring the revised BES definition to clarify both the inclusions and exclusions, can, ideally, eliminate the need for an onerous exemption process as well as eliminate the need for Section III of the Registry Criteria.</p> <p>Please see our response to question 11 for more detail on a proposed alternative approach to structuring the BES definition revision.</p>
<p>Response: The SDT agrees that the definition should track the registry criteria. One of the basic tenets of the SDT scope is to not expand the registry criteria if at all possible</p> <p>The SDT agrees and has made the suggested change.</p> <p>See response to Q11.</p>		
Occidental Energy Ventures Corp	Yes	<p>Many generator interconnection lines are operated at voltages greater than 100KV, but have traditionally not been considered part of the the transmission system. Rather these lines have been considered part of the generation system and, for quite some time, have been constructed and operated according to interconnection agreements which specify design and protection criteria. The BES definition should not be constructed in either a direct or implied manner that would alter the interconnection line status as being part of the Generation Facilities. Otherwise, it could result in registration of GO/GOPs as TO/TOPs. The issue of what additional standards, if any, should apply to these generation interconnection lines is the subject of Project 2010-07 and should be resolved by that standards development effort, not by a definition change. The proposed definition appears not to violate the inclusion of the interconnection line as part of the Generation Facility while still providing for these lines to be part of the BES, however, some clarification might be advisable (e.g., a statement that interconnection lines are part of the Generation Facility or are Generation Elements).</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
<p>Response: The SDT has carefully considered additional Facilities that may be included in the BES due to this project and the ramifications on registration of GO/GOPs and TO/TOPs. However, the SDT must satisfy the Commission Order and do what is best for reliability of the BES. The development of the BES definition is not meant to result in registration of GO/GOPs as TO/TOPs. That issue will be addressed as needed in Project 2010-07: Generator Requirements at the Transmission Interface.</p>		
American Transmission company	Yes	<p>For clarity, ATC suggests that the (gross nameplate rating) be changed to read “(gross generator nameplate rating)” and further classified as part of the BES given that a fault or outage of the individual generator resource greater than 20 MVA would not maintain an Adequate Level of Reliability of the BES.</p>
<p>Response: The SDT discussed this and does not agree with the suggested wording change.</p>		
LCRA Transmission Services Corporation	Yes	<p>The 20 MVA threshold is too low. Should consider the region’s or area’s reserve margin to determine the appropriate level of individual generator loss. Leave this to the region to determine.</p>
<p>Response: The SDT has carefully considered this threshold, and believes that the 20 MVA unit is a low enough level to capture most generating units that have an effect on the reliability of the BES and may be dispatched by Balancing Authorities, but allows the exclusion of smaller units, such as 10 MVA units, connected to the BES that may not be dispatched by Balancing Authorities. The SDT believes the 20 MVA threshold for inclusion of generating units connected to the BES is proper. The SDT’s goal is to “eliminate the regional discretion in the ERO’s current definition”, which is specifically stated in the Commission’s Order.</p>		
Utility Services	Yes	<p>Initially, yes; however, such a classification could be exempted upon a NERC review of the technical justification for exemption.</p>
<p>Response: The SDT believes the revised definition will contain enough criteria to determine most, if not all, of the Facilities that will be part of the BES. The exception process will be handled through the revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
Xcel Energy	Yes	<p>Xcel Energy believes that clarity should be added as to what constitutes an individual generation resource and a generating plant, especially as it pertains to multiple owner facilities and aggregating facilities such as wind or solar farms (which may also have multiple owners for discreet facilities that tie into a common bus). Discussion and controversy in other NERC and regional forums and standard development teams indicates that this is not well defined. It may be that the Statement of Compliance Registry needs to be enhanced if it forms the foundation for which these items are to be understood.</p>

Organization	Yes or No	Question 2 Comment
		<p>Response: The new wording for generating units in the revised definition has addressed this issue. The Statement of Compliance Registry Criteria should agree with the BES definition, as they are intended not to be in conflict with each other.</p> <p>Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.</p> <p>Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.</p> <p>Included in the BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.</p>
MRO's NERC Standards Review Subcommittee	Yes	<p>The SAR DT should use caution if the above statement is to be used within a guideline or rational box. The use of the word “interconnecting line leads may be somewhat ambiguous and lead to other confusion.</p> <p>GSU should be spelled out as a “generator step up transformer” and properly used within the statement: Individual generation resources (including Generator Step Up transformers and the associated generator interconnecting line lead(s)) greater than 20 MVA (gross nameplate rating) directly connected via a Generator Step-Up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above.</p> <p>For clarity, the NSRS suggests that the (gross nameplate rating) be changed to read “(gross generator nameplate rating)” and further classified as part of the BES given that a fault or outage of the individual generator resource greater than 20 MVA would not maintain an Adequate Level of Reliability of the BES.</p>
		<p>Response: The term “interconnecting lines leads” has been deleted in the revised definition.</p> <p>Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.</p> <p>Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.</p> <p>All acronyms used in the definition and supporting materials will be spelled out.</p> <p>The SDT discussed the wording change to the term “gross generator nameplate rating” and does not agree with the suggested wording change.</p>
SERC EC Planning Standards Subcommittee	Yes	
IRC Standards Review	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
Committee		
FirstEnergy Corp	Yes	
Competitive Suppliers	Yes	
Pepco Holdings Inc.	Yes	
Manitoba Hydro	Yes	Increasing numbers of small generators could create reliability issues if excluded.
North Carolina EMC	Yes	
Southern California Edison	Yes	SCE currently reports on individual generation resources (including GSU transformers and the associated generator interconnecting line lead(s)) greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above. SCE does not feel a blanket inclusion of all the listed equipment is needed.
Southern California Edison Company	Yes	A GSU transformer is clearly an extension of the functionality provided by the Generator Interconnection Elements, namely, to move bulk power from the BES generator to the BES network, and hence, the classification of the GSU transformer should match that of the Generator Interconnection Elements.
Entergy Services	Yes	
City of Austin dba Austin Energy	Yes	
Duke Energy	Yes	
The Dayton Power and Light Company	Yes	
BGE	Yes	No comment.
City Water Light and Power (CWLP) - Springfield, IL	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 2 Comment
American Electric Power (AEP)	Yes	
Idaho Power	Yes	
Springfield Utility Board	Yes	"directly connected" is important.
Response: Thank you for your response. Please see the summary consideration immediately under the question. Several stakeholders made suggestions that were adopted by the drafting team.		

3. Should the following be classified as part of the BES?

- **Generation plants (including GSU transformers and the associated generator interconnecting line lead(s))with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above**

Summary Consideration: While many commenters did agree with the proposal, most commenters who responded to this question disagreed with some aspect of the proposal.

The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. This threshold is based on the generation threshold values found in the NERC Statement of Compliance Registry Criteria. Also, two Regional Entities (FRCC and RFC) specifically use this criterion in each of their current BES definitions. The 75 MVA plant is a low enough level to capture most generating plants that would have an effect on the reliability of the interconnected Transmission network.

Commenters have suggested other thresholds (anywhere from 0 to 300 MVA) for generation plants to be included into the BES definition. However, as of this date commenters have not submitted technical justification upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.

Included in BES: I3 – Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.

Included in BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.

Excluded from BES: E2 - A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer’s side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.

Organization	Yes or No	Question 3 Comment
Northeast Power Coordinating Council	No	Refer to the response Question 2 above. The answer depends on whether the generator output is consumed locally or is necessary to maintain the reliability of the BES.
PUD No.1 of Clallam County	No	See comments to question2.
Orange and Rockland Utilities, Inc.	No	Refer to the response Question 2 above. The answer depends on whether the generator output is consumed locally or is necessary to maintain the reliability of the BES.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
City of Redding	No	As in question 2, there is no engineering evidence that all of the facilities are necessary to reliably operate an interconnected transmission system.
Response: Please see response to Q2.		
Electric Market Policy	No	Dominion does not agree that generation plants should be classified as part of the BES. Dominion supports the criteria for registering owners, operators, and users of the bulk power system, as indicated in the current Statement of Compliance Registry Criteria .
<p>Response: Dominion makes the suggestion that all generators be excluded from the BES, however, Dominion does not provide a technical justification for this significant departure.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
SERC OC Standards Review Group	No	<p>We do not agree with the inclusion of GSU transformers and associated interconnecting line leads. Lines and transformers should be included based upon the voltage and not the function they serve.</p> <p>We support the inclusion of all non-radial lines operated at a voltage of 100 kV or higher as well as all transformers with both primary and secondary windings operated at 100 kV or higher. We do not support generic inclusions of any radial lines or transformers with primary or secondary windings operated below 100kV. Our response in question 13 amplifies this statement.</p>
<p>Response: SERC has not provided justification for excluding all GSU transformers and associated interconnecting lines leads from the BES.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV including GSU transformers and interconnecting line leads need to be included within the BES.</p> <p>The SDT has revised the definition and included specific inclusion and exclusion criteria that address these issues.</p> <p>Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.</p>		
PacifiCorp	No	In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
		<p>In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology. Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Generation plants should not be included or excluded solely based on a their gross nameplate rating and the operating voltage at which they are connected to transmission facilities. Generation plants which are necessary to operate the interconnected network should be included as part of the regulated BES. Generating plants which are not “necessary for the operation of the interconnected network” should be excluded. A methodology needs to be developed to determine which generating plants may be excluded as part of the regulated BES.</p>
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the exception process, which is being developed as a modification to the NERC Rules of Procedure (ROP). This exception process will be a parallel effort to this BES definition development. The SDT further acknowledges the work of WECC and other regional entities (e.g., RFC, FRCC, and NPCC) in proposing the BES definition, bright lines, and exclusion/inclusion criteria and processes. The work of these regional entities has greatly helped the SDT.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
PPL Energy Plus	No	See response to Questions 2 and 8.
LG&E and KU Energy LLC	No	See response to Questions 2 and 8.
<p>Response: See response to Q2 & Q8.</p>		
ExxonMobil Research and Engineering	No	<p>I have reservations about the removal of the ability to use the net rating of a generation asset as the generator rating (i.e. the use of gross rating of a machine instead of net rating of the energy provided to the BES). Many industrial companies have back up power agreements with utilities to cover the loss of internal generation assets. The requirement to ensure that this back up power can be provided should be part of the NERC requirements for Transmission Operators and Balancing Authorities (e.g. the VAR-001 requirement for</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
		<p>TOPs to obtain the necessary reactive resources to cover normal and contingency operations). The reliability goals and strategy of some large electricity consumers that this change is targeting differ from the bulk electric system. For instance, a petrochemical facility that utilizes generation to offset the load seen by the BES may desire to disconnect from the bulk electric system during an event in order to preserve the stability of the private use network that supplies electricity to the equipment that control its chemical processes. As history has demonstrated, the most dangerous activities that petrochemical facilities undertake are the shutdown and startup of their processes. As a side note, the term 'directly connected' should be added to the NERC glossary. The concept of 'directly connected' is the key to understanding which generators are included in the BES and which generators are exempted.</p>
<p>Response: The SDT's proposed BES definition has exclusion criteria that address these issues.</p>		
<p>Excluded from BES: E2 - A generating unit or multiple generating units that serve all or part of retail Load with electric energy on the customer's side of the retail meter if: (i) the net capacity provided to the BES does not exceed the criteria identified in Inclusions I2 or I3, and (ii) standby, back-up, and maintenance power services are provided to the generating unit or multiple generating units or to the retail Load pursuant to a binding obligation with a Balancing Authority or another Generator Owner/Generator Operator, or under terms approved by the applicable regulatory authority.</p>		
Arizona Public Service Company	No	<p>The minimum plant size should be 300 MVA. Smaller plants do not materially impact the reliability of the BES.</p>
<p>Response: The SDT appreciates the suggestion of a 300 MVA generation threshold for materiality of impact, however, as of this date sufficient technical justification has not been submitted upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.</p>		
<p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
Central Lincoln	No	<p>The generation resources so described should be presumed to be part of the BES unless or until they have been through the exemption process and as a result have been classified as non-BES.</p>
<p>Response: Thank you for your response. The SDT agrees.</p>		
American Municipal Power	No	<p>Suggest 125 MVA</p>

Organization	Yes or No	Question 3 Comment
<p>Response: The SDT appreciates the suggestion of a 125 MVA generation threshold, however, as of this date sufficient technical justification has not submitted upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure, in a parallel effort to the development of this BES definition.</p>		
Indeck Energy Services	No	Same Response as Question 1
<p>Response: See response to Q1.</p>		
City of Grand Island	No	75 MVA aggregate is too low. 200 MVA aggregate is appropriate for this region.
<p>Response: The SDT appreciates the suggestion of a 200 MVA generation threshold however, as of this date sufficient technical justification has not been submitted upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
City of Anaheim	No	Unless the generator is required to maintain BES reliability, i.e. black start, etc., the GSU and gen tie should be excluded from the BES; provided, however, to eliminate any reliability gaps, such generation-tie equipment should be classified as "Generator" equipment subject to GO/GOP standards, and the PRC and vegetation management standards should be made applicable to GO/GOPs and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for non-critical generation-tie transmission elements that are not required for the reliable operation of the BES.
<p>Response: The SDT appreciates the City's suggestions, however; the City's recommendations go beyond the SAR scope of work given to the SDT. The SDT has not been charged with determining the applicability of various standards.</p> <p>Also, as of this date sufficient justification has not been submitted demonstrating that GSU transformers and interconnecting generation ties should be excluded from the BES.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
<p>should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
Snohomish County PUD	No	<p>The generation resources described should not be presumed to be part of the BES. The criteria above are intended to identify those entities that are required to register as user, owner or operator of the bulk system, and not to define a BES device. As noted in our response to question 2, Snohomish is concerned that the enforcement process to date has frequently conflated registry criteria and definitions of the BES.</p>
<p>Response: Snohomish has not provided justification for varying from a 75 MVA bright line for determining BES generation plants. Further, as of this date, the SDT has not received sufficient technical justification upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
PNGC Power	No	<p>Please see our response to Question 2</p>
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
Response: See response to Q2.		
Glacier Electric Cooperative	No	Once again, I believe it depends on the facility and its importance to the grid. Some 75 MVA plants will have a greater impact than others. The ones that are truly important to the grid should be include, but the ones that are not should not be. I believe more of an analytical approach would be much more accurate in determining which facilities truly should be part of the BES than the bright-line approach that is being attempted.
United Illuminating Company	No	Any gouprr of Generators connected at 100 kV or above should be part of BES. There should not be a MVA threshold
Response: The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process – for exclusions/inclusions – should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
<p>plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure, in a parallel effort to the development of this BES definition.</p>		
Lewis County PUD	No	<p>75MVA generation resources should not be part of the BES. This size generating resource is too small to affect the BES. Suggest the minimum size BES resource be changed to 150MVA. If a smaller threshold is used then the RE or BA should demonstrate to the GO that this resource is critical to the BES.</p>
<p>Response: The SDT appreciates the suggestion of a 150 MVA threshold for materiality of impact, however, sufficient technical justification has not been submitted upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria.</p> <p>The SDT believes that generation plants larger than 75 MVA connected above 100kV need to be included within the BES definition. The exception process should allow for the possibility that certain generating plants larger than 75 MVA can be excluded if it can be proven that such plants are not necessary for operating the interconnected Transmission network. Additionally, the Commission in its Order 743 suggests that the revised BES definition should include exception processes for exclusion/inclusion of various Elements. The process for such exclusions/inclusions will be developed as part of the revision to the NERC Rules of Procedure by a different team in a parallel effort to the development of this BES definition.</p>		
Independent Electricity System Operator	No	Same comment as in Q3, above.
<p>Response: It is assumed that the commenter is referring to Q2. See SDT response to Q2.</p>		
The Dow Chemical Company		<p>As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.</p>
<p>Response: See response to Q12.</p>		
<p>Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation</p>	Yes	<p>Constellation firmly believes that the classifications found in the Compliance Registry Criteria - Section III (Rules of Procedure Appendix 5B), such as that cited in this question, provide a useful basis to create a comprehensive, revised BES definition.</p> <p>Further, we propose that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term “bulk power system” in each criterion with “greater than 100 kV.” This would then include assets that are currently registered as BES elements as well as those that may have been previously excluded due to Regional exemption variances. Structuring the revised BES definition to clarify both the inclusions and exclusions, can, ideally, eliminate the need for an onerous exemption process as well as</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)		<p>eliminate the need for Section III of the Registry Criteria.</p> <p>Please see our response to question 11 for more detail on a proposed alternative approach to structuring the BES definition revision.</p>
<p>Response: the SDT agrees that the Registry Criteria is a valuable resource for deliberations on a BES definition and has utilized it whenever possible.</p> <p>The SDT agrees and has made the suggested change.</p> <p>See response to Question 11.</p>		
Occidental Energy Ventures Corp	Yes	<p>Many generator interconnection lines are operated at voltages greater than 100KV, but have traditionally not been considered part of the the transmission system. Rather these lines have been considered part of the generation system and, for quite some time, have been constructed and operated according to interconnection agreements which specify design and protection criteria. The BES definition should not be constructed in either a direct or implied manner that would alter the interconnection line status as being part of the Generation Facilities. Otherwise, it could result in registration of GO/GOPs as TO/TOPs. The issue of what additional standards, if any, should apply to these generation interconnection lines is the subject of Project 2010-07 and should be resolved by that standards development effort, not by a definition change. The proposed definition appears not to violate the inclusion of the interconnection line as part of the Generation Facility while still providing for these lines to be part of the BES, however, some clarification might be advisable (e.g., a statement that interconnection lines are part of the Generation Facility or are Generation Elements).</p>
<p>Response: The SDT appreciates the Occidental's suggestions, however; the recommendations go beyond the SAR scope of work given to the SDT. The SDT has not been charged with determining the applicability of various standards.</p>		
American Transmission company	Yes	<p>For clarity, ATC suggests that the “. . . aggregate capacity greater than 75 MVA . . . “ wording be changed to read, “. . . aggregate generator capacity greater than 75 MVA. . . and further classified as part of the BES given that a fault or outage of the aggregate generator capacity greater than 75 MVA would not maintain an Adequate Level of Reliability of the BES.</p>
<p>Response: The SDT appreciates the ATC's concern; however, ATC has not provided rationale for the change.</p>		
Xcel Energy	Yes	<p>Xcel Energy believes that clarity should be added as to what constitutes an individual generation resource and a generating plant, especially as it pertains to multiple owner facilities and aggregating facilities such as wind or solar farms (which may also have multiple owners for discreet facilities that tie into a common bus). Discussion and controversy in other NERC and regional forums and standard development teams indicates</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
		that this is not well defined. It may be that the Statement of Compliance Registry needs to be enhanced if it forms the foundation for which these items are to be understood.
<p>Response: The SDT has revised the BES definition and has included specific inclusion and exclusion criteria that addresses dispersed generation plants (including wind and solar farms, which may contain multiple owners).</p> <p>Included in BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.</p> <p>The SDT has not been charged with making changes to NERC's Statement of Compliance Registry Criteria and has adopted a goal of not changing that criteria if at all possible.</p>		
Bonneville Power Administration	Yes	There needs to be additional clarity on the definition of generation plant. Wind generation needs to be incorporated.
<p>Response: The SDT has revised the BES definition and has included specific inclusion and exclusion criteria that addresses dispersed generation plants (including wind and solar farms).</p> <p>Included in BES: I5 - Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a collector system through a common point of interconnection to a system Element at a voltage of 100 kV or above.</p>		
NERC Staff	Yes	Please see additional comments at the end of this document.
<p>Response: These comments were submitted in response to the concepts paper and were considered</p>		
MRO's NERC Standards Review Subcommittee	Yes	See question 2 for similar comments and it is apparent that the SDT is trying to model the BES definition on the Statement of Compliance Registry Criteria (v5). Recommend that this question be struck. Question 2 above addresses connection requirements of Generators. For clarity, NSRS suggests that the "... aggregate capacity greater than 75 MVA ..." wording be changed to read, "... aggregate generator capacity greater than 75 MVA. . . and further classified as part of the BES given that a fault or outage of the aggregate generator capacity greater than 75 MVA would not maintain an Adequate Level of Reliability of the BES.
<p>Response: The SDT appreciates the comments; however, the SDT has not received sufficient technical justification upon which to base a significant departure from the generation MVA thresholds included in the NERC's Statement of Compliance Registry Criteria. MRO has not provided a rationale for making the language change.</p>		
ReliabilityFirst	Yes	It is recommended that the term "directly connected" be defined and examples of this term are included in the

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
		ERO definition.
Response: The SDT has revised the definition and the term “directly connected” is no longer utilized.		
SERC EC Planning Standards Subcommittee	Yes	
Public Service Enterprise Group Company	Yes	Yes, but see comments in section 2 above.
IRC Standards Review Committee	Yes	
Florida Municipal Power Agency	Yes	See FMPA response to Question 2 above.
FirstEnergy Corp	Yes	
Transmission Access Policy Study Group	Yes	See TAPS response to Question 2 above.
Competitive Suppliers	Yes	
Pepco Holdings Inc.	Yes	
LCRA Transmission Services Corporation	Yes	See comment to item 2 above.
Manitoba Hydro	Yes	
North Carolina EMC	Yes	
on behalf of Teck Metals Ltd.	Yes	
Southern California Edison	Yes	SCE currently reports on generation plants (including GSU transformers and the associated generator interconnecting line lead(s))with aggregate capacity greater than 75 MVA (gross nameplate rating) directly

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
		connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above. SCE does not feel a blanket inclusion of all the listed equipment is needed.
Southern California Edison Company	Yes	A GSU transformer is clearly an extension of the functionality provided by the Generator Interconnection Elements, namely, to move bulk power from the BES generator to the BES network, and hence, the classification of the GSU transformer should match that of the Generator Interconnection Elements.
on behalf of Catalyst Paper Corporation	Yes	
Energy Services	Yes	
Utility Services	Yes	Initially, yes; however, such a classification could be exempted upon a NERC review of the technical justification for exemption.
City of Austin dba Austin Energy	Yes	
Duke Energy	Yes	
The Dayton Power and Light Company	Yes	
ITC Holdings Corp	Yes	
BGE	Yes	No comment.
City Water Light and Power (CWLP) - Springfield, IL	Yes	
American Electric Power (AEP)	Yes	
Southern Company	Yes	However, considering today's transmission network and typical plant size, the plant size that can impact the reliability should be reevaluated. Particularly Wind Farms with dozens of small generators could have an impact on the BES if enough exist. Therefore, the 75 MVA threshold should work in this instance.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 3 Comment
Idaho Power	Yes	
Springfield Utility Board	Yes	"directly connected" is important.
Clark Public Utilities	Yes	
Response: Thank you for your response. Please see the summary consideration immediately under the question. Several stakeholders made suggestions that were adopted by the drafting team.		

4. Should the following be classified as part of the BES?

- **Blackstart Resources and the designated blackstart Cranking Paths identified in the Transmission Operator’s (TOP’s) restoration plan**

Summary Consideration: There was no consensus amongst commenters who responded to this question. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from a Blackstart Resource is essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.

Organization	Yes or No	Question 4 Comment
SERC EC Planning Standards Subcommittee	No	A blackstart designation should not necessarily make it part of the BES.
Southern Company	No	
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p>		
Public Service Enterprise Group Company	No	Including these in the definition of BES would impose compliance obligations for these assets even if below 100kV at the same level as assets at or above the 100kV level. Blackstart Resources and Cranking Paths below 100kV do not impact the reliability of the BES and thus should not be required to comply with all standards as if they did. For example, 26kV cranking path protection systems typically only trip the 26kV, not 100kV or higher BES transmission facilities, thus do not impact the BES, and should not be required to meet

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
		<p>BES compliance standards for system protection. That assets can have different impacts and thus different levels of required compliance is expressly recognized in the recently stakeholder approved CIP-002-4 draft standard where blackstart cranking paths must be included as critical assets subject to CIP protections only to the point where two or more path options exist. Rather than include all Blackstart Resources and the designated Blackstart Cranking Paths indentified in the Transmission Operator's (TOP's) restoration plan in the blanket definition of BES, the drafting team should be directed to develop a definition that states that these assets are not part of the BES except where specifically identified in a requirement of a standard as needing to be compliant. For example, a standard requiring testing of Blackstart units would result in a Blackstart unit being deemed BES for purposes of that standard only.</p>
FirstEnergy Corp	No	<p>Blackstart generation and cranking paths do not need to be defined as being part of the BES. Rather, they are more appropriately reflected as supporting and restoring operation of the BES. Not all aspects of the BES reliability standards pertain to BES facilities. For example, UFLS and UVLS installed on a distribution system are important to arrest BES reliability concerns but they are not needed in what defines the BES. Similarly, blackstart generation and Cranking Paths do not need to be inclusive of what defines the BES but are important aspects of a restoration plan to re-establish a functioning BES.</p>
American Transmission company	No	<p>Blackstart Resources and designated blackstart Cranking Paths should not be classified as part of the BES, except those Elements and/or Facilities that are rated 100 kV or more and with a gross generator nameplate rating of 20 MVA or more.</p>
City of Austin dba Austin Energy	No	<p>Just because a unit can be used for black start should not - by definition - mean it is part of the BES. For example, there may be a very small unit which can be used for black start and the operating utility should not have to comply with all the NERC Standards all the time when that asset becomes "important" only during a black start event. Additionally, protective systems associated with small black start units would have to fulfill the same reliability requirements as any other BES generator even though those protective systems would have little purpose during a black start event.</p>
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator's restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator's system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths indentified in the Transmission Operator's restoration plan as BES Elements.</p>		

Organization	Yes or No	Question 4 Comment
<p>Again, Facilities identified as necessary for blackstart capability (both Blackstart Resources and the blackstart Cranking Path) in a Transmission Operator's restoration plan should be designated as part of the BES, and be subject to the corresponding NERC Standards referencing the BES.</p> <p>A review of the NERC Reliability Standards will be undertaken once the BES Definition is finalized to clearly delineate responsibilities for owners and operators of BES designated Facilities.</p>		
<p>MRO's NERC Standards Review Subcommittee</p>	<p>No</p>	<p>This question is irrelevant to the scope of this project. A Blackstart Resource may be a 10 MVA unit connected at the distribution level of voltage and within the TOP's Restoration Plan. Just because the unit is within the TOP's Restoration Plan does not make it a BES connected asset. CIP-002-4 is already industry approved and may "push" both large and small entities to remove these units from the TOP's Restoration Plan due to the Critical Asset label. If the Blackstart Resource is connected via GSU at 100 kV then it would be part of the BES. If the SDT is worried that a Blackstart Resource will not be maintained or tested, those requirements are within EOP-005-1 (and yet to be approved EOP-005-2). Blackstart Resources and designated blackstart Cranking Paths should not be classified as part of the BES, except those Elements and/or Facilities that are rated 100 kV or more and with a gross nameplate rating of 20 MVA or more.</p>
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator's restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator's system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator's restoration plan as BES Elements.</p> <p>For example, BES generation may require external Interconnections and Facilities in order to provide power to auxiliary equipment within the plant during times of system restoration.</p>		
<p>IRC Standards Review Committee</p>	<p>No</p>	<p>NERC Standards EOP-00-2 stipulates the requirements for testing Blackstart Resource and Cranking Paths. This testing requirement ensures that the facilities critical to system restoration are functional when needed. Inclusion of any resources or transmission paths as BES Elements/Facilities intended for use for system restoration should be determined using the criteria 1-3, above.</p>
<p>Response: The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
<p>connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p> <p>A review of the NERC Reliability Standards will be conducted once the BES Definition is finalized in order to clearly delineate responsibilities for owners and operators of BES designated Facilities.</p>		
PacifiCorp	No	<p>In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network. In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology. Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Blackstart Resources and designated blackstart Cranking Paths should be included only if they are deemed necessary to restore the interconnected electric transmission network.</p>
ISO New England Inc.	No	<ol style="list-style-type: none"> 1. Revise the statement, “Blackstart Resources and the designated blackstart Cranking identified in the Transmission Operator’s (TOP’s) restoration plan.” to “Blackstart Resources “material to” and designated as part of a Transmission Operator’s (TOPs) restoration plan.” Reason - Some regions have many blackstart units that are not material to a TOPs restoration plan. These units need not register and be subjected to the NERC Standards. Only those deemed material (i.e., “key facilities”) should be classified as part of the BES. See NERC Registry Criteria for reference to “material” in describing, and qualifying, what constitutes Blackstart Resources.” 2. NERC Standard EOP-00-2 stipulates the requirements for testing Blackstart Resources and Cranking Paths. This testing requirement suffices to ensure that the facilities critical to system restoration are functional when needed. Designating these facilities as BES Elements or Facilities beyond the 100 kV bright line criterion will impose unnecessary requirements for these facilities which may not contribute to the BES reliability for everyday operations. If indeed any of these facilities are deemed necessary to support BES reliability for everyday operation, they will be identified through either the 100 kV bright line criterion or the

Organization	Yes or No	Question 4 Comment
		exemption/inclusion process.
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p> <p>The SDT assumes that the Blackstart Resources and designated blackstart Cranking Paths included in the Transmission Operator’s restoration plans are those deemed necessary or required to reliably restore the system, or they wouldn’t be included in the plan, subjecting them to the NERC Standard testing requirements.</p>		
Arizona Public Service Company	No	With all of the new NERC Standards in place, a blackout should be an extremely rare event; therefore, classifying Blackstart units or Cranking Paths is not needed.
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p> <p>Again, the Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. This determination is based on the reliable restoration of the system, independent of likelihood of the assumed occurrence of the need for restoration.</p>		
Independent Electricity System Operator	No	NERC Standards EOP-00-2 stipulates the requirements for testing Blackstart Resource and Cranking Paths. This testing requirement suffices to ensure that the facilities critical to system restoration are functional when needed. Designating these facilities as BES Elements or Facilities beyond the 100 kV bright line criterion will impose unnecessary requirements for these facilities which may not contribute to the BES reliability at times other than during system restoration. If indeed any of these facilities are deemed necessary to support bulk power system reliability at times other than during system restoration, they will be identified through either the 100 bright line criterion or the exemption/inclusion process.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
American Electric Power (AEP)	No	Should be re-written to state that only those Blackstart Resources in the Transmission Operator’s (TOP’s) restoration plan be classified as part of the BES.
City Water Light and Power (CWLP) - Springfield, IL	No	CWLP feels that blackstart resources and cranking paths not otherwise qualified as a part of the BES based on other criteria should not be included in the definition of BES solely based on their status as blackstart-capable units. Requirements for blackstart resources and cranking paths are already addressed by existing and proposed EOP standards and we feel that arbitrarily classifying these elements as part of the BES may create undue burden on Transmission Owners when the same reliability result can be achieved through more directed effort in the EOP standards. Further, while such blackstart resources and cranking paths may support operation of the BES, they need not be strictly included in the definition of BES to achieve the desired reliability result.
City of Grand Island	No	Not across the board. Generator criteria from questions 2 and 3 can apply to blackstart generators as well. Otherwise the exception process can be used.
Southern California Edison	No	SCE does not feel a blanket inclusion of all the listed equipment is needed.
Pepco Holdings Inc.	No	To remain consistent with the proposed definition of facilities 100kv and above, this should not be included. Inclusion would not result in a more reliable system or reduce risk.
Electric Market Policy	No	Dominion does not agree that Blackstart Resources should be classified as part of the BES. Dominion supports the criteria for registering owners, operators, and users of the bulk power system, as indicated in the current Statement of Compliance Registry Criteria .
Central Lincoln	No	The generation resources so described should be presumed to be part of the BES unless or until they have been through the exemption process and as a result have been classified as non-BES.
Lewis County PUD	No	
Entergy Services	No	
The Dayton Power and Light Company	No	
Snohomish County PUD	No	The generation resources so described should be presumed to be part of the BES unless they have been

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
PNGC Power	No	demonstrated through performance-based studies to present no substantial threat of separation events, cascading outages, or voltage instability on the bulk system.
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p> <p>Again, Facilities critically identified as necessary for blackstart capability (both Blackstart Resources and the blackstart Cranking Path) in a Transmission Operator’s restoration plan should be designated as part of the BES, and be subject to the corresponding NERC Standards referencing the BES.</p>		
BGE	No	This proposal as written could lead to a reduction in the number of blackstart units which rely on cranking paths of less than 100 kV and not currently classified as BES, thereby reducing BES reliability.
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator’s restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator’s restoration plan as BES Elements.</p> <p>The Transmission Operator will remain responsible for maintaining a viable restoration plan, regardless of the BES definition.</p>		
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC	No	<p>This proposal as written could lead to a reduction in the number of blackstart units which rely on cranking paths of less than 100 kV and not currently classified as BES, thereby reducing BES reliability. To account for this potential gap, Constellation firmly believes that the classifications found in the Compliance Registry Criteria - Section III (Rules of Procedure Appendix 5B), such as that cited in this question, provide a useful basis to create a comprehensive, revised BES definition.</p> <p>Further, we propose that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term “bulk power system” in each criterion with “greater than 100 kV.” This would then include</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
("CDD"), Constellation NewEnergy, Inc., ("CNE") and Constellation Energy Nuclear Group, LLC, ("CENG")		<p>assets that are currently registered as BES elements as well as those that may have been previously excluded due to Regional exemption variances. As an example, the Compliance Registry Criteria includes any generator, regardless of size, that is a blackstart unit material to and designated as part of a transmission operator entity's restoration plan. The Compliance Registry also includes transmission as elements above 100kV or that is critical as defined by the Regional Entity (excluding radial facilities as described in the current BES definition). Structuring the revised BES definition to clarify both the inclusions and exclusions, can, ideally, eliminate the need for an onerous exemption process.</p> <p>Please see our response to question 12 for more detail on a proposed alternative approach to structuring the BES definition revision.</p>
<p>Response: The SDT disagrees. The Commission directed NERC to revise its BES definition to ensure that the definition encompasses all Facilities necessary for operating an interconnected electric Transmission network. The SDT interprets this to include operation under both normal and Emergency conditions, which includes situations related to black starts and system restoration. Blackstart Resources have the ability to be started without support from the System or can be energized without connection to the remainder of the System, in order to meet a Transmission Operator's restoration plan requirements for real and reactive power capability, frequency, and voltage control. The portion of the electric system that can be isolated and then energized to deliver electric power from Blackstart Resources are essential to enable the startup of one or more other generating units as defined in the Transmission Operator's system restoration plan. For these reasons, the SDT has included Blackstart Resources and the corresponding designated blackstart Cranking Paths identified in the Transmission Operator's restoration plan as BES Elements.</p> <p>The SDT agrees and has made the suggested change and replaced the term "bulk power system" in each criterion with "greater than 100 kV."</p> <p>Please see response to Q12.</p>		
The Dow Chemical Company		As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.
<p>Response: Please see response to Q12.</p>		
ReliabilityFirst	Yes	<p>It is recommended that the term "cranking path" be defined and examples of this term be provided.</p> <p>Also, does the term "cranking paths" include all paths or just the primary path if there are multiple paths available?</p>
<p>Response: The NERC Glossary of Terms defines 'Cranking Path' as "A portion of the electric system that can be isolated and then energized to deliver electric power from a generation source to enable the startup of one or more other generating units".</p>		
NERC Staff	Yes	Please see additional comments at the end of this document.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
Response: See response to Q13.		
Springfield Utility Board	Yes	
Clark Public Utilities	Yes	
Xcel Energy	Yes	
City of Redding	Yes	
City of Anaheim	Yes	
Northeast Power Coordinating Council	Yes	
Florida Municipal Power Agency	Yes	See FMPA response to Question 2 above.
Bonneville Power Administration	Yes	Blackstart resources should never be allowed to be excluded through any technical studies.
SERC OC Standards Review Group	Yes	
Transmission Access Policy Study Group	Yes	See TAPS response to Question 2 above.
PPL Energy Plus	Yes	Blackstart Resources and the designated blackstart Cranking Paths identified in the TOP's restoration plan are a special case and warrant inclusion in the BES definition regardless of voltage because of their importance to BES reliability. However, this would not be the case for other facilities operated below 100 kV.
LG&E and KU Energy LLC	Yes	
Competitive Suppliers	Yes	
ExxonMobil Research and Engineering	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
LCRA Transmission Services Corporation	Yes	This is critical for system restoration.
PUD No.1 of Clallam County	Yes	Based on the current Reliability Standards practices it may be advantageous to reduce the number of blackstart generation and cranking paths to limit exposure to BES applicable standards. At this time if a registered entity has multiple blackstart units, it may be advantageous to reduce or decommission the number to avoid compliance risks. The current requirements may ultimately reduce the number of blackstart units and reduce BES electric reliability. It may make more sense to identify subset of critical blackstart projects and associated cranking paths as BES elements. The generation resources so described should be presumed to be part of the BES unless or until they have been through the exemption process and as a result have been classified as non-BES.
Manitoba Hydro	Yes	
American Municipal Power	Yes	
North Carolina EMC	Yes	
on behalf of Teck Metals Ltd.	Yes	
Indeck Energy Services	Yes	
Southern California Edison Company	Yes	
on behalf of Catalyst Paper Corporation	Yes	
Occidental Energy Ventures Corp	Yes	
City of Anaheim	Yes	
Glacier Electric Cooperative	Yes	These resources are significant to the BES and should be included.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 4 Comment
United Illuminating Company	Yes	
Orange and Rockland Utilities, Inc.	Yes	
Utility Services	Yes	
Duke Energy	Yes	
ITC Holdings Corp	Yes	Yes, but the Blackstart Resources identified as the PRIMARY resources in the System Restoration Plan should be the focus.
Idaho Power	Yes	
Response: Thank you for your response.		

5. Should the following be classified as part of the BES?

- Transmission Elements or Facilities operated at voltages below 100kV where the exemption process deems the Element or Facility to be included in the BES

Summary Consideration: Most commenters who responded to this question indicated disagreement with the proposal however there was no consensus amongst the alternate proposals offered, and the proposals suggesting other thresholds were not supported with any technical justification. The SDT has reviewed the industry comments on this issue, debated the topic, and has come to an agreement that the bright-line designation for Transmission Elements is 100kV and above. Any deviations from the bright-line designation (beyond those identified in the revised definition of BES), including Transmission Elements operated below 100kV, will be handled through the Rules of Procedure process that is being developed by a separate team.

Organization	Yes or No	Question 5 Comment
SERC EC Planning Standards Subcommittee	No	We prefer a bright-line rule of 100 kV. The exception process should not be used to include facilities operated at voltages below 100 kV.
Arizona Public Service Company	No	There are no practical cases where the facilities below 100 kV impact the major load centers or BES.
North Carolina EMC	No	Transmission elements or facilities operated at voltages below 100kV should only be included in the BES if identified by the RRO as critical to the BES.
Southern California Edison Company	No	The Exemption Process should apply to transmission elements or facilities greater than 100kV only. Facilities operated below 100kV are generally used for distribution purposes.
BGE	No	This proposal as written could lead to the inclusion of elements or facilities which have no material reliability impact on the interconnected transmission system.
Southern Company	No	We prefer a bright-line rule of 100 kV. The exception process should not be used to include facilities operated at voltages below 100 kV.
ExxonMobil Research and Engineering	Yes	It is conceivable that, in some areas, the Bulk Electric System may include transmission assets that are rated and operated at 69kV or below.

Response: The SDT appreciates the preference of several entities to utilize strict bright-line criteria of Facilities at 100kV and above that would be considered for inclusion in the BES. The SDT has carefully considered this matter, and believes that the exception process must allow for the possibility that certain Facilities

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
<p>operated at voltages below 100kV could have appreciable influence over the reliable operation of the interconnected network Transmission grid, thereby warranting examination through an exception process for inclusion in the BES. The SDT expects that these exceptions for Facilities operated at voltages below 100kV will be relatively rare. The criteria for such inclusion will be developed as part of this project and the ROP process will be handled by a separate team through the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition.</p>		
ITC Holdings Corp	No	<p>PRC023 has developed a process for specification of critical lines below 100 kV. This same process should be used to include below 100 kV lines in the BES</p>
Florida Municipal Power Agency	No	<p>This Question refers to including an Element in the BES through the exemption process, suggesting that the SDT is contemplating a single process for including nominally non-BES Elements in the BES and for exempting nominally BES Elements from the BES. While it would make sense for the two processes to be similar, they cannot be identical: The burden should be on the entity requesting an exemption to show that an Element that is nominally part of the BES is nevertheless not necessary for operating the interconnected electric transmission network and thus should be exempted from the BES. In contrast, with respect to transmission operated at voltages below 100 kV, it is NERC that must show, on a case-by-case basis, that transmission that is not nominally part of the BES is nevertheless necessary for operating the interconnected electric transmission network and thus should be included in the BES. Transmission operated at voltages below 100 kV should only be classified as part of the BES if the inclusion process, assessing each Element on a case-by-case basis, based on a uniform set of criteria, results in a finding that the particular Element should be included in the BES.</p>
Transmission Access Policy Study Group	No	
<p>Response: The process for inclusions and exclusions will be developed by a separate team as part of the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
FirstEnergy Corp	No	<p>We do not agree with an "exemption process" being associated with "including facilities". We suggest keeping the exemption process separate from the identification of critical sub 100kV facilities that will be included in the BES. We do agree that a consistent continent-wide approach for identifying these facilities is a worthwhile goal but should be a secondary priority to establishing the BES definition and BES exemption process.</p>
<p>Response: The SDT envisions an “exception process”, and regrets the use of “exemption” in the original SAR. The processes for inclusions and exclusions will be developed by a separate team as part of the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
American Electric Power (AEP)	No	<p>Exemption processes are distinctly different than inclusion processes, and clarification is needed to address their differences. There should be two distinct processes. Until details of such processes and their related criteria are better defined, it is difficult to provide substantive comments.</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
MRO's NERC Standards Review Subcommittee	No	FERC has directed (in section 30 of FERC Order 743) that NERC have an established “exemption” process to remove this judgment from the Regions in defining what the BES is. However, the applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on the Transmission Element or Facility at voltages below 100kV would not maintain an Adequate Level of Reliability of the BES.
PacifiCorp	No	In paragraph 121 of Order No. 743, the Commission states that it agrees that the ERO should develop a parallel process for including as part of the bulk electric system “critical” facilities, operated at less than 100 kV, that the Regional Entities determine are necessary for operating the interconnected transmission network. (emphasis added) Further, the Commission stated that “[w]e believe that it would be worthwhile for NERC to consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.” (emphasis added) PacifiCorp believes that it is appropriate to use the same criteria to determine what elements or facilities should be included in the definition of Bulk Electric System as those used to determine what elements or facilities should be excluded from the definition. However, the formal process used for exclusion (i.e. the exemption process) of facilities above 100 kV should not be the same process as the process for inclusion of sub-100 kV facilities. As PacifiCorp understands it, per the Commission, the exemption process will require a facility-by-facility approval by NERC for exemption whereas inclusion of sub-100 kV facilities will involve a Regional Entity determination that such facilities must be included. These should therefore be separate processes.
Central Lincoln	No	Including elements through an exemption process is bound to create confusion and misunderstandings between the registrants and REs. Please include such elements through an inclusion process. It should also be clarified that registrants are not required to put all sub-100 kV elements through this process; the burden should be on the RE to include elements of particular concern.
PUD No.1 of Clallam County	No	
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed by a separate team through the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition.</p>		
Pepco Holdings Inc.	No	Some details on the exemption process must be known before accepting this. Who can submit an exemption (DP, GO, GOP, TO, TOP, RC, etc)? How do interested parties get informed? Can others intervene?
Occidental Energy Ventures Corp	No	Until the expemtion process is finalized, it is not prudent to answer in the affirmative.
Energy Services	No	Our response to this question depends on the details of the “exemption process”, including what entity has the

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
		final decision and how it is implemented. Please see our response to Q13 below.
City Water Light and Power (CWLP) - Springfield, IL	No	While CWLP agrees with the general concept of inclusion by exception (as opposed to exemption), we have concerns regarding the lack of detailed definition of this process, especially the administrative process for disputes regarding inclusion of elements in the BES. Without firm administrative rules for resolving disputes based on technical justification, we cannot support this measure currently.
Manitoba Hydro		It is confusing to use the term “exemption process” to determine what is included. Abstain until exemption process has been defined.
Duke Energy		There is not enough information available at this time to adequately evaluate this question. It would be necessary to have a list of exemption criteria or more detail on the exemption process to address this question. This is one of the reasons that the exemption criteria should be developed through the standards development process along with the definition.
Xcel Energy		Xcel Energy does not disagree that there may be situations where elements below 100KV may need to be included, but we have concerns about the exemption process. This undeveloped process presents itself as a wild card to entities, and will most likely present inconsistencies between regions based upon each Region's preference. Additionally, does the Regional Methodology require any approval (e.g. ERO) other than the Region's own process? The “exclusions” process indicates that the ERO has the final approval authority to exclude an item from the BES. Why would the same not apply for including something into the BES based on the Region's Methodology?
IRC Standards Review Committee	Yes	We generally support the concept but we need to assess the criteria for the exception, which have not been developed. Further, the wording seems to present a circular argument. We suggest the following revised wording to more clearly convey this criterion: Transmission Elements or Facilities operated at voltages below 100kV that are deemed to be included in the BES as determined by the exception/inclusion process.
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the exception process, which is being developed by a separate team as a modification to the Rules of Procedure in an effort parallel with the development of the BES definition.</p>		
American Municipal Power	No	
on behalf of Teck Metals Ltd.	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
on behalf of Teck Metals Ltd.	No	
on behalf of Catalyst Paper Corporation	No	
Idaho Power	No	
Response: Thank you for your response.		
Indeck Energy Services	No	Same Response as Question 1
Utility Services	Yes	See the answer to Question 1.
Response: See Response to Question 1.		
Snohomish County PUD	No	Snohomish agrees that certain Elements or Facilities operated at voltages below 100 kV may need to be classified as part of the BES if engineering studies demonstrate those Elements or Facilities to be necessary to the reliable operation of the bulk transmission system. We disagree, however, that inclusion of such facilities should be part of the exemption process. The exemption process should be focused on facilities operating at voltages above 100 kV that nonetheless are exempt because they are local distribution facilities or are demonstrated by engineering analysis to be unnecessary for the reliable operation of the interconnected bulk transmission grid. The inclusion of facilities below 100 kV should be a separate process in which the RRO is required to demonstrate that the facility has a material impact on the interconnected bulk transmission system despite its low operating voltage
Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of proposed “inclusions” and “exclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions and exclusions will be developed as part of the revision to the Rules of Procedure by a separate team, in an effort parallel to the development of the BES definition. The SDT appreciates the preference of several entities to utilize strict bright-line criteria of facilities greater than 100kV that would be considered for inclusion in the BES. The SDT has carefully considered this matter, and believes that the exception process must allow for the possibility that certain Facilities operated at voltages below 100kV could have appreciable influence over the reliable operation of the interconnected network Transmission grid, thereby warranting examination through an exception process for inclusion in the BES. The SDT expects that these exceptions for Facilities operated at voltages below 100kV will be relatively rare.		
Lewis County PUD	No	Including elements through an exemption process is bound to create confusion and misunderstandings between the registrants and REs. Please include such elements through an inclusion process. It should also be clarified that registrants are not required to put all sub-100 kV elements through this process; the burden of

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
		proof should be on the RE to include elements less than 100kV.
PNGC Power	No	Including elements through an exemption process is bound to create confusion and misunderstandings between the registrants and REs. Please include such elements through an inclusion process. It should also be clarified that registrants are not required to put all sub-100kV elements through this process; the burden should be on the RE to include elements of particular concern.
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
Cooperative		
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
Central Lincoln	No	
PUD No.1 of Clallam County	No	
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed by a separate team through the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition.</p>		
<p>Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)</p>	No	<p>Although Constellation believes that it may be appropriate to include some of the elements above in the BES, this proposal will lead to the inclusion of elements or facilities which have no material impact on the interconnected transmission system. Furthermore, the use of an exemption process to include assets is confusing. Constellation proposes that the BES drafting team structure the revised BES definition to clarify both the inclusions and exclusions as completely as possible. If a separate “opt-in” process is deemed necessary (in anticipation of a few exceptions to the definition) then the drafting team should develop criteria for such a process. Using this approach the sentence above would then read “Transmission Elements or Facilities operated at voltages below 100kV where a Regional Entity deems the Element or Facility to be included in the BES.”</p>
<p>Response: The SDT appreciates the preference of several entities to utilize strict bright-line criteria of Facilities at 100kV or above that would be considered for inclusion in the BES. The SDT has carefully considered this matter, and believes that the exception process must allow for the possibility that certain Facilities operated at voltages below 100kV could have appreciable influence over the reliable operation of the interconnected network Transmission grid, thereby warranting examination through an exception process for inclusion in the BES. The SDT expects that these exceptions for Facilities operated at voltages below 100kV will be relatively rare. The criteria for such inclusion will be developed as part of this project and the ROP process will be handled by a separate team through the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition.</p> <p>The SDT acknowledges that the term “exemption” is inappropriate in the context of proposed “inclusions” and “exclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
Springfield Utility Board	No	Why would an entity want to include an element in the definition of the BES? If an entity has a 69kV line that the ERO believes should be part of the BES but the entity does not want it part of the BES who initiates and pays for the exemption process? Does the ERO have the ability to initiate the process? If the owner of the Transmission Element or Facility is the only one that can initiate and exemption process and they do not want to what is the remedy if the line is necessary for bulk electric system reliability?
<p>Response: The bright-line designation will be developed as part of this project and the ROP process will be handled through the revision to the Rules of Procedure by a separate team in an effort parallel to the development of the BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
National Rural Electric Cooperative Association (NRECA)		Without exemption criteria to review, it is too early to explicitly answer this question. However, the concept appears to be logical as long as it is also paired with the ability of an entity that owns facilities above 100kV to appeal the inclusion of its facilities as part of the BES. Such an appeal would need to be supported by a technical justification demonstrating why certain facilities should not be classified as part of the BES. In addition, it is critical for exemption criteria to be based on operating voltage, not design voltage. Using design voltage in the criteria would provide a disincentive to build for future expansion. This could have significant negative impacts on BES reliability.
<p>Response: The process for such inclusions and exclusions will be developed by a separate team as part of the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
The Dow Chemical Company		Dow recommends that NERC finalize a basic framework for identifying BES facilities before evaluating individual facilities or types of facilities. Such a framework is recommended by Dow in response to questions #11 and #12 below.
<p>Response: See responses to Q11 & 12.</p>		
Orange and Rockland Utilities, Inc.		Refer to the response to Question 13.
Northeast Power Coordinating Council		Refer to the response to Question 13.
NERC Staff	Yes	Please see additional comments at the end of this document.
<p>Response: See response to Q13.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
SERC OC Standards Review Group	Yes	We think the process should be an “exception” rather than an “exemption”.
City of Grand Island	Yes	Exemption process should be termed “exception” process. Exception means not conforming to general rule, whereas exemption primarily means exclusion. This process will be difficult to develop and administer and is counter productive to “bright line” philosophy. Thus the bright lines should be at a high level resulting in fewer challenges. The exception process must consider the impact of a fault or outage of that facilities on the Adequate Level of Reliability (NERC defined term) of the BES.
American Transmission company	Yes	However, the applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on the Transmission Element or Facility at voltages below 100kV would not maintain an Adequate Level of Reliability of the BES.
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed by a separate team through the revision to the Rules of Procedure, in an effort parallel to the development of the BES definition.</p>		
City of Redding	Yes	If the exemption process is based on reliable engineering studies.
City of Anaheim	Yes	
Public Service Enterprise Group Company	Yes	No Comment
Bonneville Power Administration	Yes	
Electric Market Policy	Yes	Dominion conceptually supports an exemption process whereby NERC or the RRO could apply to have an element included or excluded from the BES definition. Such process recognizes that it may be necessary to include elements that do not meet the bright line criteria but are necessary for operating an interconnected transmission network. Such process should be developed through the existing NERC standards development process and include a robust appeals process for the owner/operator of any element so included or excluded.
LCRA Transmission Services Corporation	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 5 Comment
PPL Energy Plus	Yes	Yes, PPL Energy Plus supports an exemption process provided the Exemption process follows FERCs Order 743 paragraph 115: "NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid."
LG&E and KU Energy LLC	Yes	
ReliabilityFirst	Yes	It is recommended that the exemption process be defined and criteria setup so that a common approach across the ERO can be used to include these facilities.
Southern California Edison	Yes	SCE currently reports on transmission elements or facilities operated at voltages below 100kV that are interconnected with other utilities.
Glacier Electric Cooperative	Yes	Yes - this is assuming that the exemption process is an accurate way to truly determine whether or not a facility is significant to the grid.
ISO New England Inc.	Yes	
United Illuminating Company	Yes	
City of Austin dba Austin Energy	Yes	This answer assumes that an appropriate engineering study is performed to determine that the asset is necessary for the reliability of the BES.
The Dayton Power and Light Company	Yes	
Independent Electricity System Operator	Yes	We generally support the concept but we need to assess the criteria for the exception, which have not been developed. Further, the wording seems to present a circular argument. We suggest the following revised wording to more clearly convey this criterion: Transmission Elements or Facilities operated at voltages below 100kV that are deemed to be included in the BES as determined by the exception/inclusion process
Clark Public Utilities	Yes	

Response: The SDT thanks you for your comments.

6. Should the following be classified as part of the BES?

- Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation resources to be included in the BES

Summary Consideration: Most commenters who responded to this question indicated disagreement with the proposal, however there was no consensus amongst the alternate proposals offered, and the proposals suggesting other thresholds were not supported with any technical justification. The SDT has reviewed the industry comments on this issue, debated the topic, and come to an agreement that the bright-line designation for individual generating units is 20 MVA and 100 kV. Any deviations from the bright-line designation would be handled through the pending Rules of Procedure process. Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.

Organization	Yes or No	Question 6 Comment
SERC EC Planning Standards Subcommittee	No	We prefer a bright-line rule of 100 kV. The exception process should not be used to include facilities operated at voltages below 100 kV.
Public Service Enterprise Group Company	No	The intent of the BES definition is to address the reliability of the bulk electric system and associated elements. The generation connected at less than 100kV should not be classified as BES - it should be considered to be within the same category as radial connected facilities serving load (which is not included as part of the BES).
<p>Response: In Order No. 743, the Commission directed NERC to adopt an inclusion process for including in the BES definition Facilities operated at voltages below 100 kV. The Commission believes that NERC should “consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.” The DBES SDT and NERC Rules of Procedure team are responding to FERC’s directive.</p>		
Florida Municipal Power Agency	No	See FMPA response to Question 5 above. Generation resources of any size directly connected via a step-up transformer(s) to transmission operated at voltages below 100 kV should only be classified as part of the BES if the generation resource is registered pursuant to the Statement of Compliance Registry Criteria or if the inclusion process, assessing each generation resource on a case-by-case basis based on a uniform set of criteria, results in a finding that the particular generation resource should be included in the BES. The standards for registering a generator should be the same as those for including it in the BES.
Transmission Access Policy Study Group	No	
<p>Response: The SDT agrees with the comment that designation of these generators as BES would occur only if the pending Rules of Procedure process deems them to be BES, and such a designation would necessarily warrant registration per the terms of the NERC Statement of Compliance Registry Criteria (SCRC).</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
<p>The scope of the SDT does not extend to revisions of the SCRC; however, recommendations for revision of the SCRC may result from the definition development.</p>		
PacifiCorp	No	<p>In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network. In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology. Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Generation units should not be included or excluded solely based on a their gross nameplate rating and the operating voltage at which they are connected to transmission facilities. Generation units which are necessary to operate the interconnected network should be included as part of the regulated BES. Generating units which are not “necessary for the operation of the interconnected network” should be excluded. A methodology needs to be developed to determine which generating units may be excluded as part of the regulated BES.</p>
<p>Response: The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template (or “methodology” as used in the comment) for defining the bright-line exception criteria in Project 2010-17. The SDT plans to review past efforts of Regional Entities to develop their own BES definition.</p>		
ExxonMobil Research and Engineering	No	See comments on questions 2 and 3.
<p>Response: See response to Q2 & Q3.</p>		
Arizona Public Service Company	No	<p>Individual generation resources less than 50 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100 kV do not materially impact the reliability of the BES and therefore, should not be classified as part of the BES.</p>
<p>Response: The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. The comment provides no technical justification for departing from existing practices defined by the Statement of Compliance Registry Criteria.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
Pepco Holdings Inc.	No	Some details on the exemption process must be known before accepting this. Who can submit an exemption (DP, GO, GOP, TO, TOP, RC, etc)? How do interested parties get informed? Can others intervene? Would the other facilities completing the connection to a BES facility be automatically included?
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure process, which is to be developed in an effort parallel with this BES definition development. The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line criteria in Project 2010-17. The SDT will coordinate its efforts with the NERC ROP team developing the Rules of Procedure process to develop a single coordinated implementation plan that will define the responsibilities of various parties.</p>		
American Municipal Power	No	
on behalf of Teck Metals Ltd.	No	
on behalf of Catalyst Paper Corporation	No	
Idaho Power	No	
Clark Public Utilities	No	
<p>Response: Thank you for your response.</p>		
Indeck Energy Services	No	Same Response as Question 1
<p>Response: See response to Q1.</p>		
Southern California Edison	No	SCE currently reports on generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages above 100kV. SCE does not feel it is necessary to report on generation below 100kV.
<p>Response: In Order No. 743, the Commission directed NERC to adopt an inclusion process for including in the BES definition Facilities operated at voltages below 100 kV. The Commission believes that NERC should “consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.”</p>		
Southern California Edison Company	No	In SCE's system, generation resources are used to offset load being served by distribution facilities. This means that generation does not flow through step-up transformers into the 100kV and above system.

Organization	Yes or No	Question 6 Comment
		Therefore, those generation resources which are used to provide power to local load within a distribution system should not be included as part of the BES. The Exemption Process should not be applied to such resources.
<p>Response: The SDT believes that such generation resources will be excluded as part of the BES unless the Facilities are otherwise deemed material to the reliability of the BES by a ROP to the pending Rules of Procedure exception process. In a section in the revised BES definition on Local Distribution Networks, the SDT is considering the issue of generation resources used to offset Load being served by distribution Facilities.</p>		
ISO New England Inc.	No	<p>1. Yes - There are situations as envisioned in the Registry Criteria clause, i.e., “Any generator, regardless of size, that is material to the reliability of the bulk power system” where reliability would be threatened without such inclusion. Similarly, cases can be made for materiality to the reliability of the bulk power system for units < 20 MVA directly connected at 100 kV or greater and for units < 20 MVA connected at any voltage level. The exemption process developed should account for any and all situations where a generator, or group of generators, may be deemed material to support a BES function such as riding through an UFLS event. Just as UFLS Relays have been stated to be material to the reliability of the bulk power system, despite their location on the lower voltage distribution systems, any size generator at any voltage level may be found, through an analysis, to have a supporting role in protecting the BES during a postulated system disturbance.</p> <p>2. No - In general small generators connected at voltages of 100 kV and greater and those larger generators connected at voltages less than 100 kV do not impact the reliability of the BES and to classify them as BES and require them to register with NERC and abide by all NERC Reliability Standards would place an undue burden on the Generator Owners/Operators with little or no perceived reliability benefit. A more reasonable process would allow a systematic analysis to define the material need of such otherwise exempted generators and allow these generators to be registered on a “requirement basis”, a process which FERC has encouraged, and is an approach recognized in NERC’s “Statement of Registry Criteria” (See “Notes to Above Criteria” #4, page 10).</p>
Electric Market Policy	No	Dominion does not agree that a generation resource should be classified as part of the BES. Dominion supports the criteria for registering owners, operators, and users of the bulk power system, as indicated in the current Statement of Compliance Registry Criteria.
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc.	No	Although Constellation believes that it may be appropriate to include some of the elements above in the BES, this proposal will lead to the inclusion of elements or facilities which have no material impact on the interconnected transmission system. Furthermore, the use of an exemption process to include assets is confusing. Constellation proposes that the BES drafting team structure the revised BES definition to clarify both the inclusions and exclusions as completely as possible. If a separate “opt-in” process is deemed necessary (in anticipation of a few exceptions to the definition) then the drafting team should develop criteria

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
(“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)		for such a process. Using this approach the sentence above would then read “Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where a Regional Entity deems the generation resources to be included in the BES.”
<p>Response: The SDT agrees that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. FERC Order No. 743 states that changes to the BES definition “will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities.”</p>		
Snohomish County PUD	No	The NERC GOTO Task Force considered the issue of whether dedicated interconnection facilities connecting BES generation to the BES transmission system should also be classified as BES. The Task Force concluded that it is unnecessary to classify such facilities as part of the BES and that reliability would not be compromised as long as those interconnection facilities are required to comply with few reliability standards, primarily those related to vegetation management. The standards drafting group should follow the recommendation of the GOTO Task Force when considering the status of interconnection facilities and should consider those recommendations when considering related questions such as the status of radial lines that both interconnect a generator and serve distribution functions.
<p>Response: The SDT acknowledges the work of Project 2010-07 Generator Requirements at the Transmission Interface regarding the classification rationale for generation interconnection Facilities and has considered it in the development process of the BES definition. The subject of this question was focused upon the generating elements themselves, rather than the associated interconnection Facilities. The SDT has carefully considered this matter, and believes that the pending Rules of Procedure exception process must allow for the possibility that certain generating units larger than 20 MVA yet connected below 100kV could have appreciable influence over the reliable operation of the interconnected network Transmission grid, thereby warranting a submittal through the ROP process for inclusion in the BES. The SDT expects that these exceptions for generating units larger than 20 MVA, yet connected to the grid at below 100kV, will be relatively rare. Additionally, the Commission in its Order No. 743 suggests that the revised BES definition should include exception processes for inclusion of these sorts of Elements. The process for such inclusions will be developed as part of the revision to the Rules of Procedure, in an effort parallel to the development of this BES definition.</p>		
Central Lincoln	No	Including elements through an exemption process is bound to create confusion and misunderstandings between the registrants and REs. Please include such elements through an inclusion process. It should also be clarified that registrants are not required to put all sub-100 kV elements through this process; the burden should be on the RE to include elements of particular concern.
PUD No.1 of Clallam County	No	
PNGC Power	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
Fall River Electric Cooperative	No	
<p>Response: The SDT agrees. In Order No. 743, the Commission directed NERC to adopt an inclusion process for including in the BES definition Facilities operated at voltages below 100 kV. The Commission believes that NERC should “consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.”</p>		
ITC Holdings Corp	No	The lower limit for BES generators should be 75 MVA. As long as this Plant is connected to the 100 kV or greater, it should be included. Below 100 kV, only if it meets the critical test.
<p>Response: The SDT believes that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. FERC Order No. 743 states that changes to the BES definition “will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities.” As envisioned, Regional Entities will be able to request the inclusion of Elements below 100 kV in the pending Rules of Procedure exception process and will bear the burden of proof that such Elements are critical Facilities.</p>		
BGE	No	This proposal as written could lead to the inclusion of elements or facilities which have no material reliability impact on the interconnected transmission system.
<p>Response: The SDT believes that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. In addition, potential registrants may use the pending Rules of Procedure exception process to demonstrate the lack of materiality.</p>		
City Water Light and Power (CWLP) - Springfield, IL	No	While CWLP agrees with the general concept of inclusion by exception (as opposed to exemption), we have concerns regarding the lack of detailed definition of this process, especially the administrative process for disputes regarding inclusion of elements in the BES. Without firm administrative rules for resolving disputes based on technical justification, we cannot support this measure currently.
<p>Response: NERC is obligated under Order No. 743 to develop an exception process (including revisions to the NERC ROP) and implementation plan to administer a revised BES definition and associated exception criteria, and a dispute resolution process. The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure exception process, which is to be developed in an effort parallel with this BES definition development.</p>		
Lewis County PUD	No	I find it hard to believe that elements connected at less than 100kV are part of the BES. The burden of proof to include elements in the BES should be on the RE not the owner of such facilities.
<p>Response: In Order No. 743, the Commission directed NERC to adopt an inclusion process for including in the BES definition Facilities operated at voltages below 100 kV. The Commission believes that NERC should “consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.” Thus, as envisioned, Regional Entities will be able to request the inclusion of Elements below 100 kV in the pending Rules of Procedure</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
exception process and will bear the burden of proof that such Elements are critical Facilities.		
American Electric Power (AEP)	No	Please see response provided to question 5.
Response: See response to Q5.		
Southern Company	No	We prefer a bright-line rule of 100 kV. The exception process should not be used to include facilities operated at voltages below 100 kV.
Response: The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the “bright-line” exception criteria in Project 2010-17. In Order No. 743, the Commission also directed NERC to adopt an inclusion process for including in the BES definition Facilities operated at voltages below 100 kV. The Commission believes that NERC should “consider formalizing the criteria for inclusion of critical facilities operated below 100 kV in developing the exemption process.” As envisioned, Regional Entities will be able to request the inclusion of Elements below 100 kV in the pending Rules of Procedure exception process and will bear the burden of proof that such Elements are critical Facilities.		
Independent Electricity System Operator	No	Again, we need to assess the criteria for the exception, which have not been developed. Also, the proposed wording seems to present a circular argument. We suggest to change the wording as follows: Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV that are deemed to be included in the BES as determined by the exception/inclusion process.
Response: The SDT acknowledges that commenters will need to reserve judgment on the exception process, which is to be developed as a modification to the Rules of Procedure in an effort parallel with this BES definition development. The SDT notes the suggested language in this comment, and has considered it in the development of the revised definition of BES.		
Springfield Utility Board	No	"directly connected" is important.
Response: The SDT has revised the definition and that term is no longer utilized. Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.		
Manitoba Hydro		Abstain until exemption process has been defined.
Occidental Energy Ventures Corp	No	Until the exemption process is finalized, it is not prudent to answer in the affirmative.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
Duke Energy		There is not enough information available at this time to adequately evaluate this question. It would be necessary to have a list of exemption criteria or more detail on the exemption process to address this question. This is one of the reasons that the exemption criteria should be developed through the standards development process along with the definition.
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure exception process, which is to be developed in a parallel effort with this BES definition development. Nonetheless, the SDT believes that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. The exception criteria (now included in the revised definition of BES) provides for both inclusions and exclusions. FERC Order No. 743 states that changes to the BES definition “will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities.”</p>		
Northeast Power Coordinating Council		Refer to the response to Question 13.
<p>Response: See response to Q13.</p>		
Entergy Services		Our response to this question depends on the details of the “exemption process”, including what entity has the final decision and how it is implemented. Please see our response to Q13 below.
Orange and Rockland Utilities, Inc.		<p>The purpose of this question is hard to ascertain. The BES exemption process has not yet been finalized or approved. So, it is somewhat difficult to know a priori whether any individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV should or should not be classified as part of the BES definition.</p> <p>This document uses both “exemption process” and “exception process”. Recommend that the phraseology be standardized on “exception process” as the exception (not the exemption) can be to include or exclude elements and facilities.</p> <p>Refer to the response to Question 13.</p>
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure exception process, which is to be developed in an effort parallel with this BES definition development. Nonetheless, the SDT believes that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. The exception criteria will provide for both inclusions and exclusions. FERC Order No. 743 states that changes to the BES definition “will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities.”</p> <p>See response to Q13.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
Xcel Energy		Xcel Energy does not disagree that there may be situations where generators greater than 20 MVA individually or 75 MVA in aggregate are connected via step up Transformers below 100 KV that may need to be included, but we have concerns about the exemption process. This undeveloped process presents itself as a wild card to entities, and will most likely present inconsistencies between regions based upon each Region's preference. Additionally, does the Regional Methodology require any approval (e.g. ERO) other than the Region's own process? The "exclusions" process indicates that the ERO has the final approval authority to exclude an item from the BES. Why would the same not apply for including something into the BES based on the Region's Methodology?
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure exception process, which is to be developed in an effort parallel with this BES definition development. Nonetheless, the SDT believes that criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17. The exception criteria will provide for both inclusions and exclusions. The SDT notes that a stated purpose of Order No. 743 was to eliminate the regional discretion allowed in the existing definition of BES and remove any ambiguity regarding who is required to comply and accomplish the goal of reducing inconsistencies across regions. As per FERC Order No. 672, any regional variations must be approved by FERC, and generally must be more "stringent" than NERC criteria. As envisioned, Regional Entities will be able to question the outcome of bright-line criteria in the BES definition in the pending Rules of Procedure exception process and will bear the burden of proof that such Elements are critical Facilities or not. FERC Order No. 743 states that changes to the BES definition "will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities."</p>		
The Dow Chemical Company		As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.
<p>Response: See response to Q12.</p>		
City of Grand Island	Yes	See comments for items 2 and 5.
<p>Response: See response to Q2 & Q5.</p>		
NERC Staff	Yes	Please see additional comments at the end of this document.
<p>Response: See response to Q13.</p>		
PPL Energy Plus	Yes	Yes, PPL Energy Plus supports an exemption process provided the Exemption process follows FERCs Order 743 paragraph 115: "NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid." As written, however, the 20 MVA threshold does not appear to have been developed per FERC's requirements
LG&E and KU Energy LLC	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
		for the reasons discussed in the response to Questions 2 and 8.
<p>Response: The SDT is committed to drafting a BES definition and exception criteria that will enable the pending Rules of Procedure exception process “that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid.” The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17.</p>		
Utility Services	Yes	See the answer to Question 1.
<p>Response: See response to Q1.</p>		
American Transmission company	Yes	However, the applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on individual generation resources greater than 20MVA would not maintain an Adequate Level of Reliability of the BES.
<p>Response: The SDT has adopted the use of the terms “exception criteria” and “exception process.”</p>		
SERC OC Standards Review Group	Yes	We think the process should be an “exception” rather than an “exemption”. This question seems illogical since the last part of the question assumes the generator is already part of the BES through the determination of the exemption process. If the question was actually generators less than 20 MVA, we don’t agree.
<p>Response: The SDT has adopted the use of the terms “exception criteria” and “exception process.” The SDT believes that the criteria enumerated in the current Statement of Compliance Registry Criteria should be the template for defining the bright-line exception criteria in Project 2010-17.</p>		
IRC Standards Review Committee	Yes	Again, we need to assess the criteria for the exception, which have not been developed. Also, the proposed wording seems to present a circular argument. We suggest to change the wording as follows: Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV that are deemed to be included in the BES as determined by the exception/inclusion process.
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the pending Rules of Procedure exception process, which is to be developed in an effort parallel with this BES definition development.</p> <p>The SDT notes the suggested language in this comment, and has considered it in the development of the revised definition of BES., Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
of 100 kV or above.		
MRO's NERC Standards Review Subcommittee	Yes	FERC has directed (in section 30 of FERC Order 743) that NERC have an established “exemption” process to remove this judgment from the Regions in defining what the BES is. However, the applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on individual generation resources greater than 20MVA would not maintain an Adequate Level of Reliability of the BES.
Response: The SDT has adopted the use of the terms “exception criteria” and “exception process” in its work. Note, however, that neither term is used in the proposed definition of BES.		
City of Redding	Yes	If the exemption process is based on engineering studies targeted to identify those facilities necessary to reliably operate the interconnected transmission system.
City of Anaheim	Yes	
Bonneville Power Administration	Yes	
LCRA Transmission Services Corporation	Yes	
North Carolina EMC	Yes	
ReliabilityFirst	Yes	It is recommended that the exemption process be defined and criteria setup so that a common approach across the ERO can be used to include these facilities.
Glacier Electric Cooperative	Yes	Yes - Once again, this is assuming that the exemption process is an accurate way to truly determine whether or not a facility is significant to the grid.
United Illuminating Company	Yes	Any Generator directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation resources to be included in the BES should be part of BES . There should not be a MVA threshold
City of Austin dba Austin Energy	Yes	This answer assumes that an appropriate engineering study is performed to determine that the asset is necessary for the reliability of the BES.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 6 Comment
The Dayton Power and Light Company	Yes	
Response: Thank you for your response. This criterion was not changed, but is now embedded in the revised definition of BES.		

7. Should the following be classified as part of the BES?

- **Generation plants with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation plants to be included in the BES**

Summary Consideration: Most commenters who responded to this question indicated disagreement with the proposal however there was no consensus amongst the alternate proposals offered, and the proposals suggesting other thresholds were not supported with any technical justification. The SDT has reviewed the industry comments on this issue, debated the topic, and come to an agreement that the bright-line designation for multiple generating units is 75 MVA and 100 kV as shown below. Any deviations from the bright-line designation would be handled through the Rules of Procedure process.

Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.

Several comments indicated that local distribution networks should be excluded, and the drafting team adopted this suggestion and added the following to the list of “Exclusions” from the 100 kV threshold that are included in the revised definition of BES.

Excluded from the BES: E3 - Local distribution networks (LDN): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the Interconnected System. LDN’s are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following:

- Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices;
- Limits on connected generation: The LDN, nor its underlying Elements, includes no more than a total of 75 MVA generation;
- Power flows only into the Local Distribution Network: The generation within the LDN shall not exceed the electric Demand within the LDN;
- Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and
- Not part of a Flowgate or Transfer Path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

Organization	Yes or No	Question 7 Comment
SERC EC Planning Standards Subcommittee	No	We prefer a bright-line rule of 100 kV. The exception process should not be used to include facilities operated at voltages below 100 kV.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
BGE	No	This proposal as written could lead to the inclusion of elements or facilities which have no material reliability impact on the interconnected transmission system.
<p>Response: The SDT has reviewed the industry comments on this issue, debated the topic, and come to an agreement that the bright-line designation for multiple generating units is 75 MVA and 100 kV. Any deviations from the bright-line designation will be handled through the Rules of Procedure process. The process for such inclusions will be developed as part of the revision to the Rules of Procedure by another team, in an effort parallel to the development of this BES definition.</p>		
IRC Standards Review Committee	No	Same comment as in Q6, above.
Public Service Enterprise Group Company	No	See the response to item 6 above.
Snohomish County PUD	No	See response to question 6
Independent Electricity System Operator	No	Same comment as in Q6, above.
<p>Response: See response to Q6.</p>		
Florida Municipal Power Agency	No	See FMPA responses to Questions 5 and 6 above.
Transmission Access Policy Study Group	No	
<p>Response: See responses to Q5 & Q6.</p>		
Electric Market Policy	No	Dominion does not agree that generation plants should be classified as part of the BES.
<p>Response: The SDT finds no basis for the exclusion of generation plants from the BES, and continues to believe that generation is an integral part of the BES which any core BES definition must necessarily include.</p>		
PacifiCorp	No	In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network.

Organization	Yes or No	Question 7 Comment
		<p>In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are “necessary” to operate an interconnected electric transmission network and which “transmission and generation” facilities are not. In other words, there must be a clear way to determine what makes a particular facility is “necessary” for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology.</p> <p>Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team. For example: Generation plants should not be included or excluded solely based on a their gross nameplate rating and the operating voltage at which they are connected to transmission facilities. Generation plants which are necessary to operate the interconnected network should be included as part of the regulated BES. Generating plants which are not “necessary for the operation of the interconnected network” should be excluded. A methodology needs to be developed to determine which generating plants may be excluded as part of the regulated BES.</p>
<p>Response: The SDT acknowledges that commenters will need to reserve judgment on the process, which is to be developed as a modification to the Rules of Procedure by another team in an effort parallel with this BES definition development.</p> <p>The SDT acknowledges the work of the WECC BESDTF, and in keeping with the concepts of that work, envisions that the process will identify for inclusion in the BES only those generators that are necessary to operate the interconnected network.</p>		
ExxonMobil Research and Engineering	No	See comments on questions 2 and 3.
<p>Response: See responses to Q2 & Q3.</p>		
Arizona Public Service Company	No	Generation plants with aggregate capacity of less than 300 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100 kV do not materially impact the reliability of the BES and therefore, should not be classified as part of the BES.
<p>Response: The SDT appreciates the suggestion of a 300 MVA threshold for materiality of impact; however, it sees no technical justification upon which to base a significant departure from the generation MVA thresholds included in the NERC Statement of Compliance Registry Criteria. The SDT has reviewed the industry comments on this issue, debated the topic, and come to an agreement that the bright-line designation for multiple generating units is 75 MVA and 100 kV. Any deviations from the bright-line designation will be handled through the Rules of Procedure process. The process for such inclusions will be developed as part of the revision to the Rules of Procedure by another team, in an effort parallel to the development of this BES definition.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
Pepco Holdings Inc.	No	Some details on the exemption process must be known before accepting this. Who can submit an exemption (DP, GO, GOP, TO, TOP, RC, etc)? How do interested parties get informed? Can others intervene? Would the other facilities completing the connection to a BES facility be automatically included?
American Municipal Power	No	
on behalf of Teck Metals Ltd.	No	
on behalf of Catalyst Paper Corporation	No	
Occidental Energy Ventures Corp	No	Until the exemption process is finalized, it is not prudent to answer in the affirmative.
Idaho Power	No	
Springfield Utility Board	No	
Clark Public Utilities	No	
Response: The SDT acknowledges that commenters may need to reserve judgment on the exception process, which is to be developed as a modification to the Rules of Procedure in an effort parallel with this BES definition development.		
North Carolina EMC	No	Generation facilities operated at voltages below 100kV should only be included in the BES if identified by the RRO as critical to the BES.
Response: The SDT envisions that the exception process that would be used to possibly include such Facilities will identify for inclusion in the BES only those generating plants that are essential to the reliable operation of the interconnected system. This process is being developed as a revision to the NERC Rules of Procedure by another team in an effort parallel to the development of this BES definition.		
Indeck Energy Services	No	Same Response as Question 1
Utility Services	Yes	See the answer to Question 1.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
<p>Response: See response to Q1.</p>		
Southern California Edison	No	SCE currently reports on generation plants with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages above 100kV. SCE does not feel it is necessary to report on generation below 100kV.
<p>Response: While the definition of the BES is a different matter than data reporting for generation plants, the SDT has incorporated a BES designation it believes will address your concerns.</p> <p>Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.</p>		
Southern California Edison Company	No	In SCE's system, generation resources are used to offset load being served by distribution facilities. This means that generation does not flow through step-up transformers into the 100kV and above system. Therefore, those generation resources which are used to provide power to local load within a distribution system should not be included as part of the BES. The Exemption Process should not be applied to such resources.
<p>Response: In its latest revision of the BES definition, the SDT has incorporated a designation for local distribution networks (LDN) for exclusion from the BES.</p> <ul style="list-style-type: none"> • Excluded from the BES: E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following: <ol style="list-style-type: none"> a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices; b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation; c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN; d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL). 		
ISO New England Inc.	No	See the comments provided in response to question 7.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
<p>Response: This is Q7. The SDT assumes that this is a typo and should have referred to a different question.</p>		
PUD No.1 of Clallam County	No	<p>Including elements through an exemption process is bound to create confusion and misunderstandings between the registrants and REs. Please include such elements through an inclusion process. It should also be clarified that registrants are not required to put all sub-100 kV elements through this process; the burden should be on the RE to include elements of particular concern.</p>
Central Lincoln	No	
PNGC Power	No	
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		
ITC Holdings Corp	No	Only included if the plant is deemed Critical by the PRC023 test.
<p>Response: The SDT is aware of the test proposed under PRC-023, however, in this definition, the SDT is striving to develop “bright-line” characteristic criteria that will be used to make definitional inclusions and exclusions, and this will be paired with an “exception process” which will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition. The SDT will forward the suggestion of a “PRC-023 test” to the team tasked with development of the revision to the Rules of Procedure.</p>		
<p>Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)</p>	No	<p>Although Constellation believes that it may be appropriate to include some of the elements above in the BES, this proposal will lead to the inclusion of elements or facilities which have no material impact on the interconnected transmission system.</p> <p>Furthermore, the use of an exemption process to include assets is confusing. Constellation proposes that the BES drafting team structure the revised BES definition to clarify both the inclusions and exclusions as completely as possible. If a separate “opt-in” process is deemed necessary (in anticipation of a few exceptions to the definition) then the drafting team should develop criteria for such a process. Using this approach the sentence above would then read “Generation plants with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where a Regional Entity deems the generation plants to be included in the BES.”</p>
<p>Response: The SDT has reviewed the industry comments on this issue, debated the topic, and come to an agreement that the bright line designation for multiple</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
<p>generating units is 75 MVA and 100 kV. Any deviations from the bright line designation will be handled through the Rules of Procedure process. The SDT is striving to develop “bright-line” characteristic criteria that will be used to make definitional inclusions and exclusions, and this will be paired with the “exception process” which will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition. The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		
<p>City Water Light and Power (CWLP) - Springfield, IL</p>	<p>No</p>	<p>While CWLP agrees with the general concept of inclusion by exception (as opposed to exemption), we have concerns regarding the lack of detailed definition of this process, especially the administrative process for disputes regarding inclusion of elements in the BES.</p> <p>Without firm administrative rules for resolving disputes based on technical justification, we cannot support this measure currently.</p>
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The SDT is striving to develop “bright-line” characteristic criteria that will be used to make definitional inclusions and exclusions as part of the revised definition of BES. The SDT acknowledges that commenters may need to reserve judgment on the process until more clarity is provided via the development of the revision to the Rules of Procedure.</p>		
<p>Lewis County PUD</p>	<p>No</p>	<p>I find it hard to believe that elements connected at less than 100kV are part of the BES.</p> <p>The burden of proof to include elements in the BES should be on the RE not the owner of such facilities.</p>
<p>Southern Company</p>	<p>No</p>	<p>We prefer a bright-line rule of 100 kV.</p> <p>The exception process should not be used to include facilities operated at voltages below 100 kV.</p>
<p>Response: The SDT agrees that the bright-line designation for multiple generating units is 75 MVA and 100 kV. Any deviations from the bright-line designations identified in the final BES definition will be handled through the Rules of Procedure process. (The SDT is striving to develop “bright-line” characteristic criteria that will be used to make definitional inclusions and exclusions as part of the revised definition of BES.) The process for approving such inclusions will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		
<p>American Electric Power (AEP)</p>	<p>No</p>	<p>Please see response provided to question 5.</p>
<p>Response: See response to Q5.</p>		
<p>Orange and Rockland Utilities,</p>		<p>The purpose of this question is hard to ascertain. The BES exemption process has not yet been finalized or approved. So, it is somewhat difficult to know a priori whether any generation plants with aggregate capacity</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
Inc.		greater than 75MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV should or should not be classified as part of the BES definition. This document uses both “exemption process” and “exception process”. Recommend that the phraseology be standardized on “exception process” as the exception (not the exemption) can be to include or exclude elements and facilities. Refer to the response to Question 13.
<p>Response: The SDT acknowledges that commenters may need to reserve judgment on the exception process until more clarity is provided via the development of the revision to the Rules of Procedure.</p> <p>The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. Any deviations from the bright-line designations identified in the final BES definition will be handled through the Rules of Procedure process. (The SDT is striving to develop “bright-line” characteristic criteria that will be used to make definitional inclusions and exclusions as part of the revised definition of BES.)</p> <p>Also, see response to Q13.</p>		
The Dow Chemical Company		As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.
<p>Response: See response to Q12.</p>		
Manitoba Hydro		Abstain until exemption process has been defined.
Duke Energy		There is not enough information available at this time to adequately evaluate this question. It would be necessary to have a list of exemption criteria or more detail on the exemption process to address this question. This is one of the reasons that the exemption criteria should be developed through the standards development process along with the definition.
<p>Response: Thank you for your response. The revised definition of BES includes both a “bright-line” characteristic and a list of criteria that will be used to make definitional inclusions and exclusions to that bright line,</p>		
Entergy Services		Our response to this question depends on the details of the “exemption process”, including what entity has the final decision and how it is implemented. Please see our response to Q13 below.
Northeast Power Coordinating Council		Refer to the response to Question 13.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
NERC Staff	Yes	Please see additional comments at the end of this document.
Response: See response to Q13.		
Xcel Energy		Xcel Energy does not disagree that there may be situations where generators greater than 20 MVA individually or 75 MVA in aggregate are connected via step up Transformers below 100 KV that may need to be included, but we have concerns about the exemption process. This undeveloped process presents itself as a wild card to entities, and will most likely present inconsistencies between regions based upon each Region's preference. Additionally, does the Regional Methodology require any approval (e.g. ERO) other than the Region's own process? The "exclusions" process indicates that the ERO has the final approval authority to exclude an item from the BES. Why would the same not apply for including something into the BES based on the Region's Methodology?
Response: A separate Rules of Procedure (ROP) team is undertaking to develop a process for Facilities that do not fit within the bright-line definition. The details of the process are still under discussion and development. However, the SDT expects that ERO will have an oversight role on the Regional Process.		
ReliabilityFirst	Yes	It is recommended that the exemption process and the term "directly connected" be defined and criteria setup so that a common approach for including plants of this size be used across the ERO for reviewing these facilities and making this determination.
Response: The SDT believes that the phrase "directly connected" has been addressed in the latest revision. The SDT replaced this term with more descriptive language. Included in BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.		
City of Grand Island	Yes	See comments for items 3 and 5.
Response: See responses to Q3 & Q5.		
PPL Energy Plus	Yes	Yes, PPL Energy Plus supports an exemption process provided the Exemption process follows FERCs Order 743 paragraph 115: "NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid." As written, however, the 75 MVA does not appear to have been developed per FERC's requirements for the reasons discussed in the response to Questions 2 and 8.
LG&E and KU Energy LLC	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
<p>Response: The exception process will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p> <p>Also, see response to Questions 2 and 8.</p>		
SERC OC Standards Review Group	Yes	We think the process should be an “exception” rather than an “exemption”. This question seems illogical since the last part of the question assumes the generation plant is already part of the BES through the determination of the exemption process. If the question was actually generation plants less than 75 MVA, we don’t agree.
American Transmission company	Yes	The applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on the generation resource with aggregate capacity greater than 75 MVA would not maintain an Adequate Level of Reliability of the BES.
MRO's NERC Standards Review Subcommittee	Yes	However, the applicable process should be called an “exception” process, not an “exemption” process that infers the concept of “exclusion” and further classified as part of the BES given that a fault or an outage on the generation resource with aggregate capacity greater than 75 MVA would not maintain an Adequate Level of Reliability of the BES.
<p>Response: The SDT acknowledges that the term “exemption” is inappropriate in the context of these proposed “inclusions”, and subsequent drafts will refer to the “exception” process suggested by the Commission in its Order 743. The process for such inclusions will be developed as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		
City of Redding	Yes	See question 6 comments
<p>Response: See response to Q6.</p>		
City of Anaheim	Yes	
Bonneville Power Administration	Yes	
LCRA Transmission Services Corporation	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 7 Comment
Glacier Electric Cooperative	Yes	Yes - Once again, this is assuming that the exemption process is an accurate way to truly determine whether or not a facility is significant to the grid.
United Illuminating Company	Yes	Generation Plants directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation resources to be included in the BES should be part of BES . There should not be a MVA threshold
City of Austin dba Austin Energy	Yes	This answer assumes that an appropriate engineering study is performed to determine that the asset is necessary for the reliability of the BES.
The Dayton Power and Light Company	Yes	
<p>Response: Thank you for your response.</p>		

8. Should the following be excluded from the Elements and Facilities classified as part of the BES?

- **Any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6, and 7 above are excluded from the BES**

Summary Consideration: Most commenters who responded to this question indicated agreement with the proposal. The SDT agrees with the majority of industry comments and has developed “bright-line” exclusions for designated radial systems (only serving Load and designated generation resources) as part of the revised BES definition in the NERC Glossary without going through the exception process being developed separately as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.

The revised definition includes a list of “Inclusions” and “Exclusions” from the 100 kV threshold and no longer references any ‘exemption process’. Based on stakeholder comments, the following “Exclusions,” relative to radial systems, has been added to the revised definition of BES:

- Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:
 - d) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or,
 - e) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or,
 - f) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5.

Based on stakeholder comments, the following “Exclusions,” relative to local distribution networks, has been added to the revised definition of BES:

- Excluded from the BES: E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN’s are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following:
 - a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices;
 - b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation;
 - c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN;
 - d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and
 - e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Electric Market Policy	No	Dominion supports bright line exclusions of radial lines regardless of their kV rating. Radial lines to/from solely generation facilities and radial lines to/from load are comparable in terms of their impact on an interconnected transmission network. There are situations where these radials make a meaningful and required contribution to the operation of an interconnected transmission network and there are other locations/situations where these radials do not. Therefore, radial lines should only be specifically included in the definition of BES after the RRO has demonstrated that inclusion of the radial is necessary to operate an interconnected transmission network and the owner/operator of the radial line has had the opportunity to exercise its aforementioned appeal rights.
Independent Electricity System Operator	Yes	Classification of all radial facilities operated at voltages of 100 kV and above as part of the BES by default would be unnecessary and administratively inefficient, and could potentially lead to delays in the review and approval of other exemption requests. As such, the proposed definitions should be revised to clearly define what radial Transmission Elements will not be included as part of the BES. This would be consistent with FERC’s intention expressed in Paragraph 55 of Order 743 to not alter the part of the approved definition that deals with “radial transmission facilities serving only load”. Additionally, to ensure a common understanding of the meaning of “radial” and to promote consistency in its application, we believe “radial” should be defined after seeking stakeholder input and added to the NERC Glossary.
MRO's NERC Standards Review Subcommittee	Yes	However, the NSRS agrees that a radial transmission element or system directly connected from one Transmission source to a Load-serving Element and/or generation resources are excluded as part of the BES given that a fault or an outage of the radial transmission element or system would not impact the Adequate Level of Reliability of the BES.
SERC EC Planning Standards Subcommittee	Yes	The definition should clearly state that these elements are excluded. It currently implies that the exception process would have to be applied to exclude radial elements.
Florida Municipal Power Agency	Yes	Radial Transmission Elements connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6, and 7 above should be excluded from the BES. It is very important that the exclusion of radial transmission serving only load with one transmission source be recognized as a categorical exclusion from the BES definition, not merely as grounds for requesting an exemption. In that way, such radials do not have to go through an exemption process, but are treated the same as sub-100 kV Transmission, as they are today. In other words, such Elements could be included in the BES only if a case-by-case assessment pursuant to the inclusion process demonstrates that a particular radial Element is necessary for operating the interconnected electric transmission network. If every such Element instead had to go through a case-by-case exemption process in order to be exempted from the BES, there would be a staggering burden on small entities and on NERC to process exemption requests for all of
Transmission Access Policy Study Group	Yes	

Organization	Yes or No	Question 8 Comment
		<p>the radials serving only load with one transmission source that are excluded from the BES under the current definition. Order 743 does not require NERC to impose any new burdens on entities who own radials serving only load that are currently excluded from the BES.FMPA supports adding to the current exclusion a specification that “A radial Transmission Element may be considered as ‘serving only load’ for purposes of the foregoing general exclusion even if it connects generation, so long as that generation is not registered pursuant to the Statement of Compliance Registry Criteria.” We believe that this formulation captures the generation intended in this Question’s reference to “generation resources not included in items 2, 3, 4, 6, and 7 above.” The FERC-approved Compliance Registry Criteria recognize that a small generator, so long as it is not a “blackstart unit material to and designated as part of a transmission operator entity’s restoration plan,” is not material to the reliability of the BES. It follows, therefore, that if a radial line would not be included in the BES but for the presence of this inconsequential generation, the presence of such non-registered generation does not cause the line to become necessary for operating an interconnected electric transmission system. For example, rooftop photovoltaic cells are now common enough that allowing their presence to prevent a radial from being excluded would render the exclusion of radials to load meaningless. Of course, the application of the definition of the BES is dynamic. For example, in considering whether new generation connected by what had previously been a radial to load should be registered, NERC may also reevaluate the exclusion of the radial. There is no basis for differentiating between radials serving only load, and radials serving load with insignificant generation. Neither is necessary for operating an interconnected electric transmission network, and so both should be excluded from the BES absent a specific demonstration as to the materiality of a particular radial. Finally, it may be appropriate for Registered Entities to have the option of submitting to NERC an informational filing listing their excluded radials. Whether or not a Registered Entity submits such an informational filing to NERC, a Registered Entity’s claimed exclusion of a radial serving only load and/or unregistered generation should apply unless and until the radial is added to the BES through the inclusion process (see FMPA comments on BES exemption process submitted today).</p>
SERC OC Standards Review Group	Yes	<p>We assume the question was meant to read: Any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6 and 7 above. Any ac transmission Facility composed of Transmission Line(s), substation Facilities, and transformers that is connected to BES ac Transmission Facilities at only one point by automatic interruption devices (e.g., circuit breaker or fuse), and is not capable of being switched so as to be simultaneously connected to BES ac transmission Facilities at a second point, should be considered an “excluded radial transmission Facility.”</p>
Southern Company	Yes	
<p>Response: The SDT agrees and has developed “bright-line” exclusions for designated radial systems (only serving Load and designated generation resources) as part of the revised BES definition in the NERC Glossary without going through the exemption process being developed separately as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
<p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. <p>Any deviations from the bright-line designation would be handled through the Rules of Procedure process.</p>		
PPL Energy Plus	No	<p>a) By not allowing exclusion of the generators listed under Items 2,3,4,6,&7, this exclusion is really a blanket inclusion of all generators over 20MVA. This blanket inclusion is discriminatory because it does not take into consideration FERC’s orders in Order 743 paragraph 38 that states it is the parallel nature of the lines (and generator lead lines are not parallel to the Interconnected Network) that justify their inclusion in the BES, NOT the radial nature of their service. The blanket inclusion of items 2,3,4,6&7 also does not appear to account for FERC Order 743 in paragraph 120 that encourages exclusion of radial facilities.</p> <p>b)Further, for the reasons provided in brackets beside the quoted text below, the stated exemption (which is really a blanket inclusion of items 2,3,4,6&7) appears to ignore FERC Order 743 paragraph 73 which recognizes that Network Transmission Facilities with specific characteristics should be included in the BES and most generator lead lines fail to meet the criteria laid out by FERC:</p> <ul style="list-style-type: none"> i.most 100 kV lines are parallel to other HV/EHV lines and are significantly loaded by failure of the HV/EHV lines. [this is not the case with 20 MVA generators] ii.connect “significant” generation. [less than 200 MVA is generally not significant to the BES] iii.may be part of a defined transfer path or flowgate. [rarely if ever for a generator] iv.are capable of causing or contributing to major disturbances. [rarely if ever will this apply to a generator since an N-1 will take out most generators and the reliability of the Interconnected Network is rarely affected by an N-1.]
LG&E and KU Energy LLC	No	
PacifiCorp	No	<p>In Order No. 743, the Commission stated that it believes that the best way to address their concerns is to eliminate the Regional Entities’ discretion to define “bulk electric system” without ERO or Commission review, maintain a bright-line threshold that includes all facilities operated at or above 100 kV except defined radial facilities, and adopt an exemption process and criteria for excluding facilities that are not necessary to operate an interconnected electric transmission network. PacifiCorp believes that the correct interpretation of this</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
		sentence is that certain defined radial facilities may be excluded from the definition of BES without going through the exemption process. The Commission, in paragraph 119 of Order No. 743, does state that the ERO “could track exemptions for radial facilities,” however, PacifiCorp believes that this step is unnecessary and would be unduly burdensome for both NERC and registered entities. Therefore a clear definition of excluded radial transmission elements must be developed and should be defined in the NERC Glossary or in the BES definition itself.
Springfield Utility Board	No	This question is unclear. There is no NERC definition of "radial" or "Radial". Does this mean transmission systems normally operated radially but that could be operated in such a way that the system was not radial that are owned by an LSE/DP and not a TOP/TO (for example) or transmission system? If radial includes systems "normally operated radial" then "Yes".
Lewis County PUD	No	We note that “radial” and “one Transmission source” are not presently defined. Any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources less than 150MVA should be excluded from the BES. We object to requiring such elements to go through an exemption process to become excluded.
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)	Yes	Constellation believes that the BES definition should incorporate exclusions where possible to eliminate the need for going through an exclusion process for common facilities that should not be classified as BES.
FirstEnergy Corp	Yes	Needs to be directly identified in the BES definition and not subject to the exemption process.
<p>Response: The SDT agrees and has developed “bright-line” exclusions for designated radial systems (only serving Load and designated generation resources) as part of the revised BES definition in the NERC Glossary without going through the exception process being developed separately as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p>		

Consideration of Comments on Definition of Bulk Electric System – Project 2010-17

Organization	Yes or No	Question 8 Comment
<p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. 		
United Illuminating Company	No	<p>Generator Resources should not be excluded. Load connected by a single radial line can be excluded.</p>
<p>Response: The current Compliance Registry Criteria already excludes certain generator resources from registration. The SDT agrees with this concept and is continuing that line of thought in the revised definition. The SDT agrees.</p>		
ITC Holdings Corp	No	
National Rural Electric Cooperative Association (NRECA)		<p>Without explicit exemption criteria to review, it is too early to answer this question. Final exemption criteria must provide for consistency across all Regional Entities when determining the inclusion or exclusion of radial facilities as part of the BES. All exemption criteria must be explicit and unambiguous in order to provide as much certainty as possible. Work done by the Regional Entities on exemption criteria should be reviewed to determine its usefulness to the SDT. The SDT should consider that load-serving radial transmission lines of any voltage should be excluded from the BES, especially since these lines are localized and do not affect the integrity of the BES, i.e., load flow, power flow and short circuit studies. The SDT must also pay particular attention to the PRC standards and its applicability to radial facilities.</p>
<p>Response: Thank you for your response.</p>		
The Dow Chemical Company		<p>Dow recommends that NERC finalize a basic framework for identifying BES facilities before evaluating individual facilities or types of facilities. Such a framework is recommended by Dow in response to questions #11 and #12 below.</p>
<p>Response: See responses to Q11 & 12.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Central Lincoln	Yes	We note, however, that “radial” and “one Transmission source” are not presently defined and are not treated the same way by the various REs. Please define “radial” in terms of a normal operating mode and clarify that “one Transmission source” may branch out to have multiple paths to generation upstream of the radial tap. As noted elsewhere, we object to requiring such elements to go through an exemption process to become excluded.
PUD No.1 of Clallam County	Yes	
PNGC Power	Yes	
Blachly-Lane Electric Co-op	Yes	
Clearwater Power Co.	Yes	
Douglas Electric Cooperative	Yes	
Central Electric Cooperative, Inc. (Redmond Oregon)	Yes	
Raft River Rural Electric Cooperative	Yes	
Northern Lights Inc.	Yes	
Salmon River Electric Cooperative	Yes	
Okanogan Country Electric Cooperative	Yes	
Lost River Electric	Yes	
Lane Electric Cooperative	Yes	
Coos-Curry Electric Cooperative	Yes	
Consumer's Power Inc.	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Umatilla Electric Co-op	Yes	
West Oregon Electric Cooperative	Yes	
Lincoln Electric Cooperative	Yes	
Fall River Electric Cooperative	Yes	
<p>Response: The SDT agrees and has developed “bright-line” exclusions for designated radial systems (only serving Load and designated generation resources) as part of the revised BES definition in the NERC Glossary without going through the exception process being developed separately as part of the revision to the Rules of Procedure by another team in an effort parallel to the development of this BES definition.</p> <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. <p>Radial systems will be clearly described in the exclusion designations.</p>		
Xcel Energy		<p>Xcel Energy has provided a diagram to Ed Dobrowolski on 1/21/11 that lays out a scenario that should be considered and worked through as part of the development of the definition and exemptions. As stated in questions 2 & 3 it is unclear as to how treatment of facilities would occur, especially if there are multiple/separate owners of each wind farm, even though they aggregate to a common bus that connects to the transmission system. Treatment of the bus and breakers between each wind farm and the transformer also needs to be contemplated and addressed in the definition or exclusion process.</p>
<p>Response: See responses to Q2 & Q3.</p>		
Indeck Energy Services	Yes	Same Response as Question 1

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Response: See response to Q1.		
NERC Staff		Please see additional comments at the end of this document.
Response: See response to Q13.		
ExxonMobil Research and Engineering	Yes	NERC should follow the model of RFC and provide an appendix that provides examples of what type of radial feeds are exempted. NERC should also utilize IEEE C37.95: Guide for the Protective Relaying of Utility-Consumer Interconnections Section 4, which details typical interconnection facilities, as a reference when developing their concept of the BES. Addressing typical interconnection facility configurations will assist the NERC SDT in developing a clear and concise definition that provides a precise line of demarcation between elements of the BES and end use customer facilities.
Response: The SDT believes that a bright-line definition such as provided in the latest revision is more useful than examples in appendices.		
Pepco Holdings Inc.	Yes	Radial transmission element or system and load-serving elements need to be defined.
Manitoba Hydro	Yes	Radial transmission elements and systems should be excluded, but a clear NERC definition of radial is required.
Duke Energy	Yes	Radial Transmission Element or System needs to be more clearly defined.
Response: The SDT believes that with the revisions made to the proposed definition that no other definitions will be required.		
Idaho Power	Yes	This should be expanded to transmission elements or systems that source load serving stations. Two examples are: 1.) The non-radial transmission system serving a metro area load at 138 kV where 230 kV and higher voltage systems surround the area and provide the bulk electric system transfer, and 2.) The non-radial transmission loops that serve rural area load at 138 kV that are essentially tangential to the bulk electric transfer path.
<p>Response: The SDT has discussed this at length and has drafted exclusions for local distribution networks that should address these concerns and that will be available for review and comments.</p> <p>Excluded from the BES: E1 - Local Distribution Networks (LDN): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the Interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
<p>of service to retail customer Load. The LDN is characterized by all of the following:</p> <ul style="list-style-type: none"> a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices; b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation; c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN; d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL). 		
Public Service Enterprise Group Company	Yes	See the response to item 6 above.
<p>Response: See response to Q6.</p>		
Northeast Power Coordinating Council	Yes	
City of Redding	Yes	However, the NERC GO/TO work should incorporated.
City of Anaheim	Yes	Transmission elements serving radial load, radial distribution systems, or non-GO/GOP generation connected to such radial lines and excluded from BES; provided, however, to eliminate any reliability gaps, such radial transmission elements should be classified as "Distribution" equipment subject to DP standards, and the PRC and vegetation management standards should be made applicable to Distribution Providers and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for radial transmission facilities that function as Distribution and are not required for the reliable operation of the BES.
IRC Standards Review Committee	Yes	
Bonneville Power Administration	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Competitive Suppliers	Yes	The consideration and criteria about whether radials should be included as elements of the BES or not, needs to ensure consistency across the Regional Entities, based upon the future revised BES definition and the exemption criteria. Much of the consideration from the prior questions is based on generators and their size as measured by their capacity and connection voltage. While EPSA believes that there are some facilities that should be included (but not all) the “Yes” response to this question is really dependent on the exemption criteria developed by the Standard Drafting Team for radial lines. The “bright-line” criteria from earlier questions are not sufficient to make an assertion about what is necessary for reliability with respect to radial lines. Criteria about generators and their connections is one piece for ensuring reliability. Further bright-line criteria need to be determined for load-serving elements on par with the generator criteria relevant for reliability. The BES definition additionally needs to recognize that load and generation can have similar affects on the BES because both can affect BES voltage and frequency. As written, the BES definition appears to apply to generation but not load when in fact the BES sees the difference between load and generation mainly as the direction of power flow.
Arizona Public Service Company	Yes	
LCRA Transmission Services Corporation	Yes	
American Municipal Power	Yes	
North Carolina EMC	Yes	Radial facilities meeting the above criteria should be automatically exempted from classification as a part of the BES and should not be required to go through a separate exemption process.
ReliabilityFirst	Yes	As long the facility is purely radial and could under no circumstance or system topology (i.e. via switching or re-configuration) trip/lockout a BES facility.
on behalf of Teck Metals Ltd.	Yes	Parallel transmission lines from a single source (substation) to a single load should be excluded from the BES, with the consent/request of the owner of the connected load (and/or all customers that constitute the connected load).
Southern California Edison	Yes	SCE currently does not report on any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6, and 7 and believes the above should be excluded.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Southern California Edison Company	Yes	
on behalf of Catalyst Paper Corporation	Yes	Parallel transmission lines from a single source (substation) to a single load should be excluded from the BES, with the consent/request of the owner of the connected load (and/or all customers that constitute the connected load).
City of Grand Island	Yes	
Occidental Energy Ventures Corp	Yes	The existing exclusion for radial lines serving load should be maintained. If clarification of the existing language concerning radials is required, the exclusion and definition of “radial systems,” including the explanation of “normal operations,” contained in the BES Concept Document seems to accurately reflect radials serving load or small generators that should be excluded from the BES. FERC orders directing change in the BES definition support maintaining this exclusion.
City of Anaheim	Yes	Transmission elements serving radial load, radial distribution systems, or non-GO/GOP generation connected to such radial lines and excluded from BES; provided, however, to eliminate any reliability gaps, such radial transmission elements should be classified as "Distribution" equipment subject to DP standards, and the PRC and vegetation management standards should be made applicable to Distribution Providers and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for radial transmission facilities that function as Distribution and are not required for the reliable operation of the BES.
Glacier Electric Cooperative	Yes	I don't think a radial transmission system would ever have a significant impact on the BES, so they should be excluded.
ISO New England Inc.	Yes	Per FERC Order 743, paragraph 55, the Commission declared, "As we stated in the NOPR, we do not seek to modify the second part of the definition through this Final Rule, which states that "radial transmission facilities" serving only load with one transmission source are generally not included in this definition." ISO-NE maintains that this definition of radial should be the default position and only in cases where other radial configurations are to be considered should they be examined as part of any exemption or exclusion methodology that is developed by NERC in accordance with Order 743.
Entergy Services	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 8 Comment
Snohomish County PUD	Yes	FERC Order No. 743 is clear that FERC did not intend to disturb the existing exemption for radial facilities. Accordingly, radial systems should be excluded from the BES. This should not change if the radial system is used to interconnect a BES generator for reasons set forth in the GOTO Task Force report.
Orange and Rockland Utilities, Inc.	Yes	
American Transmission company	Yes	ATC agrees that a radial transmission element or system directly connected from one Transmission source to a Load-serving Element and/or generation resources are excluded as part of the BES given that a fault or an outage of the radial transmission element or system would not maintain an Adequate Level of Reliability of the BES.
Utility Services	Yes	
City of Austin dba Austin Energy	Yes	
The Dayton Power and Light Company	Yes	
BGE	Yes	BGE believes that the BES definition should incorporate exclusions where possible to eliminate the need for going through an exclusion process for common facilities which should not be classified as BES.
City Water Light and Power (CWLP) - Springfield, IL	Yes	
American Electric Power (AEP)	Yes	Yes, and we believe that this exclusion should be applied to both Transmission and Generation.
Clark Public Utilities	Yes	
<p>Response: Thank you for your comments. The revised definition includes a list of “Inclusions” and “Exclusions” from the 100 kV threshold and no longer references any ‘exemption process’. Based on stakeholder comments, the drafting team added “Exclusions,” to the BES definition relative to radial systems and local distribution networks.</p>		

9. Should the following be excluded from the Elements and Facilities classified as part of the BES?

- Elements and Facilities identified through application of the exemption process, consistent with the criteria, where the exemption process deems that the Element or Facility should be excluded from the BES (with concurrence from the ERO)

Summary Consideration: The majority of the industry responded positively to this question. However, the SDT understands that the process is still in development and that may affect actual responses. The SDT is striving to develop a revised “bright-line” definition that contains certain inclusions/exclusions and that should remove any confusion. A separate Rules of Procedure (ROP) team is undertaking to develop a separate process for Facilities that entities may choose to follow for their unique/special circumstances that do not fit within the definition and its designation.

Organization	Yes or No	Question 9 Comment
IRC Standards Review Committee	No	We find this exclusion criteria to be redundant. We believe that the proposed definition together with the basic inclusion criteria suffice to provide a bright line framework for determining Elements/Facilities that should be included as BES. Having this exclusion criteria confuses the bright line approach and does not add any value to the basic definition and inclusion criteria.
Independent Electricity System Operator	No	We find this exclusion criteria to be redundant. We believe that the proposed definition together with the basic inclusion criteria suffice to provide a bright line framework for determining Elements/Facilities that should be included as BES. Having this exclusion criteria confuses the bright line approach and does not add any value to the basic definition and inclusion criteria.
Electric Market Policy	Yes	Dominion conceptually supports an exemption process whereby NERC or the RRO could apply to have an element included or excluded from the BES definition. Such process recognizes that it may be necessary to include elements that do not meet the bright line criteria but are necessary for operating an interconnected transmission network. Such process should be developed through the existing NERC standards development process and include a robust appeals process for the owner/operator of any element so included or excluded.
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC	Yes	Constellation recognizes the value in clarifying the Definition of Bulk Electric System into a bright line threshold consistently applied across the regions. However, we are concerned that the current approach of a simple, all inclusive definition coupled with an exception criteria and process will not draw on the fundamentals underpinning the existing definition and create a cumbersome and unnecessary exception process. As an alternative, we propose that the standard drafting team utilize the -Section III (Rules of Procedure Appendix 5B) along with definition threshold language to develop a more comprehensive definition. Regardless of approach, any elements and facilities found to meet the criteria for exemption should be exempted. The development of such criteria should be part of the BES drafting team’s

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
("CDD"), Constellation NewEnergy, Inc., ("CNE") and Constellation Energy Nuclear Group, LLC, ("CENG")		responsibility.
<p>Response: Your comments are noted. The SDT is striving to develop a "bright-line" definition that will contain certain inclusions/exclusions and that should remove any confusion. A separate Rules of Procedure (ROP) team is undertaking to develop a separate process for Facilities that entities may choose to follow for their unique/special circumstances that do not fit within the definition and its designation.</p>		
Occidental Energy Ventures Corp	No	Until the exemption process is finalized, it is not prudent to answer in the affirmative.
Manitoba Hydro		Abstain until exemption process has been defined.
<p>Response: The SDT understands that the process is still in development and how that may affect your response.</p>		
National Rural Electric Cooperative Association (NRECA)		<p>Without specific exemption criteria to review, it is too early to explicitly answer this question. However, the concept appears to be logical. All exemption criteria must be explicit and unambiguous in order to provide as much certainty as possible.</p> <p>Work done by the Regional Entities on exemption criteria should be reviewed to determine its usefulness to the SDT.</p>
PacifiCorp	Yes	<p>In Order No. 743, the Commission directed NERC to adopt an exemption process for excluding facilities from the definition of the BES that are not necessary to operate an interconnected electric transmission network. In order to determine which facilities may be excluded, there must be criteria and a methodology that may be applied to identify which facilities are "necessary" to operate an interconnected electric transmission network and which "transmission and generation" facilities are not. In other words, there must be a clear way to determine what makes a particular facility is "necessary" for bulk system operation. Application of the criteria and methodology will result in the identification of the facilities that may be excluded. The comment questions asked in this questionnaire cannot be answered in a meaningful way absent this methodology.</p> <p>Significant efforts have been undertaken by the WECC Bulk Electric System Definition Task Force (BESDTF) over the course of the past year to identify some initial criteria and methodologies. These efforts are ongoing and should be supported by the NERC drafting team.</p>
<p>Response: The SDT is striving to develop a "bright-line" definition that will contain certain inclusions/exclusions and that should remove any confusion. A separate Rules of Procedure (ROP) team is undertaking to develop a separate process for Facilities that entities may choose to follow for their unique/special</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
<p>circumstances that do not fit within the definition and its designation. Work done by Regional Entities is one of many inputs to the SDT deliberations.</p>		
Xcel Energy		<p>This undeveloped process presents itself as a wild card to entities, and will most likely present inconsistencies between regions based upon each Region's preference. Additionally, does the Regional Methodology require any approval (e.g. ERO) other than the Region's own process? The "exclusions" process indicates that the ERO has the final approval authority to exclude an item from the BES. Why would the same not apply for including something into the BES based on the Region's Methodology?</p>
MRO's NERC Standards Review Subcommittee	Yes	<p>This will give the industry a clear set of criteria to follow which is FERC approved. If a Regional Entity has a need to alter this process there are processes in place for them to pursue a variance. However, the applicable process should be called an "exception" process to avoid the connotation that "exemption" process has for the "inclusion" aspect of the process. NSRS believes the exemption process, review and approval, would be best handled by the Regional Entity (RE) since they have more knowledge on the transmission system in their region. The "who" and "what" will have to be spelled out clearly in the criteria for the exception process.</p>
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop a process for Facilities that do not fit within the bright-line definition. The details of the process are still under discussion and development. However, the SDT expects that ERO will have an oversight role on the Regional Process.</p>		
The Dow Chemical Company		<p>Dow recommends that NERC finalize a basic framework for identifying BES facilities before evaluating individual facilities or types of facilities. Such a framework is recommended by Dow in response to questions #11 and #12 below.</p>
<p>Response: See responses to Q11 & 12.</p>		
Entergy Services		<p>Our response to this question depends on the details of the "exemption process", including what entity has the final decision and how it is implemented. Please see our response to Q13 below.</p>
Northeast Power Coordinating Council	Yes	<p>Refer to the response to Question 13.</p>
FirstEnergy Corp	Yes	<p>Yes, but the process should be simple, rarely used with a high threshold for removing any 100kV and above facility from the normally defined BES. Please see our Question 13 response for further views.</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
NERC Staff	Yes	Please see additional comments at the end of this document.
Orange and Rockland Utilities, Inc.	Yes	Refer to the response to Question 13.
Response: See response to Q13.		
Florida Municipal Power Agency	Yes	It is important to maintain the distinction between “exclusions” and “exemptions.” The SDT seems at times to use the words interchangeably. An exclusion is a categorical carve-out from the BES definition, such that excluded Elements are treated the same as sub-100 kV Transmission. FMPA proposes the following exclusion, which would retain the existing exclusion of radials serving only load with one Transmission source, clarified to add radials serving inconsequential generation to the exclusion: Radial Transmission Elements serving only load with one Transmission source are generally not included in this definition. A radial Transmission Element may be considered as “serving only load” for purposes of the foregoing general exclusion even if it connects generation, so long as that generation is not registered pursuant to the Statement of Compliance Registry Criteria. To obtain an exemption, on the other hand, an entity must go through the NERC exemption process. If the owner or operator of an Element that is nominally part of the BES can demonstrate to NERC that the particular Element meets the criteria for demonstrating that it is not necessary for operating the interconnected electric transmission network, that Element should be granted an exemption and thus considered non-BES. (See also FMPA comments on BES exemption process submitted today.) Requests for exemptions should be decided by NERC, not the Regional Entities, in order to foster continent-wide uniformity.
Transmission Access Policy Study Group	Yes	
Response: Your comments are noted. The SDT is striving to develop a “bright-line” definition that will contain certain inclusions/exclusions and that should remove any confusion. A separate Rules of Procedure (ROP) team is undertaking to develop a separate process for Facilities that entities may choose to follow for their unique/special circumstances that do not fit within the definition and its designation.		
Pepco Holdings Inc.	Yes	<ol style="list-style-type: none"> 1. The proposed BES definition should be expanded to contain more specific criteria for what is excluded (and included) to minimize the need for exemptions. The exemption process should only be needed for a few special situations that are not covered in the criteria. 2. The exemption process should rest with the regional entity.
Response: 1. Your comments are noted. The SDT is striving to develop a “bright-line” definition that will contain certain inclusions/exclusions and that should remove any confusion. 2. A separate Rules of Procedure (ROP) team is undertaking to develop a process. Regional entities are expected to have an important role in the exception		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
process. However, as directed by FERC, it is expected that the ERO would have an oversight and/or approval role. The details of the process are still under discussion and development.		
Indeck Energy Services	Yes	Same Response as Question 1
Utility Services	Yes	See the answer to Question 1.
Response: see response to Q1.		
PUD No.1 of Clallam County	Yes	We agree with this except for the parenthetical. If the exemption process itself is approved by the ERO, there should be no reason to get ERO concurrence on every exempted element. Such a process will bog down the system so that the process will take years. Concurrence with the RE should be sufficient. The ERO should only become involved in the event of disagreement between the registrant and the RE.
Central Lincoln	Yes	
PNGC Power	Yes	
Blachly-Lane Electric Co-op	Yes	
Clearwater Power Co.	Yes	
Douglas Electric Cooperative	Yes	
Central Electric Cooperative, Inc. (Redmond Oregon)	Yes	
Raft River Rural Electric Cooperative	Yes	
Northern Lights Inc.	Yes	
Salmon River Electric Cooperative	Yes	
Okanogan Country Electric Cooperative	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
Lost River Electric	Yes	
Lane Electric Cooperative	Yes	
Coos-Curry Electric Cooperative	Yes	
Consumer's Power Inc.	Yes	
Umatilla Electric Co-op	Yes	
West Oregon Electric Cooperative	Yes	
Lincoln Electric Cooperative	Yes	
Fall River Electric Cooperative	Yes	
Lewis County PUD	Yes	
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop an exception process. Regional entities are expected to have an important role in the exception process. However, as directed by FERC, it is expected that the ERO would have an oversight and/or approval role. The details of the process are still under discussion and development.</p>		
United Illuminating Company	Yes	NERC should specify the technical criteria to determine the exemption of a facility. NERC could either directly or delegate to the The Regional Entity to oversee the exemption process and verify consistency and maintain lists.
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop an exception process. Regional entities are expected to have an important role in the exception process. However, as directed by FERC, it is expected that the ERO would have an oversight and/or approval role. The details of the process are still under discussion and development.</p>		
American Transmission company	Yes	However, the applicable process should be called an “exception” process to avoid the connotation that “exemption” process has for the “inclusion” aspect of the process. ATC believes the exemption process, review and approval, would be best handled by the Regional Entity (RE) since they have more knowledge on the transmission system in their region. The “who” and “what” will have to be spelled out clearly in the criteria

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
		for the exception process. For consistency, it is appropriate for the ERO to monitor and concur with the exceptions.
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop an exception (inclusion/exclusion) process. Regional entities are expected to have an important role in the exception process. However, as directed by FERC, it is expected that the ERO would have an oversight and/or approval role. The details of the process are still under discussion and development.</p>		
City Water Light and Power (CWLP) - Springfield, IL	Yes	CWLP generally agrees with this point, but would like to see a firm, detailed administrative process for resolving disputes for exemptions with technical justification as the guiding principle.
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop an exception process for Facilities that do not fit within the bright-line definition. The details of the process are still under discussion and development.</p>		
American Electric Power (AEP)	Yes	As noted in our response to question 5, we believe that an exemption process is needed, though substantive comments cannot be made until details of such a process and its related criteria are provided.
<p>Response: See response to Q5.</p>		
Springfield Utility Board	Yes	Who can apply? Who pays for the process? Is there a time frame for approval? Is the registered entity required to meet reliability requirements for the Element or Facility while it is in the exemption process? Part of the concern is that there are Elements and Facilities that are not necessary for the reliability for the BES but if they were included as part of the BES definition would significantly harm the entity financially to meet compliance with no measurable impact to reliability.
<p>Response: A separate Rules of Procedure (ROP) team is undertaking to develop an exception process for Facilities that do not fit within the bright-line definition. The details of the process are still under discussion and development. The SDT will forward your comments to the ROP team for consideration as part of their process.</p>		
City of Redding	Yes	The key element is a good exemption process based on sound engineering principles.
City of Anaheim	Yes	
SERC EC Planning Standards Subcommittee	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
Public Service Enterprise Group Company	Yes	No Comment
Bonneville Power Administration	Yes	
PPL Energy Plus	Yes	Yes, PPL Energy Plus support an exemption process for facilities (such as radial generation service and 100 kV looped load service) provided the Exemption process follows FERCs Order 743 paragraph 115: “NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid.”
LG&E and KU Energy LLC	Yes	
ExxonMobil Research and Engineering	Yes	There should be an exemption process. There should also be a documented process for appealing the determination of whether or not a facility is part of the BES.
Arizona Public Service Company	Yes	
LCRA Transmission Services Corporation	Yes	
American Municipal Power	Yes	
North Carolina EMC	Yes	If elements or facilities meet one of the BES definition classifications identified in Questions 1-7 above, the owner of the facility or element should be able to apply for an exemption through the exemption process. In other words, the criteria outlined in Questions 1-7 should be considered a "bright-line" criteria for inclusion in the BES. If a facility meets one or more of these criteria, it can only be excluded from the BES by applying for an exemption through the exemption process.
ReliabilityFirst	Yes	However, the exemption process and criteria needs to be clearly defined so that a common approach across the ERO is used when this determination is made.
on behalf of Teck Metals Ltd.	Yes	
Southern California Edison	Yes	SCE agrees Elements and Facilities identified through application of the exemption process, consistent with the criteria, where the exemption process deems that the Element or Facility should be excluded from the BES (with concurrence from the ERO).

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
Southern California Edison Company	Yes	
on behalf of Catalyst Paper Corporation	Yes	
City of Grand Island	Yes	
Glacier Electric Cooperative	Yes	Yes - This is assuming that the exemption process is an accurate way to truly determine whether or not a facility is significant to the grid. I think such an analytical method will be much more effective and accurate than a bright-line approach.
ISO New England Inc.	Yes	We generally support this approach, subject to the assessment of the detailed exemption/inclusion criteria and process.
Snohomish County PUD	Yes	If the Element or Facility is demonstrated through engineering studies performed as part of the exemption process to be unnecessary for the reliable operation of the interconnected bulk transmission system, the Element or Facility should not be classified as part of the BES regardless of its operating voltage.
City of Austin dba Austin Energy	Yes	
Duke Energy	Yes	
The Dayton Power and Light Company	Yes	
ITC Holdings Corp	Yes	
BGE	Yes	No comment.
Southern Company	Yes	Yes, provided the evaluation method is clear, understandable, and technically based.
Idaho Power	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 9 Comment
Clark Public Utilities	Yes	
Response: Thank you for your response.		

10. Should the following be excluded from the Elements and Facilities classified as part of the BES?

- **Generating plant control and operation functions which include relays and systems that control and protect the unit for boiler, turbine, environmental, and/or other plant restrictions**

Summary Consideration: Most commenters who responded to this question indicated agreement with the proposal. The SDT has discussed generator plant controls and operation functions and feels that they should not be included in the BES definition. It was determined that balance of plant equipment, including control and operation functions, fall within the scope of existing reliability standards. However, the SDT believes the inclusion of generator leads and the GSU for some configurations have been established by the SDT through discussions of the elements and resources material integral to the reliable operation of the BES. The bright-line designation will be developed as part of this project and the ROP process will be handled through the revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.

The revised BES definition includes the following “Inclusions” as elements of the BES:

Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.

Included in the BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.

Organization	Yes or No	Question 10 Comment
Bonneville Power Administration	No	However, if the generator is not part of BES, then the plant control and operation functions should not be included in the BES as well.
Glacier Electric Cooperative	No	Once again, it depends on the facility's significant impact to the grid.
Manitoba Hydro		If there is an impact to frequency or voltage response or facility ratings it should be included.
City of Austin dba Austin Energy	Yes	This response assumes the question refers to devices within the plant itself. In other words, the relays, etc. within the plant and used to protect the generation assets should not be included in the definition of BES. Additionally, many generation units have a design basis allowing some equipment to trip without impact to the generation output.
City of Redding	Yes	Only the relays and protection schemes that protect BES equipment (example is a BES substation bus), not power plant equipment. Exception could be a RMR unit.

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
<p>Response: The SDT has discussed generator plant controls and operation functions and feels that they should not be included in the BES definition. It was determined that balance of plant equipment, including control and operation functions, fall within the scope of existing reliability standards.</p>		
Duke Energy	No	Boiler, turbine, environmental or other control systems that are designed to automatically trip a BES facility in the normal system configuration, when operating correctly for their intended function, should be included in the BES definition.
ReliabilityFirst		Several of these examples listed could in fact force a unit or units out of service, thereby causing a negative impact (such as lowering frequency, etc.) to the BES. However, there should be some additional thought for exclusion of balance of plant facilities, such as the boiler, turbine, and environmental and auxiliary equipment (i.e. scrubber, baghouse, precipitator, fuel/ash coal handling, cooling water, etc.), if they cannot trip the unit off-line.
<p>Response: The SDT has discussed generator plant controls and operation functions including those associated with balance of plant equipment such as boiler, turbine, environmental and other control systems and feels that they should not be included in the BES definition. It was determined that balance of plant equipment, including control and operation functions, fall within the scope of existing reliability standards.</p>		
LCRA Transmission Services Corporation	No	
American Municipal Power	No	
<p>Response: Thank you for your response.</p>		
NERC Staff	No	Please see additional comments at the end of this document.
<p>Response: See response to Q13.</p>		
The Dow Chemical Company		As discussed in response to question #12 below, issues relating to the registry criteria applicable to generation resources should not be revisited at this time.
<p>Response: See response to Q12.</p>		
Competitive Suppliers		Plant controls and other systems on the generation side from the point of interconnection should not be included in the BES definition because they do not significantly affect the reliability of the interconnected

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
		electric network. EPSA recommends that the standards drafting team develop a BES exemption criteria that considers the impact of all equipment (including lead lines and GSUs) on the generator side from the point of interconnection on the reliability of the BES.
<p>Response: The SDT has discussed generator plant controls and operation functions and feels that they should not be included in the BES definition. It was determined that balance of plant equipment, including control and operation functions, fall within the scope of existing reliability standards. The bright-line designation will be developed as part of this project and the process will be handled through the revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. Your comments will be forwarded to the Rules of Procedure Team.</p>		
Arizona Public Service Company	Yes	The above description for defining the exclusion is vague and too difficult to determine where the exclusion applies for a Generator. AZPS recommends identifying exclusions for all systems which are not electrically/magnetically connected to generation elements including the GSU, line leads and the generator or its protection systems.
City of Anaheim	Yes	Unless the generator is required to maintain BES reliability, i.e. black start, etc., the GSU and gen tie should be excluded from the BES; provided, however, to eliminate any reliability gaps, such generation-tie equipment should be classified as "Generator" equipment subject to GO/GOP standards, and the PRC and vegetation management standards should be made applicable to GO/GOPs and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for non-critical generation-tie transmission elements that are not required for the reliable operation of the BES.
<p>Response: The inclusion of generator leads and the GSU for some configurations have been established by the SDT through discussions of the elements and resources material integral to the reliable operation of the BES.</p> <p>Included in the BES: I2 - Individual generating units greater than 20 MVA (gross nameplate rating) including the generator terminals through the GSU which has a high side voltage of 100 kV or above.</p> <p>Included in the BES: I3 - Multiple generating units located at a single site with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) including the generator terminals through the GSUs, connected through a common bus operated at a voltage of 100 kV or above.</p>		
Indeck Energy Services	Yes	Same Response as Question 1
<p>Response: See response to Q1.</p>		
Springfield Utility Board	Yes	Individual loads equal to or below 25 MW (one customer on a line) served by Transmission Facilities greater than 100kV and the Transmission Facilities themselves should be excluded for the same reason. Entity registration is based on aggregate loads. But a 10 MW load may served by an LSE that has a 200 MW peak

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
		is part of the BES while the same 10 MW load served by a 20 MW LSE would not be part of the BES. From a reliability perspective this is inconsistent. Either a facility is or isn't necessary for the reliability of the BES. If a facility isn't necessary because an entity does not meet registration thresholds then the same facility should be excluded from the BES for an entity that is registered.
<p>Response: The SDT has decided to stay with the limits in the NERC Statement of Compliance Registry Criteria with regard to the size of generators that will be included in the BES.</p>		
City of Anaheim	Yes	Unless the generator is required to maintain BES reliability, i.e. black start, etc., the GSU and gen tie should be excluded from the BES; provided, however, to eliminate any reliability gaps, such generation-tie equipment should be classified as "Generator" equipment subject to GO/GOP standards, and the PRC and vegetation management standards should be made applicable to GO/GOPs and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for non-critical generation-tie transmission elements that are not required for the reliable operation of the BES.
Northeast Power Coordinating Council	Yes	These systems are internal protection systems and will not impact the reliability of the BES.
SERC EC Planning Standards Subcommittee	Yes	
Public Service Enterprise Group Company	Yes	The relays and systems described above should not be classified as part of the BES. The intent of the BES definition and applicable standards should not include these items as this would further confuse the BES boundary scope rather than clarify what should be included. The described functions and controls by themselves do not add to BES reliability.
MRO's NERC Standards Review Subcommittee	Yes	This will give our industry a clear defining line of what is a BES Facility and what it is comprised of.
IRC Standards Review Committee	Yes	
Florida Municipal Power Agency	Yes	Excluding such generating plant control and operation functions, which have to do with mechanical energy, rather than electric energy, would be consistent with Section 215 of the Federal Power Act, which states that the Bulk Power System includes "electric energy from generation facilities needed to maintain transmission system reliability." There are standards, such as PRC-024, FAC-008, and FAC-009, regulating total unit performance and ratings, which necessarily covers component performance as well. Therefore, no purpose
Transmission Access Policy Study Group	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
		would be served by including these types of items in a granular way in the BES definition.
FirstEnergy Corp	Yes	Yes these should be excluded from the BES definition. If there is a reliability need related to these devices a standard could be written even though they are not included within the BES definition. Our position is similar to our prior stated view on the blackstart and cranking path.
Electric Market Policy	Yes	
SERC OC Standards Review Group	Yes	
PacifiCorp	Yes	
PPL Energy Plus	Yes	Excluding these generator components is correct.
LG&E and KU Energy LLC	Yes	
Central Lincoln	Yes	
Pepeco Holdings Inc.	Yes	
PUD No.1 of Clallam County	Yes	
North Carolina EMC	Yes	Only relay elements and systems for generating units that meet or exceed the 20 MVA nameplate BES criteria should be included in this classification.
on behalf of Teck Metals Ltd.	Yes	
Southern California Edison	Yes	SCE believes generating plant control and operation functions which include relays and systems that control and protect the unit for boiler, turbine, environmental, and/or other plant restrictions should not be included in the BES definition.
Southern California Edison Company	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
on behalf of Catalyst Paper Corporation	Yes	
City of Grand Island	Yes	
Occidental Energy Ventures Corp	Yes	
ISO New England Inc.	Yes	
Entergy Services	Yes	
Snohomish County PUD	Yes	<p>The BES by statutory definition can include only those Facilities and Elements that are necessary for the reliable operation of the interconnected bulk transmission system. While the facilities identified in question 10 may be necessary for the protection of plant equipment or to meet regulatory obligations related to environmental protection, they cannot be classified as BES facilities in the absence of a clear demonstration that the facilities are material to the reliable operation of the bulk system because the failure of those facilities could threaten cascading failures, separation events, or instability on the interconnected bulk transmission system.</p>
PNGC Power	Yes	
Blachly-Lane Electric Co-op	Yes	
Clearwater Power Co.	Yes	
Douglas Electric Cooperative	Yes	
Central Electric Cooperative, Inc. (Redmond Oregon)	Yes	
Raft River Rural Electric Cooperative	Yes	
Northern Lights Inc.	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
Salmon River Electric Cooperative	Yes	
Okanogan Country Electric Cooperative	Yes	
Lost River Electric	Yes	
Lane Electric Cooperative	Yes	
Coos-Curry Electric Cooperative	Yes	
Consumer's Power Inc.	Yes	
Umatilla Electric Co-op	Yes	
West Oregon Electric Cooperative	Yes	
Lincoln Electric Cooperative	Yes	
Fall River Electric Cooperative	Yes	
United Illuminating Company	Yes	The Generator Protection systems for the Electrical Interconnection should not be excluded from the BES.
Orange and Rockland Utilities, Inc.	Yes	These systems are internal protection systems and will not impact the reliability of the BES.
American Transmission company	Yes	
Utility Services	Yes	Utility Services believes that these systems are internal protection systems and will not impact the reliability the BES. .
The Dayton Power and Light	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
Company		
ITC Holdings Corp	Yes	
BGE	Yes	No comment.
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear Group, LLC, (“CENG”)	Yes	
City Water Light and Power (CWLP) - Springfield, IL	Yes	
Lewis County PUD	Yes	These elements have little to do with the BES and should be excluded.
American Electric Power (AEP)	Yes	Given the vast diversity of plant auxiliary systems, together with their built-in redundancies, component failures in these systems would have negligible impact on BES reliability. In support of this, RFC’s definition of BES does well by seeking to maintain electric system reliability without over-reaching, by allowing the exemption of the devices mentioned in question 10.
Southern Company	Yes	Generator protection systems and operational control systems for generating plants are not critical to the BES operation. Generator protection systems should be included. However, we do not believe that other plant control systems such as boiler controls and operational control systems, etc should be included for generating plants as they are not critical to the BES operation.
Idaho Power	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 10 Comment
Independent Electricity System Operator	Yes	
Clark Public Utilities	Yes	
Xcel Energy	Yes	
Response: Thank you for your response.		

11. Do you believe that the proposed definition of BES, accompanied by a separate BES Definition Exception Process meets the reliability-related intent of the directives in Order 743?

Summary Consideration: Most commenters who responded to this question indicated disagreement with the proposal, indicating a preference to have more details in the definition. The SDT will develop the BES definition and associated criteria. The SDT intends to develop criteria that will be explicit enough so that the owners/operators of the vast majority of Facilities will not have to seek a case-by-case exception on whether their Facilities are part of the BES. This includes addressing radial Transmission serving only Load.

A separate ROP team will develop the procedures for seeking an exception that is not clearly addressed by the definition and criteria. The SDT understands the importance of the exception process being developed in parallel with the BES definition and associated criteria and will closely coordinate with the ROP team that is responsible for developing that process. As the SDT develops the modified BES definition and associated criteria, it will carefully consider Canadian-specific issues and the current NERC Statement of Compliance Registry Criteria.

Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:

- a) Only serving Load. A normally open switching device between radial systems may operate in a 'make-before-break' fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or,
- b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or,
- c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5.

Excluded from the BES: E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following:

- a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices;
- b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation;
- c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN;
- d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and
- e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
Public Service Enterprise Group Company	No	There is still room for misinterpretation. The definition of the BES should be as explicit as possible since it affects the majority of the standards.
Response: The SDT is developing a bright-line BES definition and associated criteria that will address as many Facilities as possible.		
Florida Municipal Power Agency	No	The proposed definition abandons the current exclusion of radials serving only load with one transmission source that Order 743 specifically left in place, and instead conflates “excluded” Elements with Elements for which an “exemption” can be sought. The proposed definition would thus require entities to seek an exemption, presumably on a case-by-case basis, for every > 100 kV radial serving only load with one transmission source. FERC did not intend to direct such a result in Order 743, but rather intended to allow the current exclusion of such radials to load to continue. Furthermore, to comply with Order 743, the new BES definition and exemption/inclusion processes must ensure uniformity throughout the United States. Thus there must be a uniform process; clear criteria for exemption and inclusion; and a right to appeal decisions to a higher body within NERC and/or to FERC.
Transmission Access Policy Study Group	No	
<p>Response: The SDT has proposed the following radial exclusion from the BES as part of its revised definition. The SDT believes that this will address your concern.</p> <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. 		
Electric Market Policy	No	See comments at bottom of questionnaire (Q13).
Response: See response to Q13.		
PPL Energy Plus	No	For the reasons discussed above, the proposed BES definition does not take into account FERC’s desire to only include Facilities in the BES that have an impact on the reliability of the Interconnected Electric Network.
LG&E and KU Energy LLC	No	

Organization	Yes or No	Question 11 Comment
<p>Response: The SDT assumes that you are referring to responses that you provided to earlier questions. See above responses.</p>		
Competitive Suppliers	No	<p>The intent of the directives in Order 743 is to, “direct NERC to develop a uniform modified definition of Bulk-electric system [that] will eliminate regional discretion and ambiguity”. In Order 743 the Commission also finds that the exemption process needs to work with the definition. Paragraph 115 from the BES final rule states “NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid. The ERO also should determine any related changes to its Rules of Procedures (ROP) that may be required to implement the exemption process, and file the proposed exemption process and rule changes with the Commission.” This section does not direct NERC to use the ROP modification process to develop “separate” exemption criteria. It only recommends that NERC modify its ROP for any related changes to implement the exemption process, not for developing the exemption criteria. BES exemption criteria need to be developed through the NERC standards development procedure by the Standard Drafting Team (SDT) that is modifying the BES definition. The exemption criteria need to be done by the same group that forms the definition so that the exemptions are crafted to fit with the new BES definition. The definition and the exemption criteria need to be meshed and work together.</p>
<p>Response: The SDT will develop the BES definition and associated criteria. A separate Rules of Procedure (ROP) team will develop the procedures for seeking an exception that is not clearly addressed by the definition and criteria. The SDT will closely coordinate with the ROP team.</p>		
PacifiCorp	No	<p>The proposed definition does not meet the reliability-related intent of the directives in Order 743 in two respects. First, the second clause of the first sentence of the proposed definition re-introduces the ambiguity that the Commission believes a bright-line threshold will eliminate. The first sentence states that the BES is “all Transmission and Generation Elements and Facilities operated voltages of 100 kV or higher necessary to support bulk power system reliability.” (emphasis added). PacifiCorp understands that the intent of this language is to indicate that only some subset of 100 kV facilities (those necessary for reliability) are included in the definition of the BES. However, this language is ambiguous in that it does not make it clear that the only way to exempt 100 kV and above facilities (other than certain defined radial facilities) from the definition is to utilize the exemption process. Second, the proposed definition does not make it clear that certain defined radial facilities may be excluded from the definition without utilizing the exemption process.</p> <p>PacifiCorp proposes the following: Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher except [defined radial facilities]. Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher may be excluded if they are not necessary to operate an interconnected electric transmission network. Transmission and Generation Elements and Facilities operated at voltages of 100 kV or lower must be included if they are necessary to operate an interconnected electric transmission network. The criteria for determining whether Elements and</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
		Facilities are necessary to operate an interconnected electric transmission network are defined in the BES definition exemption process.
<p>Response: The SDT is developing criteria that will be explicit enough so that the owners/operators of the vast majority of Facilities will not have to seek a case-by-case decision on whether their Facilities are part of the BES. This includes addressing radial Transmission serving only Load.</p> <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5. 		
ExxonMobil Research and Engineering	No	The proposed definition is over reaching and can potentially expand the scope of the BES beyond the point to which NERC was intended to have the authority to govern. The proposed definition does not directly address the line of demarcation between customer owned facilities and elements of BES.
<p>Response: The SDT is developing a BES definition and associated criteria that it believes will address your concerns and those of others in this regard.</p>		
NERC Staff	No	Please see additional comments at the end of this document.
Entergy Services	No	Please see our response to Q13 below.
<p>Response: See response to Q13.</p>		
Arizona Public Service Company	No	Radial transmission systems operated below 100 kV should not be included as part of the BES and should not have to go through the exception process.
<p>Response: The SDT is developing a BES definition and associated criteria that it believes will address your concerns and minimize the need for owners/operators to have to have to go through an exception process.</p> <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
		<p>a) Only serving Load. A normally open switching device between radial systems may operate in a 'make-before-break' fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or,</p> <p>b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or,</p> <p>c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in Inclusions I2, I3, I4 and I5.</p>
Xcel Energy	No	
Manitoba Hydro	No	<p>No. The proposed definition includes the wording '...necessary to support bulk power system reliability' which increases ambiguity and reduces the 100kV and above bright line distinction. This wording should be removed. Manitoba Hydro suggests the following: Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher except defined radial facilities. Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process.</p>
<p>Response: The SDT has revised the definition and the wording is no longer utilized.</p>		
Indeck Energy Services	No	Same Response as Question 1
<p>Response: See response to Q1.</p>		
Southern California Edison	No	SCE believes that the 100kV brightline threshold is sufficient.
<p>Response: Thank you for your comment. Please see the revised definition – it includes a detailed list of inclusions/exclusions to minimize the need to use the BES Exception Process.</p>		
City of Grand Island	No	This question is premature given that the BES Exception Process has not been developed.
Occidental Energy Ventures Corp	No	Until the exemption process is finalized, it is not prudent to answer in the affirmative.
<p>Response: The SDT understands the importance of this process being developed in parallel with the BES definition and associated criteria.</p>		
Central Lincoln	No	The order was to provide a definition that excepted radial facilities and to create an exemption process for

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
PUD No.1 of Clallam County	No	other facilities not necessary for operating the interconnected network. The SAR proposes to treat the two the same. This will cause unneeded expense, delay, and uncertainty for those radial facilities that could simply be eliminated by inspection. This would work against reliability by misdirecting resources toward the elements tied up in the process, and possibly away from the elements that should be included. The SAR also fails to meet the order by failing to apply it to all entity types. We fail to see how a bright line is achieved if DPs, PSEs, and IAs work from a definition different from all the other types of registered entities. Please edit the SAR to include all entity types.
PNGC Power	No	
Blachly-Lane Electric Co-op	No	
Clearwater Power Co.	No	
Douglas Electric Cooperative	No	
Central Electric Cooperative, Inc. (Redmond Oregon)	No	
Raft River Rural Electric Cooperative	No	
Northern Lights Inc.	No	
Salmon River Electric Cooperative	No	
Okanogan Country Electric Cooperative	No	
Lost River Electric	No	
Lane Electric Cooperative	No	
Coos-Curry Electric Cooperative	No	
Consumer's Power Inc.	No	
Umatilla Electric Co-op	No	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
West Oregon Electric Cooperative	No	
Lincoln Electric Cooperative	No	
Fall River Electric Cooperative	No	
Lewis County PUD	No	
<p>Response: The SDT is developing criteria that will be explicit enough so that the owners/operators of the vast majority of Facilities will not have to seek a case-by-case decision on whether their Facilities are part of the BES. This includes addressing radial Transmission serving only Load.</p> <p>Excluded from the BES: E1 - Any radial system which is described as connected from a single Transmission source originating with an automatic interruption device and:</p> <ul style="list-style-type: none"> a) Only serving Load. A normally open switching device between radial systems may operate in a ‘make-before-break’ fashion to allow for reliable system reconfiguration to maintain continuity of electrical service. Or, b) Only including generation resources not identified in Inclusions I2, I3, I4 and I5. Or, c) Is a combination of items (a.) and (b.) where the radial system serves Load and includes generation resources not identified in inclusions I2, I3, I4 and I5. 		
The Dow Chemical Company	No	<p>Order No. 743 correctly recognizes that local distribution facilities are expressly excluded from the definition of “Bulk-Power System” set forth in Section 215 of the Federal Power Act. See Order No. 743 at P 37. As such, local distribution facilities must also be excluded from the definition of BES adopted by NERC. That is not the case with respect to the proposed definition, which makes no mention whatsoever of local distribution facilities. Instead, the proposed definition simply provides that certain facilities, including “Radial Transmission systems, may be excluded . . . if approved through the BES definition exemption process.” While this language presumably is an acknowledgement that Radial Transmission lines perform a local distribution function and should be excluded, numerous other types of facilities also perform a local distribution function and should also be excluded regardless of their voltage. For example, Dow and certain of its subsidiaries, including Union Carbide Corporation, own and operate electrical facilities at a number of industrial sites within the U.S. In all cases, a tie line or lines connect the industrial site to the electric transmission grid. Power is delivered from the electric transmission grid to the industrial site through the tie line(s). Lines within the industrial site then deliver power to individual manufacturing plants within the site. Additionally, cogeneration facilities are located at a number of industrial sites owned by Dow and Union</p>

Organization	Yes or No	Question 11 Comment
		<p>Carbide Corporation, principally in Texas and Louisiana. These cogeneration facilities generate power that is primarily distributed within the industrial site and used for manufacturing plant operations. In some instances, excess power not required for plant operations is delivered into the electric transmission grid through the tie line(s) connecting the industrial site to the grid. While the tie lines and internal lines at these industrial sites can be fairly significant in terms of voltage, they do not perform anything that resembles a transmission function. Rather than transmit power long distances from generation to load centers, the tie lines and internal lines perform a local distribution function consisting of the distribution of power brought in from the grid or generated internally to different manufacturing plants within each industrial site. In some cases, the facilities also perform an interconnection function to the extent they enable excess power from cogeneration facilities to be delivered into the grid. The voltage of the tie lines and internal lines at these industrial sites is dictated by the load and basic configuration of each site. Higher voltage lines (>100 kV) are used to reduce line losses while meeting applicable load requirements. That does not mean that such lines perform a transmission function. Indeed, just as a line that delivers power into a home, or from a home to an accompanying garage, is considered a distribution facility and not a transmission facility, the same is true of lines that deliver power into industrial sites owned by Dow or its subsidiaries (even though such lines also may be used to deliver excess power to the transmission grid) or within those sites. The definition of BES adopted by NERC should explicitly provide for these types of local distribution facilities to be categorically excluded.</p>
City of Redding	No	<p>The current definition goes to far; local governments, cities, and citizens have been given the right to decide the level of reliability of their distribution system. FERC & NERC were not given jurisdiction over local distribution facilities. Note: many local distribution facilities are operated above 100 kV.</p>
<p>Response: The SDT is developing a BES definition and associated criteria that it believes will address your concerns.</p> <ul style="list-style-type: none"> • Excluded from the BES: E3 - Local distribution networks (LDNs): Groups of Elements operated above 100 kV that distribute power to Load rather than transfer bulk power across the interconnected System. LDN's are connected to the Bulk Electric System (BES) at more than one location solely to improve the level of service to retail customer Load. The LDN is characterized by all of the following: <ol style="list-style-type: none"> a) Separable by automatic fault interrupting devices: Wherever connected to the BES, the LDN must be connected through automatic fault-interrupting devices; b) Limits on connected generation: Neither the LDN, nor its underlying Elements (in aggregate), includes more than 75 MVA generation; c) Power flows only into the LDN: The generation within the LDN shall not exceed the electric Demand within the LDN; d) Not used to transfer bulk power: The LDN is not used to transfer energy originating outside the LDN for delivery through the LDN; and e) Not part of a Flowgate or transfer path: The LDN does not contain a monitored Facility of a permanent Flowgate in the Eastern Interconnection, a major transfer path within the Western Interconnection as defined by the Regional Entity, or a comparable monitored Facility in the Quebec Interconnection, and 		

Consideration of Comments on Definition of Bulk Electric System – Project 2010-17

Organization	Yes or No	Question 11 Comment
<p>is not a monitored Facility included in an Interconnection Reliability Operating Limit (IROL).</p>		
<p>National Rural Electric Cooperative Association (NRECA)</p>	<p>No</p>	<p>It is too early to determine the effectiveness of the proposed BES definition and BES criteria included in the draft SAR. However, the concept of a BES definition and BES criteria, along with BES exemption criteria, appears, at least from a preliminary standpoint, to be a satisfactory direction to begin the process. The concepts presented in the draft SAR should not preclude any other potential direction for the SDT to explore at this point in the process. The proposed BES definition in the SAR should be considered only as an alternative for the SDT to consider in its work, not a final definition or a definition that precludes other proposed definitions.</p>
<p>Response: The SDT considers the proposed BES definition in the SAR as a starting point for SDT consideration.</p>		
<p>Duke Energy</p>	<p>No</p>	<p>The high level direction does, but the details need to be defined before this question can be answered affirmatively.</p>
<p>Response: The SDT is developing a BES definition and associated criteria that it believes will address your concerns.</p>		
<p>American Electric Power (AEP)</p>	<p>No</p>	<p>It's not clear how the criteria in the concept paper will be related back to the overall definition of BES. We recommend that the finalized criteria be included verbatim in the definition, or that the definition refer to an official companion document. The definition cannot automatically include all equipment (both primary-voltage and the associated auxiliary equipment) by default.</p>
<p>Response: The SDT considers the concept paper one of the starting points for SDT consideration. The finalized criteria will be included in the definition.</p>		
<p>Springfield Utility Board</p>	<p>No</p>	<p>SUB appreciates the work to provide a clearer definition of the BES, but the proposed language is ambiguous. The existing definition is: "As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition." The proposed definition is: "Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher necessary to support bulk power system reliability. Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process." Looking at the first sentence, 100kV or higher facilities are part of the BES ONLY if they are necessary to support bulk power system reliability. As written, if a registered entity determines that a 100kV or higher facility is not necessary for BPS system reliability then the facility may be excluded. If the intent is to</p>

Organization	Yes or No	Question 11 Comment
		<p>assume that all 100kV and above facilities are necessary for BPS reliability, SUB strongly disagrees. To avoid confusion, SUB suggests that the first sentence state: "Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher." The language "necessary to support bulk power system reliability." should be deleted.</p> <p>Turning to the second sentence: "Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process." The approved April 2010 NERC Glossary of Terms includes definitions for "Elements", "Facilities", and "Transmission", but does not have a definition for "Radial" or "Radial Transmission", "Radial Transmission systems", "Transmission systems", or "systems". SUB does not know what this language is intended to mean. If the language "Radial Transmission systems" means an Transmission Element or Facility normally operated open then SUB agrees with this language. If all Elements or Facilities are outright excluded from being excluded from the BES because they could "potentially" be operated closed, this language has little value as most facilities have the "potential" to operated closed. SUB has concerns that EROs are making interpretation of language, such as "radial", without going through a required interpretation public process and are just "announcing" what language means. Is is not uncommon for an ERO to announce a definition for an undefined term and then tell registered entities that they need to request a formal interpretation from NERC in order to modify an informal ERO interpretation. SUB would like to eliminate this confusion - starting with the BES definition which is confusing and may perpetuate an informal interpretation process. SUB proposes that the second sentence read: "Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process. Radial Transmission systems include Elements or Facilities normally operated open."</p> <p>Lastly, why would an entity want to include an Element or Facility that would otherwise be excluded? If an ERO determines that an Element or Facility below 100kV is necessary for reliability would the ERO be able to initiate an exemption process to include the Element or Facility without the owners knowledge or consent? What if the owner is not a Registered Entity? This inclusion language for elements below 100kV is unclear in terms of the application, implementation, or intent.</p>
<p>Response: The proposed BES definition included in the SAR is only a starting point for the SDT. The SDT intends to address the issues you have identified in its efforts to develop a BES definition and associated criteria. The initial thinking is that for Facilities captured as BES by the definition/criteria, if an owner/operator believed those Facilities should not be considered BES, that owner/operator would need to technically demonstrate why such Facilities should be excluded. In addition, for Facilities that are not captured as BES by the definition/criteria, if the ERO or a Regional Entity believed those Facilities should be considered as BES, then the ERO or the Regional Entity would need to technically demonstrate why such Facilities should be included. It is the intent of the SDT that the BES definition and associated criteria it develops will address the vast majority of Facilities and minimize the need for technical demonstration by owners/operators or</p>		

Organization	Yes or No	Question 11 Comment
the ERO and regional Entities.		
Electricity Consumers Resource Council (ELCON)	No	<p>The Electricity Consumers Resource Council (ELCON) appreciates the opportunity to submit the following comments on the draft concept document prepared by the Regional Bulk Electric System Definition Coordination Group (RBESCG), a team of representatives of the Regional Entities (REs).ELCON is the national group representing the interests of large industrial consumers of electricity. Many ELCON member facilities are Registered Entities. One or more ELCON members are registered as: BA, IA, GO, GOP, TO, TOP, TSP, PA, RP, LSE, and PSE. However, the most common registered functions of large industrial end users are GO, GOP and PSE by virtue of the need to supply a complex industrial process with low-cost thermal energy and/or low-cost electric energy.The stated purpose of the concept document is to provide a “common approach” for:</p> <ul style="list-style-type: none"> o Defining the BES and therefore improve the clarity, reduce ambiguity and establish a universal method (i.e., bright line) for distinguishing between BES and non-BES Elements and Facilities. o Identifying BES Elements and Facilities so as to establish a “repeatable” method for applying NERC Reliability Standard requirements and facilitate consistent application of compliance efforts across regional boundaries.CommentsELCON members have always supported fair and effective reliability efforts at NERC. However, the expansion of the standards compliance responsibility implied by the NERC Concept Document goes too far. As written, this proposal could have the effect of devaluing a large number of industrial owned electrical power assets by forcing industrials to meet new and unnecessary compliance obligations. Many will be forced to choose to either accept a significant new cost or fire sale their assets to local providers increasing the purchaser’s market power in the process. ELCON feels the addition of new compliance obligations should not be done in such a wholesale manner but instead done on an exception and as needed basis that factors in both a realistic appraisal of the underlying risk and the economic burden imposed on the registered entity relative to the expected benefits. <p>Specific recommendations and concerns are:</p> <ol style="list-style-type: none"> 1. An Overarching “Principle” for the Identification of BES Elements and Facilities Must be the Guidance Provided by FERC That Significant Expansion of the Compliance Registry is Not Contemplated.In FERC’s March 18, 2010 Notice of Proposed Rulemaking (NOPR) on the Revision to Electric Reliability Organization Definition of Bulk Electric System, the Commission stated regarding the revision to the BES definition:“This proposal would eliminate the discretion provided in the current definition for a Regional Entity to define “bulk electric system” within a region. Importantly, however, we emphasize that we are not proposing to eliminate all regional variations and we do not anticipate that the proposed change would affect most entities.” ¶ 16.“... the Commission does not believe that the proposal would have an immediate effect on entities in any Regional Entity other than NPCC.” ¶ 27.Similarly, in Order No. 743, the Commission stated:“We expect that our decision to direct NERC to develop a uniform modified definition of 'bulk-electric system' will eliminate

Organization	Yes or No	Question 11 Comment
		<p>regional discretion and ambiguity. The change will not significantly increase the scope of the present definition, which applies to transmission, generation and interconnection facilities. The proposed exemption process will provide sufficient means for entities that do not believe particular facilities are necessary for operating the interconnected transmission system to apply for an exemption." ¶ 144. One area where the proposed BES definition and exception process will significantly expand the Compliance Registry is the criteria applicable to behind-the-meter generation (primarily cogeneration facilities). We urge that the BES definition should not change the currently applicable 20 MVA / 75 MVA generation size threshold applicable to generation facilities or the manner in which that threshold is currently applied, with behind-the-meter cogeneration facilities evaluated based on the net capacity actually provided to the grid.</p> <p>2. A Second Overarching "Principle" for the Identification of BES Elements and Facilities Is the Need to Clarify Which Facilities Perform a True Transmission Function and Excluding Facilities That Perform a Local Distribution Function, As Required by Law. Congress stated in Federal Power Act section 215: SEC. 215. ELECTRIC RELIABILITY." (a) DEFINITIONS.-For purposes of this section: (1) The term 'bulk-power system' means- (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy. There has been little attempt by NERC to clarify what in fact are "facilities used in the local distribution of electric energy" even though any plain English application of the term makes such a determination self-evident. The proposed BES definition should expressly exclude facilities used in the local distribution of electric energy, and the identification of such facilities is independent of the identification of BES transmission. Facilities used for local distribution are NOT the residual of any determination of what are BES transmission facilities.</p> <p>3. A Third Overarching "Principle" for the Identification of BES Elements and Facilities Must be Recognition of the Risk Imposed by the Element or Facility, and the Economic Burden of the Owner/Operator of the Element of Facility. The efforts of the BES Standards Drafting Team follow the release of two important policy documents. First, on January 18, 2011, the White House issued an Executive Order ("Improving Regulation and Regulatory Review") by President Obama regarding improvements to federal regulations and the review of existing regulations to ensure, among other things, that a regulation be proposed or adopted "only upon reasoned determination that its benefits justify its costs," and that regulations be tailored "to impose the least burden on society." Second, the NERC Planning Committee issued on January 10, 2011, "Risk-Based Reliability Compliance - White Paper Concept Discussion," which attempts to advance "processes and procedures to prioritize [NERC's] efforts and 'tiering' elements of its programs to maximize their value and optimize the benefit/cost of effort from stakeholders." This white paper complements the President's Executive Order. ELCON believes that BES exclusion criteria and process should recognize and exclude elements and facilities in which the risk to bulk electric system reliability is at most theoretical or speculative, and where the compliance burden clearly outweighs the benefits. Such a determination should recognize the</p>

Organization	Yes or No	Question 11 Comment
		<p>historical record of the element or facility in terms of the owner or operator’s coordination with the BA or control area, and transmission operators. This principle should be applied to the development of exclusion/inclusion criteria for private lines that connect loads and behind-the-meter generation to true BES Elements and Facilities.</p> <p>4. An Additional Principle for the Identification of BES Elements and Facilities Should Be the Explicit Recognition on How the Element or Facility is Actually Operated or Used, Not Its Physical or Nominal Rating That May be Irrelevant to Reliability Considerations. In Order No. 743, FERC clarified that it did not intend to require NERC to utilize the term “rated at” rather than the term “operated at” for the voltage threshold in the revised BES definition. A principle for the identification of BES Elements and Facilities should be such recognition and not exclusively on the rated value of an Element or Facility. This principle should be used to retain the exclusion in the Statement of Compliance Registry Criteria (Revision 5.0) for “net capacity provided to the bulk power system” in the context of the 20 MVA generating unit and 75 MVA generating plant thresholds. The “net capacity” applies to capacity “put” of a behind-the-meter generator whose predominant function is to serve load at the same site.</p> <p>5. An Additional Principle for the Identification of BES Elements and Facilities Should be the Exclusion of PSEs That Do Not Own or Operate Physical Assets and Whose Power Transactions Are Exclusively Financial in Nature. Many PSEs that operate in FERC jurisdictional organized wholesale markets (i.e., ISOs and RTOs) do not own, operate or lease physical assets and are currently bombarded with data requests that assume that they own or control such assets. An example of a superfluous data request is to prove that adequate reactive power has been procured to support the load. This is a question that should not have been asked and displays a profound ignorance of the operation of ISO/RTO markets. One potential solution to this problem is to create two subsets of PSEs: one that owns and operates physical assets that are used to serve their loads, and a second that does not. Some Regional Entities have also begun to ask questions that require PSEs to reveal the details of specific commercial transactions. This raises a broader question on what NERC and regional compliance staffs and auditors “need to know” and whether such questions are an abuse of their enforcement authority.</p> <p>6. Any Attempt to Make Demand Side Management (DSM) Measures an Element or Facility of BES Will Be Shortsighted and Counterproductive. Proposals that unilaterally and arbitrarily remove exclusions for generation and transmission, including the application of new compliance obligations to DSM programs, go far beyond what FERC intended in its guidance for revisions. Any new requirement concerning voluntary DSM adds cost to a process that so far has only acted to support reliability with performance equal to and sometimes superior to traditional providers. How is it that a potential resource that can contribute to maintaining reliability is now so quickly identified as a risk? We warn against the overzealous pursuit of control over every asset and resource on the electric system. This mindset will only breed cynicism and end the willingness of potentially dispatchable loads to cooperate with the real operators and owners of the BES. A recently issued FERC study highlights the potential value to reliability of DSM (in the form of dispatchable</p>

Organization	Yes or No	Question 11 Comment
		<p>demand response) (See Joseph H. Eto et al., Use of Frequency Response Metrics to Assess the Planning and Operating Requirements for Reliable Integration of Variable Renewable Generation, LBNL-4142E, December 2010). To reliably integrate greater amounts of wind energy resources to the bulk electric system, the study recommended the:"Expanded use of demand response that is technically capable of providing frequency control (potentially including smart grid applications), starting with broader industry appreciation of the role of demand response in augmenting primary and secondary frequency control reserves."</p> <p>7. Revising the Definition of BES Does Not Justify Shifting the Plenary Burden for BPS Reliability from Utilities to Utility Customers. A BES Principle Should Recognize That the Obligation to Serve Applies in One Direction.The only reason the bulk power system exists is to deliver electric power to residential households, commercial businesses, government facilities and industrial facilities of all sizes. The value of a reliable BPS is dependent on the needs of end use customers. Nothing in the legislative history of section 215 of the Federal Power Act suggests that Congress wittingly intended to change that relationship. The burden of complying with NERC Reliability Standards is a cost of doing business for utility providers of generation, transmission and distribution services. Generation and interconnection facilities of industrial customers are almost never intended for or used to "operate the interconnected transmission network." Those facilities are integral to a manufacturing process, including purchasing power from the grid. They were built in expectation that the BPS was prudently planned and operated by utilities. The rare exceptions are administered under applicable tariffs or contracts, and are already Registered Entities. Part of NERC's effort should include defining the line between a BES asset that is used to deliver power and an End User asset that's sole purpose is to serve the End User's load. The NERC Functional Model includes a vague definition of End-use Customer. The problem is determining the scope of an end-use device. If an industrial company owns a 138 kV to 13.8 kV transformer that feeds its plant, is that an end-use device or a transmission asset that is used to transmit power to the low voltage distribution network within the manufacturing facility? Any work to revise the definition of the BES should also include a clarification of its boundaries. We believe that NERC should not expand the scope of the BES to include assets within end-use customer's private use networks. (See our recommendation #2 above)</p> <p>8. An Additional BES Principle Should be that BES Elements and Facilities be Limited to Only Functions Currently Specified in the NERC Functional Model (Version 5).NERC's development of the revised BES definition and exclusion/inclusion criteria and processes should be limited to functions specified in the NERC Functional Model (Version 5).</p> <p>9. NERC is Encouraged to Propose a "Different Solution" That is as Effective as, or Superior to, the Commission's Proposed Approach. The Proposed Principles for the Exclusion of Elements and Facilities from the BES Should Include a Process for Categorical Exclusion Based on Common Physical Characteristics.The Commission stated in Order No. 743 regarding its proposed revision of the BES definition (and presumably the exclusion/inclusion criteria and processes):"... NERC may propose a different solution that is as effective as, or superior to, the Commission's proposed approach in addressing the Commission's</p>

Organization	Yes or No	Question 11 Comment
		<p>technical and other concerns so as to ensure that all necessary facilities are included within the scope of the definition." ¶ 16. In addition, specific to the exclusion of Elements and Facilities from the BES, the Final Rule did not adopt the exclusion process proposed in the NOPR (i.e., facility-by-facility review). In the Final Order, FERC directed NERC to develop an exclusion process "with practical application that is less burdensome than the NOPR proposal." FERC has also allowed NERC to consider concerns (mainly industrials') regarding "exclusion categories" in developing the exclusion process and criteria. ¶ 120. ELCON interprets the Commission's statements to mean that the agency is open to developing a more efficient compliance process, including processes that minimize unnecessary regulatory burdens on potential Registered Entities and the administrative costs of NERC and RE compliance operations. In the spirit of "streamlining" NERC and the REs' review of smaller entities, ELCON recommends the addition of a principle on the exclusion of Elements and Facilities from the BES that encourages a process for categorical exclusion of entities based on common physical characteristics.</p>
<p>Response: The SDT considers the proposed BES definition in the SAR as a starting point for SDT consideration. As it develops a modified BES definition and associated criteria, it is carefully reviewing and considering the NERC Statement of Compliance Registry Criteria. The SDT has considered your comments in developing a modified BES definition and associated criteria. The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions while addressing most, if not all, of the provided suggestions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. NERC will follow the due process established for changes to the Glossary of terms. This new definition addresses radial Loads, generation, and local distribution networks.</p>		
<p>Constellation Power Source Generation, Inc. ("CPSG") filing on behalf of Constellation Energy Group, Inc. ("CEG"), Constellation Energy Commodities Group, Inc. ("CCG"), Constellation Energy Control and Dispatch, LLC ("CDD"), Constellation NewEnergy, Inc., ("CNE") and Constellation Energy Nuclear Group, LLC, ("CENG")</p>	<p>Yes</p>	<p>Paragraph 115 from the BES final rule states "NERC should develop an exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid. The ERO also should determine any related changes to its Rules of Procedures (ROP) that may be required to implement the exemption process, and file the proposed exemption process and rule changes with the Commission." This section does not direct NERC to use the ROP modification process to develop "separate" exemption criteria. It only recommends that NERC modify its ROP for any related changes to implement the exemption process, not the exemption criteria itself. The compliance implications and technical nature of such criteria make it imperative that industry input be considered in a transparent stakeholder process. It is appropriate for NERC to develop aspects such as the administrative management, the role and interaction of the regions, an appeal process, etc. However, due to the technical aspects of BES operation, the drafting team members are best suited to devise criteria for non-BES facilities to warrant inclusion in the BES. As currently proposed, the definition language and the exception criteria are not being developed in the properly coordinated fashion. This should change. Further, Constellation is not convinced that creation of a definition and an exception process is the best course to respond to the FERC directives. In question 12, an alternative approach is proposed.</p>

Consideration of Comments on Definition of Bulk Electric System – Project 2010-17

Organization	Yes or No	Question 11 Comment
City Water Light and Power (CWLP) - Springfield, IL	Yes	CWLP feels, again, that the lack of a firm, detailed administrative process for exemptions hampers the proposed BES definition in meeting the intent of Order 743
American Transmission company	Yes	However, ATC does not want to appear to endorse any separate BES Definition Exception and Inclusion Processes until one has been clearly proposed and meets the reliability-related intent of the Order 743 directives. Furthermore, ATC believes the separate Exception and Inclusion Processes should be subject to the same Standards Development review and approval process as the associated BES definition.
MRO's NERC Standards Review Subcommittee	Yes	However, NSRS does not want to appear to endorse any separate BES Definition Exception Process until one has been clearly proposed and meets the reliability-related intent of the Order 743 directives. Furthermore, NSRS believes the separate Exception Process should be subject to the Standards ("Definition") Development Process as the associated BES definition.
<p>Response: The SDT is developing the BES definition and associated criteria. A separate Rules of Procedure (ROP) team will develop the procedures for seeking an exception that is not clearly addressed by the definition and criteria. The SDT will closely coordinate with the ROP team.</p>		
APPA	Yes	I agree that the proposed definition meets the intent of Order 743. However, the separate development of exception criteria outside of the standards development process does raise concerns. See response to Question 12.
<p>Response: See response to Q12.</p>		
Pepco Holdings Inc.		See comments above and below.
<p>Response: See responses above and below.</p>		
Hydro-Québec		For the Canadian entities, it is important to consider that the definition of the Bulk Electric System must also be approved by the Canadian regulators.
<p>Response: The SDT is aware of the issues related to Canadian utilities and regulators and will consider those as it develops a modified BES definition and associated criteria.</p>		
Utility Services	Yes	However, Utility Services would like to suggest alternative definitions for Bulk Electric System and BES Exemption Process. We have presented our proposed definitions in the answer to Question 1. While the proposed definition may meet the Order, Utility Services believes that the definition can be made cleaner and

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
		easier to read
Response: See response to Q1.		
United Illuminating Company	Yes	Order 743 focused on the definition of BES and the exemption process. Although not part of the SAR or ORDER 743, UI suggests NERC provide an explanation in the implementation plan of the impact on the registry criteria. Will the Registry Criteria serve as another filter for identifying which entities will be part of Compliance Monitoring
Response: As the SDT develops a modified BES definition and associated criteria, it will be carefully reviewing and considering the NERC Statement of Compliance Registry Criteria.		
Northeast Power Coordinating Council	Yes	A qualified “Yes”. The BES exemption process has not yet been written. So, it is somewhat difficult to know in advance that this approach meets the reliability-related intent of the directives in Order 743. While in general agreement with this conclusion, there is concern that the BES definition and BES exception process do not yet adequately address a “point-of-demarcation” between the BES Facilities and Elements and non-BES facilities and elements (lower case). Propose to add two new terms for the NERC Glossary of Terms in our reply to Question 13, in order to identify a point-of-demarcation and more fully respond to this question.
Orange and Rockland Utilities, Inc.	Yes	
Response: The SDT will consider your concerns in its deliberations as it moves forward in revising the definition. .		
City of Anaheim	Yes	
IRC Standards Review Committee	Yes	The definition is critically dependent on the detailed exemption/inclusion criteria and process, which has not been developed.
Bonneville Power Administration	Yes	
FirstEnergy Corp	Yes	However, BES definition changes are needed to establish a bright-line for the BES.
SERC OC Standards Review Group	Yes	
LCRA Transmission Services Corporation	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
American Municipal Power	Yes	
North Carolina EMC	Yes	
ReliabilityFirst	Yes	A single and uniform definition that includes exemption criteria and an exemption process must be the result of this effort. Then this material must be consistently used by all of the Regional Entities across the ERO in order to achieve the directives set forth in Order 743.
on behalf of Teck Metals Ltd.	Yes	
Southern California Edison Company	Yes	
on behalf of Catalyst Paper Corporation	Yes	
City of Anaheim	Yes	
Glacier Electric Cooperative	Yes	I have not seen the BES Definition Exception Process, but I trust it will be an accurate method.
ISO New England Inc.	Yes	
Snohomish County PUD	Yes	While Snohomish believes FERC substantially overstepped its statutory authority in Order No. 743 for the reasons set forth in its comments and petition for rehearing filed with FERC in that docket, we nonetheless support FERC's underlying goal to assure reliable operation of the interconnected bulk transmission system. Within the constraints imposed by FERC, we believe the approach of defining the BES and then establishing an exemption process to exclude Facilities and Elements that are not necessary for the reliable operation of the interconnected bulk transmission system should meet FERC's reliability goals while mitigating the excessive compliance costs that will arise from blunt application of a 100-kV brightline threshold. Nothing stated in these comments, however, should be interpreted as withdrawing or waiving any objection Snohomish has made to Order No. 743.
City of Austin dba Austin Energy	Yes	
The Dayton Power and Light	Yes	

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 11 Comment
Company		
ITC Holdings Corp	Yes	As long as the PRC023 Critical criteria is used for below 100 kV is used for inclusion.
BGE	Yes	No comment.
Southern Company	Yes	The framework appears to be in place to respond to the directive; however, the details of the “exemption process” remain to be fully developed.
Idaho Power	Yes	
Independent Electricity System Operator	Yes	The definition is critically dependent on the detailed exemption/inclusion criteria and process, which has not been developed. We advocate that the revised BES definition and the exemption/inclusion process and criteria be developed at the same time and preferably by the same drafting team to ensure consistency in approach, since these issues are very closely interrelated.
Clark Public Utilities	Yes	
<p>Response: Thank you for your response. Please see the revised definition –it includes a detailed list if inclusions/exclusions to minimize the need to use the BES Exception Process.</p>		

12. If you have a proposal for an equally efficient and effective method of achieving the reliability- related intent of the directives in Order 743, please provide your proposal here.

Summary Consideration: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations (included within the body of the definition), will provide a bright-line definition, clarity, and consistency across the regions while addressing most, if not all, of the provided suggestions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. NERC will follow the due process established for changes to the Glossary of terms. This new definition addresses radial Loads, generation, and local distribution networks. Furthermore, the SDT has utilized many resources to provide this clarity including the Compliance Registry Criteria and the WECC BESDTF recommendations.

Organization	Question 12 Comment
Public Service Enterprise Group Company	The BES definition impacts many standards and has been the source of misunderstanding with subsequent requests for interpretations. In this one case, a stand alone interpretive descriptive document with clear lines of demarcation using example one lines and associated notes in lieu of a three sentence description that attempts to describe all elements of the BES could be considered.
Manitoba Hydro	Manitoba Hydro supports a true bright-line threshold that includes all facilities operated at or above 100kV except defined radial facilities. There should be no regional differences in the definition or exemption process and the regional discretion should be removed from the BES definition.
ReliabilityFirst	The ERO and the Regional Entities should develop and propose the common BES definition and exemption process, submit it to FERC, and allow for the FERC process, whereby the industry provides its comments, etc., to be used to finalize this definition, exemption process and criteria.
United Illuminating Company	The BES definition should be very clear and simple.
ITC Holdings Corp	Exclusion criteria should be determined at the NERC level and implemented continent wide by the Regions, rather than allowing each Region to come up with their own policy and criteria on exclusions.
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p>	
MRO's NERC Standards Review	Proposed Bulk Electric System definition: Facilities operated at voltages of 100 kV or higher necessary to support the

Organization	Question 12 Comment
Subcommittee	<p>interconnected transmission network reliability (Note see the NERC approved exemption process for Facilities that are and are not considered part of the BES).</p> <p>Rational:1. NERC defines Facilities as “a set of electrical equipment that operates as a single BES Element. Since Element is part of the Facilities NERC definition it is not needed to be repeated.</p> <p>2. Section 30 of FERC Order 743 “all facilities operated at or above 100kV” should be included in the bright-line criteria.</p> <p>3. This new language eliminates the ambiguity as directed in FERC Order 743 whereby the Region cannot establish other bright-line criteria for what the BES is.</p> <p>4. This reinforces foot note 41 by stating exactly what “reliability” of the BES needs to be reinforced. The “interconnected transmission reliability should also be used in any “exemption criteria” that the SDT formulates in the future.</p> <p>5. The removal of bulk power system reliability is still a somewhat ambiguous term and FERC has stated that the BPS definition is not within the scope of this FERC Order.</p> <p>6. Note that the NERC defined term of Facility contains the word BES. So, as written, a Facility is energized at 100kV or above. The capitalized word of Facility cannot be used in the inclusion process since those facilities would be below the 100kV level.</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>Section 30 of FERC Order 743 directs the ERO to include exclusions as deemed appropriate, such as radials.</p> <p>The SDT agrees that the term BPS is not in scope and also stipulates that this work is focused on defining the BES.</p> <p>The SDT recognized the problem with Facility and has corrected that in the revised work.</p>	
City of Anaheim	<p>Transmission elements serving radial load, radial distribution systems, or non-GO/GOP generation connected to such radial lines and excluded from BES; provided, however, to eliminate any reliability gaps, such radial transmission elements should be classified as "Distribution" equipment subject to DP standards, and the PRC and vegetation management standards should be made applicable to Distribution Providers and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for radial transmission facilities that function as Distribution and are not required for the reliable operation of the BES.</p> <p>Transformers with secondary windings of 100kV or less should not be part of the BES if they feed radial load or radial distribution systems; provided, however, to eliminate any reliability gaps, such transformers should be classified as "Distribution" equipment subject to DP standards, and the PRC and vegetation management standards should be made applicable to Distribution Providers and including this equipment. This is consistent with the NERC Reliability Functional</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Question 12 Comment
	<p>Model and is more efficient than requiring TO/TOP registration for radial transmission facilities that function as Distribution and are not required for the reliable operation of the BES.</p> <p>Unless the generator is required to maintain BES reliability, i.e. black start, etc., the GSU and gen tie should be excluded from the BES; provided, however, to eliminate any reliability gaps, such generation-tie equipment should be classified as "Generator" equipment subject to GO/GOP standards, and the PRC and vegetation management standards should be made applicable to GO/GOPs and this equipment. This is consistent with the NERC Reliability Functional Model and is more efficient than requiring TO/TOP registration for non-critical generation-tie transmission elements that are not required for the reliable operation of the BES.</p>
<p>Florida Municipal Power Agency</p> <p>Transmission Access Policy Study Group</p>	<p>FMPA proposes that the BES be defined as: In general, the Bulk Electric System includes all Transmission Elements operated at voltages of 100 kV or higher, and all generation resources registered pursuant to the Statement of Compliance Registry Criteria. Radial Transmission Elements serving only load with one Transmission source are generally not included in this definition. A radial Transmission Element may be considered as "serving only load" for purposes of the foregoing general exclusion even if it connects generation, so long as that generation is not registered pursuant to the Statement of Compliance Registry Criteria. An Element that nominally meets the general BES criteria, but which an entity demonstrates, on a case-by-case basis, is not necessary for operating the interconnected electric transmission network, shall be exempted from the BES pursuant to the NERC exemption process. An Element that does not nominally meet the general BES criteria, but which NERC demonstrates, on a case-by-case basis, is necessary for operating the interconnected electric transmission network, shall be included in the BES pursuant to the NERC inclusion process.</p> <p>There should be an exemption process with clear criteria pursuant to which an entity can attempt to demonstrate that although a particular Element is nominally part of the BES, it is not necessary for operating the interconnected electric transmission network. Elements for which an exemption is granted would be considered non-BES. FMPA's proposed criteria and exemption process are discussed in FMPA' comments on BES exemption process submitted today.</p> <p>There should be an inclusion process with clear criteria pursuant to which NERC may show, on a case-by-case basis, that although a particular non-BES Element is nominally not part of the BES, it is necessary for operating the interconnected electric transmission network and should therefore be considered part of the BES. FMPA' proposed criteria and inclusion process are discussed in FMPA' comments on BES exemption process submitted today.</p>
	<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>This new definition addresses radial Loads.</p>
<p>PacifiCorp</p>	<p>See respons #11.</p>

Organization	Question 12 Comment
Response: See response to Q11.	
PPL Energy Plus	The determination of whether or not a facility is part of the BES should consider FERC’s Order 743 paragraph 73 which clearly states the network nature of the BES. FERC states that the ability to overload parallel facilities (Order 743 paragraph 73) is a key feature of an element in the BES.
LG&E and KU Energy LLC	
Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. Elements such as Transmission lines are included and excluded in the BES based on this bright-line definition. Furthermore, entities will need to continue to meet all the performance of Facilities per the applicable NERC standards.	
Competitive Suppliers	Initial EPSA suggestions for meeting the directives for Order 743 are included in the answer to question 11. Additionally, EPSA recommends that the drafting team can benefit from utilizing the Compliance Registry Criteria in the BES definition. By using the classifications found in the Compliance Registry Criteria - Section III (Rules of Procedure Appendix 5B), of which much is alluded to in the questions included on this comment form, can provide a useful basis to create a comprehensive, revised BES definition. Further, competitive suppliers recommend that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term "bulk power system" in each criteria with "100 kV." Structuring the revised BES definition to clarifying that aligns with the Compliance Registration criteria will ensure against complex exemption process as well as eliminate the need for Section III of the Registry Criteria.
Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. Furthermore, the SDT has utilized many resources during the development of this definition including the Compliance Registry Criteria.	
NERC Staff	Please see additional comments at the end of this document. .
Entergy Services	Please see our response to Q13 below.
Response: See response to Q13.	
NextEra Energy Inc.	Based on the information posted by the North American Electric Reliability Corporation (NERC) on its plans to address Order No. 743 of the Federal Energy Regulatory Commission (FERC), NextEra Energy, Inc. (NextEra) believes that NERC (and associated drafting teams) should slightly modify its direction to more closely align with FERC’s proposed framework. In Order No. 743, at paragraph 30, FERC stated that:The Commission believes the best way to address these concerns is to

Organization	Question 12 Comment
	<p>eliminate the regional discretion in the ERO’s current definition, maintain the bright-line threshold that includes all facilities operated at or above 100 kV except defined radial facilities, and establish an exemption process and criteria for excluding facilities the ERO determines are not necessary for operating the interconnected transmission network. It is important to note that Commission is not proposing to change the threshold value already contained in the definition, but rather seeks to eliminate the ambiguity created by the current characterization of that threshold as a general guideline. FERC also provided NERC with the opportunity to propose an alternative approach. NextEra believes, however, that FERC’s proposed framework is appropriately designed to enhance the definition of the Bulk Electric System (BES) in the NERC glossary, and to separately develop a process to apply for and receive, as appropriate, an exemption from the BES definition. Although it appears that NERC and the drafting teams may also be inclined to proceed as suggested by FERC, there are indications in the questionnaire and BES concept paper that there may be some thought to deviating from FERC’s proposal. A review of the information posted by NERC seems to indicate NERC’s intention to have a drafting team develop a revised BES definition via the standards development process (i.e., Appendix 3A of the NERC Rules of Procedure).</p> <p>It also seems that NERC is interested in assigning a “working group” to separately develop an exemption process that would be implemented as a new process in the NERC Rules of Procedure. NextEra agrees with this approach. NextEra’s concerns stem from some of the words in the proposed BES definition, the BES concept paper and the questions asked, which seem to suggest an unnecessarily overlapping definition and exemption process, and a movement toward an exemption process based on categories rather than criteria.</p> <p>Thus, to address these concerns NextEra proposes the following enhancements to more clearly separate the BES definition and exemption process, and align each more closely with Order No. 743. As for the BES definition, NextEra encourages the drafting team to solely focus its efforts on the definition. The currently posed revised BES definition reads as follows: Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher necessary to support bulk power system reliability. Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process. NextEra maintains that this is not the correct starting point, nor consistent with Order No. 743 or the other material posted by NERC, that suggests a more definitive separation of the BES definition from the exemption process. Thus, NextEra proposes that the definition be revised to read as follows: Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher, unless a Transmission or Generation Element or Facility has been exempted pursuant to the exemption process set forth in the NERC Rules of Procedure. This proposed BES definition more clearly and cleanly separates the BES definition from the exemption process. It also does not add unnecessary qualifiers or verbiage that may result in confusion.</p> <p>NextEra is also concerned that the working group assigned to the exemption process may initially be more focused on developing categories, instead of an exemption process and associated criteria. Given the unique circumstances of the interconnected BES, including system topology, NextEra does not believe that it would be a productive exercise for the exemption working group to focus on types, groups or categories of equipment; instead, its efforts should focus on developing specific objective criteria to judge the reasonableness of a request or application for an exemption. This approach also seems more in line with FERC’s statement in Order No. 743 at paragraph 115: NERC should develop an</p>

Organization	Question 12 Comment
	<p>exemption process that includes clear, objective, transparent, and uniformly applicable criteria for exemption of facilities that are not necessary for operating the grid. The ERO also should determine any related changes to its Rules of Procedures that may be required to implement the exemption process, and file the proposed exemption process and rule changes with the Commission. The challenges of developing an exemption process also include ensuring that any applicant is afforded due process and balanced decision-making, as required by section 215 of the Federal Power Act. Thus, the exemption process must address legal, regulatory and technical issues. Accordingly, NextEra requests that NERC assemble a working group (perhaps via the Standards Committee) to develop the exemption process that is comprised of stakeholders with legal, regulatory and technical experience. Without this balance of disciplines, NextEra is concerned that a technical-heavy working group will attempt to develop a “fix,” instead of a process whereby applicants may request an exemption, and have that exemption judged by specific criteria and pursuant to a process that affords due process and balanced decision-making. It is not clear whether an exemption working group has already been assembled. If it has, NextEra requests that NERC consider restructuring of the group consistent with NextEra’s proposal. In summary, NextEra requests that the BES definition drafting team adopt NextEra’s proposed definition of BES. NextEra also requests that NERC assemble a cross-functional working group to develop an exemption process based on specific criteria (rather than categories), and a process that affords applicants due process and balanced decision-making.</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>The new definition removes the term “general” and provides more specific wording.</p> <p>NERC will follow the due process established for changes to the Glossary of Terms.</p>	
<p>Pepco Holdings Inc.</p>	<p>The RFC BES Definition and Clarifications could be used as a model for definition. It specifically incorporates additional detail of what is included and what is excluded.</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. The SDT has utilized many resources during the development of this definition including the work done by RFC.</p>	
<p>Indeck Energy Services</p>	<p>The BES definition should be the same as the FPA Bulk Power System definition! It will not be a bright line, like >100 kV. It will focus NERC's efforts on the real reliability issues rather than chasing many small entities through paper exercises that make someone feel that they are punishing unreliable behavior. Such exercises over the last 3 years have not measurably improved reliability, in fact, NERC doesn't seem to know how to measure reliability in its purest form. It can monitor operating and planning parameters of the BPS, but none of them truly measure reliability. The July, 2010 FERC Technical Conference showed how far off NERC is when a FERC Commissioner had to state that preventing "loss of load" does not define reliability. As referred to in the FPA, preventing cascading outages defines reliability. How does having a Sabotage</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Question 12 Comment
	and Bomb Threat procedure at a 100 MW wind farm prevent cascading outages?
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions.</p>	
Snohomish County PUD	<p>Snohomish has worked extensively with the WECC Bulk Electric System Task Force ("BESDTF") over the last two years and, while we disagree with certain details of the BESDTF approach (in particular, we believe a 200-kV threshold rather than a 100-kV threshold more appropriately reflects conditions in the Western Interconnection), we believe the approach developed by the BESDTF will achieve the reliability goals laid down by FERC in Order No. 743 while at the same time excluding facilities from the BES that have no meaningful impact on the reliable operation of the bulk transmission system, which thereby minimizes unnecessary compliance costs. Accordingly, we commend the work of the BESDTF to the standards drafting team. Given the relatively short deadline imposed by FERC for completion of work on the revised definition, we believe it will be necessary for the standards drafting team to rely on existing work of groups like the BESDTF rather than re-inventing the wheel.</p>
Central Lincoln	<p>The WECC Bulk Electric System Definition Task Force has made significant progress in defining the BES. We encourage the SAR to look at the work they've done.</p>
PUD No.1 of Clallam County	
PNGC Power	
Blachly-Lane Electric Co-op	
Clearwater Power Co.	
Douglas Electric Cooperative	
Central Electric Cooperative, Inc. (Redmond Oregon)	
Raft River Rural Electric Cooperative	
Northern Lights Inc.	
Salmon River Electric	

Organization	Question 12 Comment
Cooperative	
Okanogan Country Electric Cooperative	
Lost River Electric	
Lane Electric Cooperative	
Coos-Curry Electric Cooperative	
Consumer's Power Inc.	
Umatilla Electric Co-op	
West Oregon Electric Cooperative	
Lincoln Electric Cooperative	
Fall River Electric Cooperative	
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. The SDT has utilized many resources during the development of this definition including the work done by the WECC BESDTF.</p>	
The Dow Chemical Company	<p>As discussed above, the proposed definition of BES is flawed because it fails to expressly exclude local distribution facilities. It is also confusing, particularly with respect to its use and application of the 100 kV standard. As the definition is written, the 100 kV standard would apply to both transmission and generation facilities - i.e., "All Transmission and Generation Elements and Facilities" - even though voltage is primarily a measure of transmission capability with little applicability to generation. Such a standard would, depending on how it is applied, be inconsistent with the generation criteria already set forth in the NERC Statement of Compliance Registry Criteria. In the case of Dow and Union Carbide Corporation, these criteria establish a generally-applicable 20 MVA threshold applicable to exports of electricity to the transmission grid from individual generating units and a 75 MVA threshold applicable to exports of electricity to the transmission grid from generating plants/facilities.</p>

Organization	Question 12 Comment
	<p>The BES definition should not change the currently applicable 20 MVA / 75 MVA generation size threshold applicable to generation facilities or the manner in which that threshold is currently applied, with behind-the-meter cogeneration facilities evaluated based on the net capacity actually provided to the grid. The best approach might be to define BES as simply consisting of three types of facilities: (1) BES Generation; (2) BES Transmission; and (3) BES Protection and Controls. Those terms would then be defined by reference to criteria set forth in NERC's Statement of Compliance Registry Criteria. For example, the term BES Generation would be defined as individual generating units or generating plants or facilities that meet the criteria set forth in the Statement of Compliance Registry Criteria.</p> <p>This approach would provide greater clarity. It would also generally preserve the status quo, which is particularly important in the context of generation. NERC and the Regional Entities have already made significant progress in deciding what generators should be subject to compliance with mandatory reliability standards and what generators should be exempted. Nothing in Order No. 743 requires that those determinations be revisited.</p> <p>The issues raised in Order No. 743 will, however, likely require revisions to the transmission-related criteria set forth in NERC's Statement of Compliance Registry Criteria. Dow is not in principle opposed to the retention of the 100 kV standard that is already set forth in the registry criteria, but it must be clarified to apply to facilities that perform a transmission function while excluding facilities that perform a local distribution function. The criteria should also preserve the "material to reliability" standard that is set forth in the proposed definition, i.e., that facilities must be "necessary to support bulk power system reliability" in order to be considered part of the BES. This standard is particularly important in the context of interconnection facilities that connect generation resources to the transmission grid. FERC has recognized that such facilities do not neatly qualify as either transmission facilities or distribution facilities, but that such facilities should nevertheless be considered part of the BES and subject to mandatory reliability standards only if they are determined to be "material to the reliability of the bulk power system." See <i>New Harquahala Generating Company, LLC</i>, 123 FERC ¶ 61,173 at P 44 (2008), clarified, 123 FERC ¶ 61,311 (2008). Based on these considerations, the criteria set forth in the NERC Statement of Compliance Registry Criteria should be structured so as to define "BES Transmission" as including: (1) facilities that perform a transmission function, that are operated at voltages of 100 kV or higher, and that are materially necessary to support bulk power system reliability; and (2) any other facility that performs a transmission function that is found to be materially necessary to support bulk power system reliability. To the extent an interconnection line from a BES Generation facility is materially necessary to support bulk power reliability, that interconnection line should be treated as part of the BES Generation facility, rather than a BES Transmission facility. Such a structure would preserve the bright-line 100 kV standard preferred by FERC, while defining and applying the standard in a manner that appropriately preserves the distinctions that are recognized for local distribution and interconnection facilities, and that ensures that all facilities that materially affect reliability are covered by the standards.</p> <p>Of course, once a definition for BES Transmission is adopted, the next step is to develop a process for applying that definition so as to identify specific facilities that qualify as BES Transmission facilities, and that are subject to mandatory reliability standards. Owners and operators should be afforded an opportunity in the process to demonstrate that their facilities should be excluded because they either: (1) perform a distribution function; (2) are not materially necessary to support bulk power system reliability; or (3) are included as part of BES Generation facilities. Such an opportunity must be</p>

Organization	Question 12 Comment
	provided before facilities become subject to mandatory BES Transmission reliability standards.
	<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>This new definition addresses radial Loads and generation.</p> <p>Furthermore, the SDT has utilized many resources to provide this clarity including the Compliance Registry Criteria.</p>
Utility Services	We believe our answers to the questions above provide for sufficient means to meet the intent of Order 743.
	Response: Please see responses to questions above.
BGE	<p>It is preferable that non-BES facilities be excluded by the definition language rather than to define BES broadly and require non-BES facilities go through an exception process. For those special case facilities that may exist, an “opt-in” evaluation could be conducted. We find that this approach to revising the BES definition would satisfy the FERC directives in Order 743 by encompassing all facilities necessary for operating an interconnected electric transmission network into a national level, bright-line definition. This approach will improve the clarity and consistency of the BES definition for application by Industry and NERC as well as avoiding creation of a potentially cumbersome exception process. The rules of procedure process may be used to develop the “opt-in” process that would replace the proposed exception concept; however, the drafting team, perhaps in collaboration with regional entities, should develop any opt-in criteria needed for the process. It is appropriate for NERC to develop aspects such as the administrative management, the role and interaction of the regions, an appeal process, etc. However, due to the technical aspects of BES operation, the drafting team members are best suited to devise criteria for non-BES facilities to warrant inclusion in the BES.</p>
Constellation Power Source Generation, Inc. (“CPSG”) filing on behalf of Constellation Energy Group, Inc. (“CEG”), Constellation Energy Commodities Group, Inc. (“CCG”), Constellation Energy Control and Dispatch, LLC (“CDD”), Constellation NewEnergy, Inc., (“CNE”) and Constellation Energy Nuclear	<p>Constellation recognizes the value in clarifying the Definition of Bulk Electric System into a bright line threshold consistently applied across the regions. However, we are concerned that the current approach of a simple, all inclusive definition coupled with an exception criteria and process will not draw on the fundamentals underpinning the existing definition and create a cumbersome and unnecessary exception process. As an alternative, we propose that the standard drafting team utilize the Compliance Registry Criteria-Section III (Rules of Procedure Appendix 5B) along with definition threshold language (such as 100 kV) to develop a more comprehensive definition. Further, we propose that the BES drafting team incorporate the criteria directly into the revised BES definition, replacing the term “bulk power system” in each criterion with “greater than 100 kV.” This will make for a longer definition, but by aligning the facilities requiring registration as those defined as BES, the definition will more clearly determine the line between BES and non-BES. It is preferable that non-BES facilities be excluded by the definition language rather than to define BES broadly and require non-BES facilities go through an exception process. Ideally, this approach can eliminate the need for an onerous exemption process as well as eliminate the need for Section III of the Registry Criteria in the Rules of Procedure. For special case facilities deemed non-BES by the revised definition that</p>

Organization	Question 12 Comment
Group, LLC, (“CENG”)	<p>may warrant consideration for inclusion, an “opt-in” evaluation could be conducted. The rules of procedure process may be used to develop the “opt-in” process that would replace the proposed exception concept; however, the drafting team, perhaps in collaboration with regional entities, should develop any opt-in criteria needed for the process. Again, it is appropriate for NERC to develop aspects such as the administrative management, the role and interaction of the regions, an appeal process, etc. However, due to the technical aspects of BES operation, the drafting team members are best suited to devise criteria for non-BES facilities to warrant inclusion in the BES. We find that this approach to revising the BES definition would satisfy the FERC directives in Order 743 by encompassing all facilities necessary for operating an interconnected electric transmission network into a national level, bright-line definition. This approach will improve the clarity and consistency of the BES definition for application by Industry and NERC as well as avoiding creation of a potentially cumbersome exception process.</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition. Furthermore, the SDT has utilized many resources to provide this clarity including the Compliance Registry Criteria.</p>	
Springfield Utility Board	<p>See suggested language in the comment to Question 11. (This e-survey process is confusing as one does not know what will be asked to know the right context to provide a response. Can you please post all questions in advance of an entity walking through the survey. Also - seeing the responses at the conclusion of the survey is great, but it would be convenient to be able to edit responses at the conclusion as well)</p>
<p>Response: See response to Q11. The SDT has no control over the logistics of the system for providing comments. However, a Word version was posted on the project web page for review.</p>	
APPA	<p>The Concept Paper states at page 1 that in Order 743, FERC directed NERC to do the following:</p> <ul style="list-style-type: none"> A. Utilize the NERC Standard Development Process to revise the definition of Bulk Electric System (BES) contained in the NERC Glossary of Terms. B. Develop a single Implementation Plan to address the application of the revised definition of the BES and the implementation of the exemption process. C. Utilize the NERC Rules of Procedure to develop and implement an ‘exemption process’ used to identify Elements and Facilities which will be included in or excluded from the BES. <p>The Concept Paper continues to state that: This project will address items ‘A’ and ‘B’ and will coordinate efforts between the Standard Drafting Team (SDT) and the group working to develop the exemption process for inclusion in the NERC Rules of Procedure to ensure that the revised BES definition and exemption process result in an accurate, repeatable, and</p>

Organization	Question 12 Comment
	<p>transparent method for the identification of BES and non-BES Elements and Facilities.</p> <p>APPA agrees that the standards process must be used to develop the revised BES definition and that NERC has been directed to use its Rules of Procedure process to develop an ROP-based procedure to implement an exemption/exclusion/inclusion process. However, the FERC directives do not speak to how and by whom the technical methodology, study criteria and data requirements for requesting and receiving approval for an exemption should be developed.</p> <p>To the maximum extent possible, subject to time constraints imposed by FERC, this inherently technical methodology needs to be developed through the NERC standards development process, in conjunction with development of the revised definition of BES. Separate development will significantly hamper development of industry consensus in support of the revised BES definition and the yet to be developed ROP modifications for the exemption process.</p> <p>The most critical question is how do we arrive at a commonly agreed upon, widely accessible, transparent, and replicable continent-wide methodology to determine whether each specific facility is or is not “necessary to operate an interconnected electric transmission network” to quote from paragraph 16 of Order 743. While each region may have a separate model reflecting its topology and system performance characteristics, a continent-wide approach is required to address FERC concerns about inconsistency across regions that are not the result of physical differences.</p> <p>The statutory definition of the term bulk-power system defines the outer extent of facilities that can be included (at least within the United States) within the NERC definition of BES. FPA section 215(a)(1) states that the bulk-power system includes “(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability.” Further, the term BPS “does not include facilities used in the local distribution of electric energy.” [emphasis added]. Similarly, “reliable operation” is defined at 215(a)(4) to mean “operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.” These definitions appear to point to two basic questions for the classification of each facility or element as BES or non-BES:</p> <ol style="list-style-type: none"> 1. Is the facility or element necessary for reliable operation because it contributes significant capability to the interconnected transmission network? 2. Will the misoperation or unanticipated failure of the facility or element adversely affect the reliable operation of the interconnected transmission network? APPA suggests that the BES SDT or separate study teams should be directed to establish the outline for this study methodology. <p>APPA further suggests that BES sub-teams be established to address the Proposed BES Criteria in the Concept Paper. Separate sub-teams should be established to address detailed system configuration and study methodology issues affecting:</p>

Organization	Question 12 Comment
	<p>1. Radials serving load (with and without distribution voltage generation not subject to registration)</p> <p>2. Other transmission elements that entities seek to include in or exclude from the BES.</p> <p>3. Generating plant equipment that entities seek to include in or exclude from the BES.</p> <p>4. Technical issues raised by the FERC Seven Factor Test for Local Distribution Facilities.</p> <p>Separate sub-teams are appropriate because the study issues are likely to be quite distinct. For example, radials serving only load do not provide alternative pathways for reliable BES operations, as might some sub-100 kV facilities. Mixing the two teams together might slow progress on identification of various commonly used radial to load center configurations that with proper protection schemes do not have the potential to adversely affect the BES. A focused effort on permissible exclusions of radials serving load is essential to prevent distribution providers from adopting less reliable system configurations to serve their loads because they are concerned that the preferred configuration will make them subject to registration as TOs and/or TOPs.</p> <p>Note that the proposed sub-teams do not necessarily have to be populated by members of the SDT. The new standards process allows SDTs to gather informal input from a variety of sources. However, development and posting for industry comment of the minimum acceptable characteristics of the study methodology to be used in the Exceptions Process should be the responsibility of the BES SDT.</p> <p>The Comment Form on the Exclusion Process poses reasonable questions and it is my hope that registered entities and regional entities identify numerous candidate facilities and elements for inclusion or exclusion from the BES, accompanied by one-line diagrams that lay out each of the permutations for such facilities that are candidates for exclusion/inclusion. These facilities range from simple radial transmission lines and distribution step-down transformers to 100 kV class distribution networks that operate radially from the BES. I also hope that entities submit extensive technical documentation to explain why such facilities should be excluded from or included in the BES.</p> <p>Good luck!</p>
	<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>NERC will follow the due process established for changes to the Glossary of Terms.</p> <p>This new definition addresses radial Loads, generation, and local distribution networks.</p>
Xcel Energy	<p>Xcel Energy agrees that the FERC Order 743 directs NERC to modify the Rules of Procedure to include the process for how an entity or region may initiate an exclusion or inclusion. However, we do not agree that FERC also directed that the actual criteria and technical specifics for inclusion or exclusion be developed as part of the Rules of Procedure. Furthermore, since</p>

Organization	Question 12 Comment
	<p>the inclusion/exclusion criteria is a key component to the definition of BES, we feel the criteria should be treated as part of the definition development and developed in the same manner as the definition itself. (Preferably by the same drafting team.)</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>NERC will follow the due process established for changes to the Glossary of Terms.</p>	
<p>City of Redding</p>	<p>Please consider the WECC Bulk Electric Definition Task Force work to date.</p> <p>See Attachment 1 at the end of this document.</p> <p>See Attachment 2 at the end of this document.</p>
<p>Response: The SDT appreciates these observations and believes that our new definition with the exclusion and inclusion designations will provide a bright-line definition, clarity, and consistency across the regions that will address many, if not all, of the issues in the provided examples. This definition will eliminate regional discretion and any questions on this bright-line definition will be handled through a revision to the Rules of Procedure by a separate team in an effort parallel to the development of this BES definition.</p> <p>Furthermore, the SDT has utilized many resources to provide this clarity including the Compliance Registry Criteria and the work in the WECC BESDTF recommendations.</p>	

13. Please provide any other information that you feel would be helpful to the drafting team working on the definition of BES.

Summary Consideration: The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The exception criteria use the same bright-line criteria to provide further guidance as to whether an Element is considered BES or non-BES. The SDT believes that this is the best method to address the Commission’s concerns of establishing a bright-line definition of the BES that is clear, unambiguous, and provides for consistent application across the continent.

The SDT acknowledges the comments and concerns related to the Exception Process and recognizes that the forum for providing these comments to the NERC Rules of Procedure Team was not established prior to this posting. The revision process for the NERC ROP to develop the Exception Process will be coordinated by NERC staff and governed by current practice for administering such revisions. All comments pertaining to the Exception Process, the NERC ROP Team, and the ROP revision process will be forwarded to the appropriate parties for consideration.

The SDT acknowledges the industry’s concerns surrounding the separation of work to different teams in response to the directives in FERC Order No. 743. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project. The SDT is committed to that close coordination between the development of the core definition of the BES and the exception criteria by the SDT and the development of the Exception Process by the NERC ROP Team. The goal is to have parallel postings from each aspect of the project, which will enable the industry to review the entire project ‘package’ at one time and effectively provide comments simultaneously on the core definition exception criteria with its associated lists of “inclusions” and “exclusions” and the Exception Process.

Organization	Yes or No	Question 13 Comment
Northeast Power Coordinating Council	a.)	Proposed definitions to be added to the NERC Glossary of Terms: BES Exemption Process: The review processes for (a) excluding or exempting facilities and Elements from the BES that are determined not to be necessary to support bulk power system reliability (e.g., radial elements), and (b) including Elements operated at voltages below 100 kV that are determined to be necessary to support bulk power system reliability. By identifying all such BES and non-BES facilities and elements, the BES Exemption Process will establish the Points-of-Demarcation between Facilities and BES Elements and non-BES facilities and Elements. Point-of-Demarcation: A physical point and/or electrical connection between facilities and BES Elements and non-BES facilities and elements, e.g., the upstream terminals of a disconnect switch (or a buss connection) representing the boundary between a BES supply bus and a non-BES radial feeder. The BES exemption process has not yet been written. So, it is somewhat difficult to know a priori whether any element, elements or a group of elements or facilities should or should not be classified as part of the BES definition.
	b.)	This document uses both “exemption process” and “exception process”. Recommend that the phraseology be standardized on “exception process” as the exception (not the exemption) can be to include or exclude elements and

Organization	Yes or No	Question 13 Comment
		<p>facilities.</p> <p>c.) It is envisioned that the BES Exception Process will contain 3 sub-processes; one for Exclusion, one for Exemption, and one for Inclusion. Each sub-process will establish provisions and guidelines for the three different tasks. In order to ensure consistency across the continent, it is our view that NERC should be the facilitator of these processes. NERC may choose to have some of these tasks performed at the regional levels through the existing delegation agreements.</p> <p>d.) The BES Exception Process must be an active and ongoing aspect of the ERO program. With the addition of new or deletion of existing Transmission and Generation Elements, Facilities, or systems. It needs to be recognized that Exclusions, Inclusions, and Exemptions might need alteration over time. By establishing appropriate guidelines and processes, the ERO will be able to monitor and maintain information on what is the Bulk Electric System, or BES.</p> <p>e.) The exception (exemption) process should clearly address the process and requirements for FERC non-jurisdictional entities (such as the Canadian entities) with the exception of the interconnections between them and those entities under FERC jurisdiction, and/or those entities having a direct impact on those interconnections.</p> <p>f.) Classification of all radial facilities operated at voltages of 100 kV and above as part of the BES by default would be unnecessary and administratively inefficient, because the operation of all radial facilities do not have a significant operational impact on the BES. Those radial facilities not having a significant impact should be excluded from the BES. If they aren't, it could lead to delays in the review and approval of other exemption requests. As such, the proposed BES definition should be revised to clearly define what radial Transmission Elements will not be included as part of the BES. This would be consistent with FERC's intention expressed in Paragraph 55 of Order 743 to not alter the part of the approved definition that deals with "radial transmission facilities serving only load".</p> <p>g.) Additionally, to ensure a common understanding of the meaning of "radial" and to promote consistency in its application, "radial" should be defined and added to the NERC Glossary.</p>
<p>Response:</p> <p>a.) With the proposed revisions to the definition of BES, at this time, the SDT does not contemplate adding any additional definitions beyond BES. In regards to the term "BES Exception Process"; it has been determined that the process will reside in the NERC Rules of Procedure (ROP) and therefore it seems logical that the purpose of the process would be defined within the boundaries of the NERC ROP.</p> <p>b.) The inconsistency of the use of 'exemption' vs. 'exception' in several documents has been identified by the SDT and the team has determined that 'exception' is the proper term to be used in reference to the Bulk Electric System definition and supporting processes.</p> <p>c.) The 'Exception Process' will be developed by the NERC Rules of Procedure Drafting Team while coordinating with the DBES SDT. The 'Exception Process' and the responsibilities associated with the implementation and oversight will be defined by the NERC Rules of Procedure Team. Based on the</p>		

Organization	Yes or No	Question 13 Comment
		<p>language contained in FERC Order No. 743, there are Commission expectations associated with the process oversight by the ERO and allowances for the delegation of responsibilities to Regional Entities as appropriate, while ensuring the process is clear and capable of being applied consistently, objectively, and uniformly across all regions.</p> <p>d.) The SDT agrees that the Bulk Electric System is dynamic and that the implementation and continued application of the BES Definition and supporting processes will require active oversight and management to ensure that changing conditions (i.e., operational & new construction) surrounding the Bulk Electric System will be addressed and result in proper evaluation and identification of BES & non-BES Elements. The current scope of the Standard Authorization Request (SAR) for Project 2010-17 Definition of Bulk Electric System does not include the development of the 'Exception Process'. The 'Exception Process', including the implementation and continued application of the process will be developed by the NERC ROP Team.</p> <p>e.) The SDT has established non-jurisdictional representation to address the concerns of the applicable entities (i.e., Canadian entities) in regards to the application of a continent-wide 'bright-line' definition of the Bulk Electric System and the exception criteria listed in the definition. NERC Staff has determined the needs of the NERC Rules of Procedure Team in regards to the diversity of the membership and the technical expertise required to appropriately modify the ROP in response to the directives identified in FERC Order No. 743.</p> <p>f.) The SDT has further developed the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' utilizes the same 'bright-line' approach to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line for identifying Generation Facilities, Radials, etc.). The exception criteria has been listed in the revised definition of BES.</p> <p>g.) With the proposed revisions to the definition of BES, at this time, the SDT does not contemplate adding any additional definitions beyond BES.</p>
MRO's NERC Standards Review Subcommittee		<p>A. What time frame is the SDT considering for the implementation of this definition and process once approved, allowing enough time for the entities to provide justification, and then make the necessary changes to their internal programs?</p> <p>B. Recommend the BES SDT be consistent with the generation registration criteria and the Protection System definition and other documents. For example, what is a "common bus" as stated in the generation registration criteria.</p> <p>C. Please review and update the concept paper. The concept paper does not specifically call out Transmission Lines above 100 kV as in the BES definition (the proposed definition does, however) and there is a circular exemption criteria in the concept paper. In criterion #2, it refers to the exemption process "consistent with the criteria". The criteria exempt generating plant controls and Transmission Elements or Systems that are radial to a load or generator not included in the BES List. However, the BES list is defined prior to the criteria in the concept paper. Exemption criterion #1 points to BES list elements #6 and #7, which in turn, refer to the exemption process. But, the exemption criteria never define how to exempt the elements referred to in #6 and #7.</p> <p>D. How often would a Registered Entity revisit this Exception Process? NSRS can envision a scenario where they are doing that every year or two because of the changes in load, generation, and transmission. The process should also allow for</p>

Organization	Yes or No	Question 13 Comment
		<p>multi-year distinctions for exceptions. In other words, if a Registered Entity gets a facility excluded, then that exclusion should be allowed for 3 or more years. Annual certifications and approval are too restrictive.</p> <p>E. NSRS believes the exception criteria needs to be developed by the SDT. NERC Staff should focus on the process (identification, notification, appeal and rights) but the SDT is in the better position to develop the technical piece of the exception criterion.</p>
<p>Response:</p> <p>A. The SDT has established basic goals and assumptions that will be used to guide the development of the BES definition and supporting documents. The assumptions include: ‘The revised definition will not significantly expand or contract what are currently considered BES Elements, nor will the revised definition drive entity registration or de-registration’. Based on these goals and assumptions the overall impact of the revised definition is expected to be minimized for the majority of the Regions and Registered Entities. However, once the definition and supporting documents are nearing completion, the impact of the revised definition will be assessed and the Implementation Plan and Transition Plans will be developed to provide an appropriate time-period for entities to establish compliance with the applicable Reliability Standards.</p> <p>B. The SDT has established basic goals and assumptions that will be used to guide the development of the BES definition and supporting documents. The assumptions include: ‘The revised definition will not significantly expand or contract what is currently considered to be BES Elements, nor will the revised definition drive entity registration or de-registration’. Based on these goals and assumptions and in the absence of technical justification, the current generator registration criteria appears to be the logical starting point for assessing BES Elements. The goal of the SDT is to establish a component-based ‘bright-line’ definition which enables the proper assessment of BES and non-BES Elements. The ‘bright-line’ associated with the identification of Protection Systems which are applicable to the PRC series of Reliability Standards is not necessarily at the same point. The SDT has discussed this issue and will be seeking guidance from FERC staff in regards to the directives in FERC Order No. 743 and how they potentially apply to Protection Systems. Protection Systems are not currently within the scope of the SAR for this project and any significant expansion could potentially jeopardize the ability of the SDT to complete this project and file in accordance with the Commission directed time requirements in FERC Order No. 743.</p> <p>C. The SDT is not considering updating the concept paper as future work will be in crafting the actual definition and designations.</p> <p>D. The SDT agrees that the Bulk Electric System is dynamic and that the implementation and continued application of the BES Definition and supporting processes will require active oversight and management to ensure that changing conditions (i.e., operational & new construction) surrounding the Bulk Electric System will be addressed and result in proper periodic evaluation and identification of BES & non-BES Elements. The current scope of the Standard Authorization Request (SAR) for Project 2010-17 Definition of Bulk Electric System does not include the development of the ‘Exception Process’. The specific review/re-assessment ‘time periods’ associated with the identified exceptions (inclusions & exclusions) will be drafted by the NERC ROP Team and vetted through the ROP Revision Process.</p> <p>E. The current scope of Project 2010-17 includes the development of the exception criteria. Additionally, the SDT will have representation on the NERC ROP Team to ensure that consistency is maintained throughout the development of the revised definition and the Exception Process.</p>		

Organization	Yes or No	Question 13 Comment
IRC Standards Review Committee		<p>a. On the SAR, it indicates an SC approval date of December 8. It is misleading since the SC did not approve the SAR; it only approved posting of the SAR for industry comment.</p> <p>b. We have a concern with the concept paper on the exemption/inclusion criteria/process. Please see other comments on that paper submitted separately.</p> <p>c. We suggest use of consistent term between “exception” and “exemption”.</p> <p>d. We suggest the exception/inclusion criteria to be included in the definition and developed/approved by the balloting body. Determining these criteria via any other processes will not provide the industry the opportunity to fully vet the criteria.</p> <p>e. The SAR indicates that “...the definition drafting team will work closely with the team developing the BES definition exemption process to develop a single coordinated implementation plan. It is also envisioned, that the team working to develop the BES definition exemption process will solicit input from drafting teams, stakeholders...” We find this confusing and have a concern that having two teams working on this definition/criteria package leads to misalignment and confusion. Further, while the definition drafting team is formed by a nomination process and appointed by the NERC Standards Committee, there is no transparency and/or public announcement to solicit nominations for the team working to develop the exemption process. We urge the NERC Standards Committee to direct the definition drafting team to also be responsible for developing the exemption process, and include the exemption criteria as part of the definition hence subjecting them to industry comment and balloting.</p>
<p>Response:</p> <p>a. The default language in the form is misleading and implies that the NERC Standards Committee’s approval is required. Per the NERC Standard Process Manual the Standards Committee authorizes posting of the SAR for industry comment. The DBES SDT will provide a recommendation to NERC Standards Staff to revise the SAR form to read, “Date SC Authorized Posting the SAR”.</p> <p>b. Please see comment responses to other questions.</p> <p>c. The inconsistency of the use of ‘exemption’ vs. ‘exception’ in several documents has been identified by the SDT and the SDT has determined that ‘exception’ is the proper term to be used in reference to the Bulk Electric System definition and supporting processes.</p> <p>d. The current scope of Project 2010-17 includes the development of the exception criteria and the revised definition of BES includes a proposed list of criteria for “Inclusions” and a proposed list for “Exclusions”. Additionally, the SDT will have representation on the NERC ROP Team to ensure that consistency is maintained throughout the development of the revised definition and the Exception Process.</p> <p>e. The passage from the SAR that is referenced in the comment is addressing the need for a single Implementation Plan that takes into consideration all</p>		

Organization	Yes or No	Question 13 Comment
<p>aspects of this project. The Implementation Plan will need to address the impact of the revised BES definition and exception criteria, the Exception Process (ROP) and the Regional Transition Plans. The current scope of Project 2010-17 includes the development of the exception criteria. Additionally, the SDT will have representation on the NERC ROP Team to ensure that consistency is maintained throughout the development of the revised definition and the Exception Process. The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and include representation from the DBES SDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p>		
Bonneville Power Administration		<ol style="list-style-type: none"> 1. Define the definition of generation resources and plants, specifically wind. 2. Ensure that the exemption process incorporates all lines in service, outage conditions, etc. 3. Ensure that BA's have the ability to recommend inclusion in the BES, if the BA determines the facility has an impact on the BES.
<p>Response:</p> <ol style="list-style-type: none"> 1. The term is no longer used in the definition. 2. The SDT has developed the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' utilizes the same type of 'bright-line' criteria approach to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The idea of injecting the 'current operational conditions' (lines in service, outage conditions, etc.) of Elements poses difficulties with the universal application of the definition to achieve consistent results across the continent. Additionally, the idea of 'current operational conditions' (lines in service, outage conditions, etc.) suggests that these conditions are subject to change and therefore could result in different assessments when identifying BES and non-BES Elements. 3. The responsibilities associated with the Exception Process will be determined and established by the NERC ROP Team as part of the Exception Process. 		
FirstEnergy Corp		<ol style="list-style-type: none"> a.) FirstEnergy supports a new BES definition that will provide a clear bright-line of electric facilities deemed inclusive to the BES. The exclusion process should be a simple, continent wide, rarely used with high-thresholds for removing any 100kV and above facility from the BES. The exclusion process and BES definition change should also include a practical means for transition for any affected companies. b.) The BES definition should explicitly contain language to exclude radial to load transmission operated at 100kV and above voltage levels. Presently, it seems that radial transmission to load "may" be excluded, subject to the exemption process. The excluded radial facilities described by the BES definition should be simply defined and avoid overly complicated scenarios for qualify a facility as radial transmission.

Organization	Yes or No	Question 13 Comment
		<p>c.) BES definition clarity can be accomplished by incorporating aspects of the concept paper’s proposed “BES Criteria” as being part and parcel of the overall BES definition. Doing so will establish the desired BES bright-line by further describing facilities as “in” or “out” by definition and avoid an overly complicated exclusion process.</p> <p>d.) The exclusion process should be rarely used, having a narrow expectation for removing facilities from the BES and thus avoid an overly burdensome administrative process. From an exclusion view, the BES definition should directly exclude radial 100kV and higher transmission, facilities operated below 100kV unless deemed critical to the BES by the Regional Entity and any 100kV and higher facility qualified by the BES exemption process.</p> <p>e.) Further, we support EEL’s views that the BES Definition and the technical aspects of the exemption criteria (outside of the definition) should be treated as a single standards development project and performed by this drafting team.</p> <p>f.) We also support a parallel effort by NERC staff, subject to industry review/comment, of revising the Rules of Procedure to account for the process oriented information that would point to the technical exemption criteria/guidance developed by the standard drafting team.</p> <p>g.) Finally, the concept paper awkwardly describes an “exclusion process” that would identify any sub 100kV facilities that would be “included” in the BES. The criterion developed for potentially including sub 100kV facilities should be separately developed or at least not referenced within an “exclusion process”. Additionally care should be taken to not cast the net too wide in this regard. While we propose a high threshold for excluding 100kV facilities from the BES, we similarly propose a high threshold for inclusion of sub 100kV facilities. The primary focus of this drafting team should be the drafting of the new BES definition and the technical BES exemption criteria. The development of continent-wide criteria for including other sub 100kV facilities in the BES should be treated as a secondary priority for meeting the milestone expectations of the FERC compliance filing.</p>
<p>Response:</p> <p>a.) The SDT agrees with the comments. The Implementation Plan will need to address the impact of the revised BES definition and exception criteria, the Exception Process (ROP) and the Regional Transition Plans on affected entities and provide sufficient time to ensure a smooth transition into the realm of mandatory and enforceable Reliability Standards.</p> <p>b.) The SDT has further developed the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements with a list of exceptions. The ‘exception criteria’ utilizes the same ‘bright-line’ criteria approach to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.).</p> <p>c.) The SDT agrees with the comments and has established the tight linkage between the core definition of the BES with the component-based ‘bright-line’ exception criteria.</p>		

Organization	Yes or No	Question 13 Comment
		<p>d.) The Exception Process will be employed when the bright-line core definition and its associated exception criteria cannot be applied to a specific Element. It is anticipated by the SDT that the 'bright-line' will be the definitive approach to identifying BES and non-BES Elements for the vast majority of the system configurations across the continent and utilization of the Exception Process will be limited to the remaining Elements.</p> <p>e.) The current scope of Project 2010-17 includes the development of the exception criteria and these have been included in the revised definition of BES. Additionally, the SDT will have representation on the NERC ROP Team to ensure that consistency is maintained throughout the development of the revised definition and the Exception Process.</p> <p>f.) The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p> <p>g.) It is the vision of the SDT that the process to include Elements within the BES and the ability to exclude Elements from the BES should parallel each other and require the same level of technical justification to achieve consistent results.</p>
Electric Market Policy		<p>Dominion supports, in large part, EEI's response to the draft concept paper. Dominion provides the following comments on the proposed exemption process. NERC should use the FERC-approved standards development process to develop the Bulk Electric System (BES) definition and the exemption process in a single, integrated and stakeholder approved process. To this end, Dominion conceptually supports an exemption process whereby NERC or the RRO could apply to have an element included or excluded from the BES definition. Such process recognizes that it may be necessary to include elements that do not meet the bright line criteria but are necessary for operating an interconnected transmission network. Such process should be developed through the existing NERC standards development process and include a robust appeals process for the owner/operator of any element so included or excluded.</p> <p>Dominion supports bright line exclusions of all elements rated at less than 100 kV, any transformer that has a primary or secondary winding of less than 100 kV, and all radial lines regardless of their kV rating. Radial lines to/from solely generation facilities and radial lines to/from load are comparable in terms of their impact on an interconnected transmission network. There are situations where these radials make a meaningful and required contribution to the operation of an interconnected transmission network and there are other locations/situations where these radials do not. Therefore, radial lines should only be specifically included in the definition of BES after the RRO has demonstrated that inclusion of the radial is necessary to operate an interconnected transmission network and the owner/operator of the radial line has had the opportunity to exercise its aforementioned appeal rights. Adopting this paradigm would prevent a gap in the application of reliability standards. Specifically, all radial lines would either be included in the definition of BES or would be captured via the NERC registry under distribution or generation.</p>

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 13 Comment
		<p>Dominion supports the criteria for registering owners, operators, and users of the bulk power system, as indicated in the current Statement of Compliance Registry Criteria . Adoption of the foregoing process would insure confidence in entities that the compliance registration process is equitable and fair.</p>
<p>Response: The NERC Standard Processes Manual is the governing document for the development of the revised BES definition and exception criteria. The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' use the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e. bright-line criteria for identifying Generation Facilities, Radials, etc.).</p> <p>The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project's success) is to have parallel postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria, and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743, the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>See responses to EEI comments.</p>		
SERC OC Standards Review Group		<p>We agree that Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher that are necessary to support bulk power system reliability should be included. Elements and Facilities operated at voltages of 100kV or higher, including radial elements, may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process."The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Standards Review group only and should not be construed as the position of SERC Reliability Corporation, its board or its officers."</p>
Competitive Suppliers		<p>EPSC recognizes the value in revising the BES definition so that a bright-line proxy can be consistently applied by the NERC Regional Entities. It is important that this definition be completed so that the drafting team work sequentially by determining the new BES definition and then move on to developing a exemption process that can work efficiently with that new definition</p>
<p>Response: The DBESSDT acknowledges your comments and thanks you for the support of the presented concepts.</p>		
Hydro-Quebec		<p>For Canadian entities, inclusion or exclusion of equipment and facilities in the BES must be also approved by Canadian regulators. Common interconnection between two jurisdictions must be included in BES when at</p>

Organization	Yes or No	Question 13 Comment
		<p>least one Facilities is necessary for the reliability of BES.</p> <p>The transmission lines dedicated to serve the native load in Quebec Interconnection should be excluded, considering that the Quebec Interconnection is one of the four recognized interconnection.</p> <p>Finally, we believe that it is very difficult to propose first a definition for the BES and only after an Exemption process. Both aspects influence each other and both should be conducted together.</p>
<p>Response: The SDT has established non-jurisdictional representation to address the concerns of the applicable entities (e.g., Canadian entities) in regards to the application of a continent-wide ‘bright-line’ definition of the Bulk Electric System and exception criteria. NERC Staff has determined the needs of the NERC Rules of Procedure Team in regards to the diversity of the membership and the technical expertise required to appropriately modify the ROP in response to the directives identified in FERC Order No. 743.</p> <p>Transmission Lines dedicated to serving native Load are an identified concern in several Regions and Interconnections. The issues surrounding this concern and the development of potential bright-line criteria are currently being considered by the SDT.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team.</p>		
PPL Energy Plus		<p>Please consider that it is the magnitude of MVA flow on a facility and the subsequent impact on the remaining facilities that defines when a facility is in the BES rather than just the direction of the real power flowing on the facility.</p>
LG&E and KU Energy LLC		
<p>Response: The SDT has developed the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The ‘exception criteria’ (now proposed as part of the definition of BES) utilizes the same ‘bright-line’ criteria approach to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The idea of injecting the ‘current operational conditions’ (i.e., MVA flow) of Elements poses difficulties with the universal application of the definition to achieve consistent results across the continent. Additionally, the idea of ‘current operational conditions’ (i.e., MVA flow) suggests that these conditions are subject to change and therefore could result in different assessments when identifying BES and non-BES Elements.</p>		
ExxonMobil Research and Engineering		<p>Industrial facilities must retain the ability to control their electric facilities in order to ensure that the system is designed to provide for the safest and most reliable source of electric power for the control of their processes. The definition of the bulk electric system and the exemption process should address this fact and exclude or provide a process to exclude industrial facilities from all or a select number of NERC requirements when there is a conflict between the requirements designed to ensure the reliability of BES and the safe operation of chemical processes.</p>
<p>Response: The SDT has established basic goals and assumptions that will be used to guide the development of the BES definition and supporting documents.</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 13 Comment
		<p>The assumptions include: ‘The revised definition will not significantly expand or contract what are currently considered BES Elements, nor will the revised definition drive entity registration or de-registration’. Based on these goals and assumptions the overall impact of the revised definition is expected to be minimized for the majority of the Regions and Registered Entities. The SDT is currently working toward an equitable solution concerning industrial customers based on language currently contained in the Registry Criteria which establishes guidance for addressing ‘behind the meter generation’.</p>
NERC Staff		See Attached.
<p>Response: The SDT will consider your comments in the further development of the core definition and the exception criteria.</p>		
Edison Electric Institute		<p>Order 743 / NERC BES Project Edison Electric Institute Responses to Draft Concept Paper General Issues: On behalf of its member companies, Edison Electric Institute (EEI) appreciates the opportunity to offer the following brief comments on NERC Project 2010-17 for developing response to FERC Order No. 743, definition of Bulk Electric System and an exemptions process for certain facilities. EEI is the association of the nation’s shareholder-owned electric companies, international affiliates, and industry associates worldwide. EEI’s U.S. members serve approximately 95 percent of the ultimate consumers served by the shareholder-owned segment of the electric utility industry and approximately 70 percent of all electric utility ultimate consumers in the nation. Virtually all EEI members are required to comply with the mandatory electric reliability standards established by the ERO and approved by the Commission, pursuant to section 215 of the Federal Power Act. As a process matter, EEI develops comments such as these through a disciplined and well-practiced process that includes broad distribution of draft documents to member companies, conference calls, and email exchanges, all conducted to ensure that EEI speaks with broad member company support and with as much specificity as possible. For additional information about the roster of membership, NERC staff should contact EEI directly.</p> <p>The concept paper envisions two parts of the project - (1) development of the technical criteria for the BES definition through the NERC Standards Development Process and (2) development of the Rules of Procedure for the exemption process.</p> <ul style="list-style-type: none"> a.) NERC should use the FERC-approved standards development process for developing the technical criteria for both the BES definition and exemptions. EEI views this as a single exercise, that is, the BES definition and technical aspects relating to exemptions as a single project. b.) EEI members believe that this is a critical project and understands various concerns about timeliness and process efficiency, and therefore recommends that stakeholders make strong commitments now to a project plan that will ensure a timely compliance filing at FERC. The drafting team should also expedite development of a project plan that shows tasks, deliverables, and milestone dates for the entire one-year timeline.

Organization	Yes or No	Question 13 Comment
		<p>c.) EEI reads Order No. 743 as suggesting that NERC should develop appropriate changes to the Rules of Procedure (ROP) to accommodate the process and due process features of the BES exemptions process, including matters such as administrative procedure, decision authority, appeals and other due process matters, and requests for changes. EEI strongly believes that the technical matters are best resolved in the FERC-approved standards development process, which for this project includes the BES definition and the various technical criteria to be used to define exemptions. NERC should manage the development of ROP changes through an open process that considers stakeholder comments and recommendations.</p> <p>d.) Alternatively, if NERC decides to develop various technical criteria for the granting of exemptions through the Rules of Procedure, EEI strongly encourages NERC to plainly describe the process plan, which will help communicate to companies how the process will be open, inclusive, transparent, and ensure due process.</p> <p>e.) Issues recommended for drafting team consideration: Order No. 743 provides that the best way to address its concerns about the definition of BES is to eliminate the regional discretion in the current definition, maintain the bright-line threshold that includes all facilities operated at or above 100 kV except defined radial facilities and establish an exemption process and criteria for excluding facilities that the ERO determines are not necessary for operating the interconnected transmission network. (P 30) Because transmission lines below 100 kV and radial lines are not included in the definition of BES, the standards drafting project should ensure that the definition expressly incorporates these exclusions. Entities should not have to seek an exemption for facilities below 100 kV or for radial lines. They should be clearly excluded in the BES definition itself.</p> <p>f.) Removing regional discretion does not imply that regions have no role. EEI also encourages NERC in the ROP to delegate the authority to grant exemptions in the first instance to the Regional Entities. NERC should maintain oversight authority, including review of decisions for consistent application of the criteria.</p> <p>g.) Applicants for exemptions should be able to appeal adverse Regional Entity decisions to NERC. The NERC Compliance Registry process should serve as a general model.</p> <p>h.) The BES definition must also address the statutory exclusion for facilities used in “local distribution.” Section 215 plainly excludes facilities used in local distribution from jurisdiction and EEI notes that the definition is applied under other provisions of the Federal Power Act. The exemptions process should provide that previous or future regulatory decisions regarding local distribution facilities can serve as an</p>

Organization	Yes or No	Question 13 Comment
		<p>exemption criterion. While Order 743 does not provide explicit guidance on this issue, EEI urges the drafting team to expand the concept paper to include how this issue will be addressed. If the concept paper is not expanded to include this issue, NERC needs to plainly say where the issue will be addressed.</p> <p>i.) Order 743 made references to facilities below 100 kv that might be defined as necessary for operating an interconnected transmission network, and asked that whatever processes are used to make jurisdictional decisions are rolled into the NERC process. In addition, the order referred to several “technical concerns” that might inform jurisdictional decisions on specific facilities greater than 100 kv, which are scattered references throughout the order. For example: operate in parallel with other high voltage and extra-high voltage facilities (P. 73), interconnect significant amounts of generation and (possibly) operate as a defined flowgate (P. 73), will experience similar loadings as high voltage or extra-high voltage facilities at any given time (P. 73), can cause or contribute to significant bulk power system disturbances and cascading outages (P. 73), will be relied upon during contingency operations (P. 73), are not primarily radial in character (P. 39), multiple interconnections of facilities (to other higher voltage facilities) do not constrain an otherwise limited geographical area (P. 39), overall, (implementation of) the proposed definition may not result in a reduction in reliability (P. 74), facilities that, when they fail, cause or influence significant loss of load (PP. 87, 89). Order No. 743 does not explicitly connect these criteria to the process to be developed; however, the drafting team in its plan should explain how it will address them, as required by the order (P 74). EEI encourages the drafting team to seek informal agreement with FERC staff on these various “technical concerns” prior to significantly advancing the project.</p> <p>j.) As a design matter, EEI encourages the drafting team to endorse a principle to seek to maximize the “brightness” of bright line criteria. While this may produce a longer or more detailed definition, EEI believes that greater demarcation at the outset will help reduce companies’ uncertainty, and help avoid the need to maintain a costly and bureaucratic exemptions process. EEI has previously offered comments on many occasions to both FERC and NERC in support of a ‘simple and clean’ TFE process.</p> <p>k.) EEI urges the drafting team to resist the temptation to create a complicated ‘Rube Goldberg’ device for BES exemptions. Order No. 743 (PP 77-78, 84-85) criticizes the NPCC impact-based study as failing to identify many facilities that are necessary for operating an interconnected transmission network. However, the order does not reject such studies generically, and plainly states that the Commission is not dictating the substance or content of the exemptions process. (P 114) The concept paper needs to clarify whether requests for exemptions may use impact-based studies to support their requests.</p> <p>l.) The concept paper reflects an awkwardly-worded reference (Item #6, proposed BES criteria) to the effect that certain facilities will be deemed included in the BES “...where the exemptions process</p>

Organization	Yes or No	Question 13 Comment
		<p>deems...” In the paragraph at the top of p. 2, the concept paper refers to the exemption process as seeking to determine “...whether a facility should be included or excluded...” EEI requests clarification that an exemptions process will be used to determine facilities for exclusions and not inclusions, and based on a 100 kv bright-line criterion for inclusion. Alternatively, the concept paper should clarify the general intention of this particular criterion.</p> <p>m.) As previously stated, the proposed ROP to be developed should codify the process - and due process - aspects of the exemptions process. The exemptions process should strike the right balance in establishing the criteria for exemptions to ensure that the process does not become mired in attenuated processes such as those developed for the TFE process.</p>

Response:

- a.) The NERC Standard Processes Manual is the governing document for the development of the revised BES definition and exception criteria. The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The ‘exception criteria’ (now proposed as part of the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.).
- b.) The SDT agrees with the critical nature of the project and the need to provide deliverables within the Commission directed time frame. The SDT has developed and posted a project schedule which identifies the tasks, deliverables, and milestone dates for the entire project. The schedule is publically posted and available on the project page (Project 2010-17 Definition of the Bulk Electric System) of the NERC website.
- c.) The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.
- d.) The SDT has determined that one of the keys to success for this team and the NERC ROP Team is effective communication that provides the industry with an understanding of the project plan and concepts, which will emphasize the development process attributes of openness, inclusiveness, transparency, and due process.
- e.) The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying Generation Facilities, Radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively indentified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as

Organization	Yes or No	Question 13 Comment
		<p>BES (inclusions) or non-BES (exclusions).</p> <p>f.) The 'Exception Process' and the responsibilities associated with the implementation and oversight will be defined by the NERC Rules of Procedure Team. Based on the language contained in FERC Order No. 743, there are Commission expectations associated with the process oversight by the ERO and allowances for the delegation of responsibilities to Regional Entities as appropriate, while ensuring the process is clear and capable of being applied consistently, objectively and uniformly across all regions.</p> <p>g.) The SDT agrees that within the NERC ROP Exception Process, entities should have the opportunity to appeal decisions made by the Regional Entities and the ERO concerning the inclusion or exclusion of Elements in relation to the BES.</p> <p>h.) The SDT agrees that the issues surrounding 'local distribution networks' deserve consideration when developing the BES Designations. See the revised definition as it proposes exclusions for local distribution networks that meet certain criteria.</p> <p>i.) The SDT will consider your comments in the further development of the core definition and the exception criteria and will seek clarity on the issues identified in future discussions with FERC staff.</p> <p>j.) The SDT has developed the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' utilizes the same 'bright-line' criteria approach to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.).</p> <p>k.) The specific methodology associated with establishing the technical justification of inclusions to or exclusions from the BES will be determined and vetted by the NERC ROP Team utilizing the revision process for the NERC ROP and will be coordinated by NERC staff and governed by current practice for administering such revisions.</p> <p>l.) The SDT disagrees with the commenter in that any Exception Process should establish a process for exceptions from and inclusions to the BES. As stated in FERC Order No. 743, P83 "The Commission's proposed approach to addressing these concerns will enable affected entities to pursue exemptions for facilities they believe should not be included in the bulk electric system, and also will allow Regional Entities to add facilities below 100 kV they believe should be included". The Regional Entities currently have the authority to include Elements operated at voltages below 100 kV that are deemed necessary for the reliable operation of the BES. The Order does not eliminate this authority, but rather emphasizes the need to maintain the Regional Entity's ability of establishing inclusions to the BES through the Exception Process.</p> <p>m.) The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. With that in mind, the SDT agrees with the commenter in that the Exception Process should carry the same characteristics as the core definition and exception criteria: clear, unambiguous, repeatable, and establish consistency on a continent-wide basis.</p>
Pepco Holdings Inc.		1. The definition should be expanded to contain what is excluded to minimize the need for exemptions. For example radial facilities should by definition be excluded and not have to go through a formal exemption

Organization	Yes or No	Question 13 Comment
		<p>process. Other “generic” criteria identified should also be excluded.</p> <p>2. The exemption process needs to be well designed to minimize the effort. The exemption process development should incorporate lessons learned and experience from the TFE process, so that this new process is more manageable.</p> <p>3. Instead of two separate groups, one working on the definition and one on the exemption process, one group should handle both activities to assure continuity and consistency.</p> <p>4. Any data required for the exemption process needs to be kept secure and not posted on an open source.</p> <p>5. PHI is supportive the EEI comments offered on the BES Project.</p>
<p>Response:</p> <ol style="list-style-type: none"> The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ (now proposed as part of the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying Generation Facilities, Radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions). The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP team will be determined and administered by NERC staff. With that in mind, the SDT agrees with the commenter in that the Exception Process should be a manageable process that is clear, unambiguous, repeatable, and establishes consistency on a continent-wide basis. The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project’s success) is to have postings from each aspect of the project, which will enable the industry to review the entire project ‘package’ at one time and effectively provide comments simultaneously on the core definition, the exception criteria and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743, the decision was made to establish two teams working in close coordination to address the issues related to the project. The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The current process includes public postings of proposed changes which will allow the industry provide comments. We will forward your comment to the team working on the ROP modifications. 		

Organization	Yes or No	Question 13 Comment
<p>5. See responses to EEI comments.</p>		
<p>PUD No.1 of Clallam County</p>		<p>Due to the lack of clarity around the current definition of the Bulk Electric System ("BES") the NERC Statement of Compliance Registry Criteria is often used/misused to define elements of the BES. The registration criterion uses many undefined terms as well as "bright line" thresholds that that in many cases have little to no technical basis. One example is using "gross nameplate rating" when the machine size may be significantly limited by boiler capacity on a cogeneration steam plant or water on a hydro plant. In addition there is no technical or reliability bases used to identify the low MVA/MW thresholds used in the load and generation thresholds for the DP, GO, GOp registrations.</p> <p>The Standards Authorization Requests (SARs) should also address how, or if the registration criteria is used in identifying BES elements. We believe the Registration Criteria should not be used to identify BES elements; it should be used as indented, to address functional registration.</p>
<p>Response: The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed as part of the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying Generation Facilities, Radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>Any impact of the revised core definition, the exception criteria, or Exception Process on the current Registry Criteria will be addressed in the Implementation Plan.</p>		
<p>Manitoba Hydro</p>		<p>a.) A NERC definition of 'radial' is required to prevent misapplication of the BES definition and exemption process.</p> <p>b.) There should be no regional differences in the BES definition or in the BES definition exemption process.</p> <p>c.) There should be equal representation from the regions to draft this standard and exemption process</p>
<p>Response:</p> <p>a.) With the proposed revisions to the definition of BES, at this time, the SDT does not contemplate adding any additional definitions beyond BES.</p> <p>b.) FERC Order No. 743 provides specific direction on the elimination of the regional discretion which is allowed under the current definition of the Bulk Electric System. The SDT fully intends to be responsive to the Commission directives.</p> <p>c.) In forming the SDT, NERC staff has utilized the criteria established in the NERC Standard Drafting Team Scope Document, which states: 'Representation</p>		

Organization	Yes or No	Question 13 Comment
<p>from as many NERC Regions as possible'.</p>		
<p>North Carolina EMC</p>		<p>The BES definition for radial facilities serving only load with one source should be clarified to include radial facilities with the potential ability to be served from more than one source, but always operated with an "opening point" that makes it radial. If the entity can demonstrate that it always operates in this fashion, either by producing switching orders indicating such operation or other evidence such as documentation of open and tagged switches, etc., then it should be considered to be in full compliance with the radial BES definition exemption.</p>
<p>Response: The DBES SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed as part of the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The SDT has revised the definition but is retaining the single source designation.</p>		
<p>ReliabilityFirst</p>		<ul style="list-style-type: none"> • ReliabilityFirst would like to see this as a simple easy-to-follow definition. The exclusion process needs to be clear without room for discussion or interpretation. • There must be a common framework developed to apply the entire process that begins with a single NERC-wide BES definition. • The definition should serve as a common approach for the identification of BES Elements and Facilities that are subject to compliance that is married to the Registration Criteria. • The definition and approach for the determination must be repeatable • The method must clearly identify the BES elements for use by the industry. • In order to obtain consistency, the definition, application and criteria must be used across Regional Entity boundaries. • The revised BES definition should be consistent with the Statement of Compliance Registry Criteria so as not to create a conflict between the two, and could possibly simply reference the Criteria for issues such as size of generating units (e.g., 20 MVA units and 75 MVA plants) included in the BES. • As stated in the FERC Order No. 743, the criteria for exemption should be included within the BES definition, and the exemption process should contain only the procedure for submitting and determination

Organization	Yes or No	Question 13 Comment
		<p>of such. The exemption process should not contain a third set of criteria (in addition to the BES definition and the Statement of Compliance Registry Criteria) in which to make a determination of facilities to be monitored for compliance to standards.</p> <ul style="list-style-type: none"> With the revised BES definition containing specific requirements for inclusion in the BES, will the separate Statement of Compliance Registry Criteria be needed?
<p>Response: The SDT agrees and has considered your comments in the further development of the core definition and the exception criteria.</p> <p>The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed as part of the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>A revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBES SDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff. With that in mind, the SDT agrees with the commenter in that the Exception Process should be a manageable process that is clear, unambiguous, repeatable, and establishes consistency on a continent-wide basis.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project's success) is to have postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria, and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>Any impact of the revised core definition, the exception criteria, or Exception Process on the current Registry Criteria will be addressed in the Implementation Plan.</p>		
on behalf of Teck Metals Ltd.		<p>Parallel transmission lines from a single source (substation) to a single load should be excluded from the BES, with the consent/request of the owner of the connected load (and/or all customers that constitute the connected load).</p>
on behalf of Catalyst Paper Corporation		
<p>Response: The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes</p>		

Organization	Yes or No	Question 13 Comment
		<p>the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation facilities, radials, etc.). In the development of the exception criteria, the SDT has considered your comments.</p>
<p>City of Grand Island</p>		<p>a.) The NERC defined Adequate Level of Reliability is the governing factor on whether or not a facility really has an impact on the BES. Currently the standards are applied far too broadly and numerous small entities are needlessly involved. This project should pull the standards/compliance environment back to entities that have a real impact.</p> <p>b.) Exemption process should be termed "exception" process. Exception means not conforming to general rule, whereas exemption primarily means exclusion. This process will be difficult to develop and administer and is counterproductive to "bright line" philosophy. Thus the bright lines should be at a high level resulting in fewer exceptions. The exception process must consider the impact of a fault or outage of that facility on the Adequate Level of Reliability of the BES.</p> <p>c.) The exception process development should be simultaneous to the BES definition project. It's all one, not two pieces. In addition if this is a direct impact on registration criteria, then that should be part of the project as well.</p>
<p>Response:</p> <p>a.) The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The SDT believes that this method of identification will provide the desired clarity requested by the industry and directed by the Commission while ensuring that consistent results will be produced universally across the continent. In the development of the core definition and the exception criteria, the SDT has considered your comments.</p> <p>b.) The inconsistency of the use of 'exemption' vs. 'exception' in several documents has been identified by the SDT and the team has determined that 'exception' is the proper term to be used in reference to the Bulk Electric System definition and supporting processes.</p> <p>The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e. bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively indented as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as</p>		

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		<p>BES (inclusions) or non-BES (exclusions).</p> <p>c.) The development of the core definition of the BES and the exception criteria by the DBES SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project's success) is to have postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743, the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>Any impact of the revised core definition, the exception criteria or Exception Process on the current Registry Criteria will be addressed in the Implementation Plan.</p>
Occidental Energy Ventures Corp		<p>Demand Side Management. One commenter has apparently suggested that "Demand Side Management" relied on to provide Contingency Reserves be included in the BES definition. On the surface, this seems reasonable. However, this would possibly subject aggregators of DSM resources to registration as a yet unknown resource type. The DSM resources could be located on lower voltage distribution systems that should not be part of the BES. Once again, the issue of DSM registration is being pursued under a separate NERC initiative and should be resolved by that process rather than a broadening of the definition of BES which forces registration of entities not currently registered. This also could provide a disincentive for potential DSM development, which the Federal Energy Regulatory Commission (FERC) is on record as trying to foster as a peak shaving resource. When the issues surrounding DSM as a resource are resolved by due process, any recommendations could include a change to the definition of BES, if actually required. Finally, this issue is not part of the FERC directives for changing the BES definition.</p> <p>Self-Generation and Cogeneration. One commenter has apparently suggested that self-generation as currently defined and excluded in the Statement of Compliance Registry should not be excluded from the definition of BES based on the "immediate-term impact on reliability." This same commenter notes that, in order to be excluded under the current BES definition, the self-generation is required to purchase back-up (stand-by) power for the generation in case of an outage. Paying for this standby power (which is essentially "extra" reserve power) is one reason for allowing the self-generation to be excluded from the BES. Once again, subjecting self-generation/cogeneration to NERC regulatory requirements is not one of the directives from the FERC concerning the BES definition and could provide a disincentive for cogeneration, which has been historically supported by FERC and the federal government. Hence, suggestions such as this are out of the scope of this process.</p>
<p>Response: The SDT has established basic goals and assumptions that will be used to guide the development of the BES definition and supporting documents. The assumptions include: 'The revised definition will not significantly expand or contract what are currently considered BES Elements, nor will the revised</p>		

Organization	Yes or No	Question 13 Comment
		<p>definition drive entity registration or de-registration. Based on these goals and assumptions the overall impact of the revised definition is expected to be minimized for the majority of the Regions and Registered Entities. The SDT will consider your comments in the further development of the core definition, the exception criteria and the Exception Process.</p>
Glacier Electric Cooperative		<p>I highly encourage the development of a method that utilizes engineering analyses to more accurately define which elements are truly significant to the BES and which are not. Thanks for taking on the challenge to improve the BES definition.</p>
		<p>Response: The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The SDT believes that this method of identification will provide the desired clarity requested by the industry and directed by the Commission while ensuring that consistent results will be produced universally across the continent. exception criteria</p>
Entergy Services		<p>a.) The following are Entergy's comments concerning the scope and implementation of the requested work, the draft SAR, draft standard, draft criteria, draft exemption criteria, exemption process, and implementation process. We suggest the SAR and the standard development be revised to reflect the comments below. In particular, we believe there are several parts to the scope of this project.</p> <p>First, the development of the revised definition of the BES including all inclusion / exemption criteria and the development of the implementation plan for that revised definition should be developed through the Standards Development Process. All future inclusion / exemption criteria would also be developed through the Standards Development Process. The process for changing the Rules of Procedure should be used for the development, approval and application of the process for obtaining an exemption of specific facilities. It would be helpful, but not required, that the development of the standard and the changes to the ROP proceed together.</p> <p>b.) We suggest there be one continent-wide definition of BES with no exemption criteria specific to a particular region...</p> <p>DEFINITION OF BES, INCLUSION CRITERIA and EXEMPTION CRITERIA We suggest the definition of BES be the following: Bulk Electric System: All Transmission and Generation Elements and Facilities conforming to the Inclusion Criteria and Exemption Criteria identified below. Elements and Facilities operated at voltages of 100kV or higher may be excluded and Elements and Facilities operated at voltages less than 100kV may be included if approved through the BES definition exemption process included in the NERC Rules of Procedure.</p> <p>INCLUSION CRITERIA1. All transmission and generation elements and facilities operated at voltages of</p>

Organization	Yes or No	Question 13 Comment
		<p>100 kV or higher,</p> <p>2... Transformers, other than Generator Step-up (GSU) transformers, including Phase Angle Regulators, with both primary and secondary windings of 100 kV or higher;</p> <p>3. Individual generation resources (including GSU transformers and the associated generator interconnecting line lead(s)) greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above;</p> <p>4. Generation plants (including GSU transformers and the associated generator interconnecting line lead(s)) with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Transmission Facilities operated at voltages of 100 kV or above;</p> <p>5. Blackstart Resources and the designated blackstart Cranking Paths identified in the Transmission Operator's (TOP's) restoration plan;</p> <p>6. Transmission Elements or Facilities operated at voltages below 100kV where the exemption process deems the Element or Facility to be included in the BES;</p> <p>7. Individual generation resources greater than 20 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation resources to be included in the BES; and</p> <p>8. Generation plants with aggregate capacity greater than 75 MVA (gross nameplate rating) directly connected via a step-up transformer(s) to Facilities operated at voltages below 100kV where the exemption process deems the generation plants to be included in the BES.</p> <p>EXEMPTION CRITERIA1. Any radial Transmission Element or System, connected from one Transmission source to a Load-serving Element and/or generation resources not included in items 2, 3, 4, 6, and 7 above are excluded from the BES;</p> <p>2. Elements and Facilities identified through application of the exemption process, consistent with the criteria, where the exemption process deems that the Element or Facility should be excluded from the BES (with concurrence from the ERO); and</p> <p>3. Generating plant control and operation functions which include relays and systems that control and protect the unit for boiler, turbine, environmental, and/or other plant restrictions.</p> <p>IMPLEMENTATION PLAN FOR REVISED DEFINITION OF BES The Standard Drafting Team will develop for industry comment an Implementation Plan for the revised definition of BES.</p>
<p>Response:</p>		

Organization	Yes or No	Question 13 Comment
		<p>a.) The NERC Standard Processes Manual is the governing document for the development of the revised BES definition and exception criteria. The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e. bright-line criteria for identifying generation Facilities, radials, etc.).</p> <p>The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBES SDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project's success) is to have postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743, the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>b) FERC Order No. 743 provides specific direction on the elimination of the regional discretion which is allowed under the current definition of the Bulk Electric System. The SDT fully intends to be responsive to the Commission directives.</p> <p>The SDT has considered your comments in the further development of the core definition and the exception criteria. See the proposed revised definition of BES with its lists of "Inclusions" and "Exclusions."</p>
Snohomish County PUD		<p>While we recognize that the Standards Drafting Team is a technical body and is not charged with interpreting legal doctrine, we nonetheless urge the Drafting Team to bear in mind the statutory limitations on the definition of the BES. If the BES definition is drafted with these limits in mind, the process will more easily meet with industry acceptance. If the BES definition adopted by the drafting team fails to meet these limits, by contrast, its efforts are likely to result in extended litigation that will be counterproductive to the goal of improving the reliability of the bulk delivery system. The definition of "bulk-power system" adopted by Congress in Section 215 of the Federal Power Act is the ultimate source of the Standards Drafting Team's authority and the Team should therefore pay particular attention to that statutory definition: The term 'bulk-power system' means-(A) Facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and(B) Electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy. This definition, and in particular the language italicized above, imposes clear restrictions on the definition to be developed by the Drafting Team.</p>

Organization	Yes or No	Question 13 Comment
		<p>These restrictions are:</p> <p>a. Only facilities “necessary for” the operation of the interconnected bulk transmission network can be included in the BES. Snohomish believes the most logical way to determine whether facilities are “necessary for” operation of the bulk system is through engineering-based studies demonstrating that particular Facilities or Elements play a material role in the operation of the bulk grid.</p> <p>b. Generation facilities can be included in the BES only if they are “needed to maintain” the reliability of the bulk system. Accordingly, as noted above, the thresholds used in the NERC Statement of Registry Compliance are not determinative of whether a generator is necessary to maintain bulk system reliability. That determination is an engineering-based assessment and the fact that a generator may exceed the 20 MW capacity threshold in the Registry Statement does not mean that the generator is “needed to maintain” bulk system reliability. It may well not be.</p> <p>c. “Reliability” was also given a specific meaning by Congress when it drafted Section 215. Specifically, the statute defines “reliable operation” to mean “operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of sudden disturbances, including . . . unanticipated failure of system elements.” Accordingly, the BES definition should focus on facilities that are necessary to ensure that the bulk transmission system does not suffer instability, uncontrolled separation, or cascading failures. Facilities that do not threaten these kinds of severe consequences should not be included in the BES.</p> <p>d. The definition explicitly excludes “facilities used in the local distribution of electric energy.” The definition adopted by the Standards Drafting Team must therefore unequivocally exclude all local distribution facilities. In light of these statutory constraints, Snohomish supports as part of the Standards Drafting Team’s process the creation of a categorical exclusion from the BES for systems that meet NERC’s historical definition of Local Network. As explained in more detail below, Local Networks are operated to provide service to specific, geographically-limited service areas and do not affect the reliable operation of the bulk transmission system. Accordingly, there is no good reason to include Local Networks in the BES and to do so would be contrary to the language in the statute discussed above. Historically, NERC employed a definition of “Local Networks” and NERC’s “Bulk Electric System” definition distinguished between the “Bulk Transmission System” and “Sub-transmission.” More recently, those distinctions have been lost, diverting attention away from critical elements of the transmission system that, if they fail, threaten cascading outages or other large-scale events, and increasing attention to facilities that, if they fail, threaten only to disrupt service in a localized areas. The Standards Drafting Team can remedy this over breadth problem by categorically excluding facilities meeting the definition of “Local Networks” from the BES definition. Until a few years ago, NERC used the following definition of “Local Network”: Local Network- a non-radial portion of a bulk electric system whose customers may be interrupted for the loss of a single transmission element (100 kV or more). This loss of load is only</p>

Organization	Yes or No	Question 13 Comment
		<p>allowed in those rare circumstances when it is impractical (e.g., long transmission distances, extremely high costs with low benefits) to avoid interruption of service to a portion or all of the customers in the network due to the network being directly connected to or supplied by the faulted transmission system element (e.g., generator, transmission circuit, transformer). The resulting customer interruption should be of relatively low probability of occurrence and limited in magnitude (less than 100 MW). The interruption of such local network customers shall not impact the overall security of the interconnected transmission systems. The term Local Network is currently used in the NERC TPL Reliability Standard. However the definition is no longer defined in the NERC Standard Glossary of Terms. The important distinctions between Local Networks and the Bulk Electric System have been further obscured by changes in NERC’s BES definition. The “Bulk Electric System” definition that appeared in the Glossary of Terms reference document approved by both the NERC EC and OC at a joint meeting of those committees on July 16, 1996, distinguished between “Transmission” and “Sub-transmission”:</p> <p>Bulk Electric System - A term commonly applied to the portion of an electric utility system that encompasses the electrical generation resources and bulk transmission system. Where</p> <p>Transmission - An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.</p> <p>Bulk Transmission - A functional or voltage classification relating to the higher voltage portion of the transmission system.</p> <p>Sub-transmission - A functional or voltage classification relating to the lower voltage portion of the transmission system.</p> <p>The current version of the BES definition does not, by contrast, make such a distinction: Bulk Electric System - As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition. The definitional changes have diverted attention away from the systems that pose the greatest risks of cascading outages and toward systems that do not threaten such widespread reliability impacts. Protecting the electric system from wide-spread cascading outages and focusing on protecting equipment and isolating cascading outages has historically been the primary goal of NERC reliability efforts and, as FPA Section 215 requires, should remain so now and in the future. It is clear, however, that there are real distinctions between “Bulk Transmission,” “Sub-transmission,” and “Local Networks” in terms of their impacts on bulk system reliability. We propose that, in order to restore these important distinctions, WECC categorically exclude systems meeting the definition of Local Network from its BES definition. Doing so will refocus the NERC-WECC reliability mission on those systems that most effect bulk system reliability, while excluding from the BES ambit those systems whose impacts are purely local.</p> <p>As noted above, Snohomish has participated in and supports the work of the WECC BESDTF. The BESDTF’s current proposal contains a categorical exclusion for Local Networks along the lines of the one we advocate here and the BESDTF has developed an extensive factual and technical record supporting its approach. We urge the Standards Drafting Team to follow that approach.</p>

Organization	Yes or No	Question 13 Comment
<p>Response: The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ (now proposed for inclusion in the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The SDT believes that this method of identification will provide the desired clarity requested by the industry and directed by the Commission while ensuring that consistent results will be produced universally across the continent. In the development of the core definition and the exception criteria, the SDT has considered your comments.</p>		
United Illuminating Company		<p>Any technical definition should provide the means to differentiate facilities used in local distribution since these facilities are excluded from the statutory definition of bulk-power system. The definition of BES should be very broad or bright.</p>
<p>Response: The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ (now proposed for inclusion in the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The SDT believes that this method of identification will provide the desired clarity requested by the industry and directed by the Commission while ensuring that consistent results will be produced universally across the continent. In the development of the core definition and the exception criteria, the SDT has considered your comments.</p>		
Orange and Rockland Utilities, Inc.		<p>a.) Proposed definitions to be added to the NERC Glossary of Terms: BES Exemption Process: The review processes for (a) excluding facilities and elements from the BES that are determined not to be necessary to support bulk power system reliability (e.g., radial elements), and (b) including Elements operated at voltages below 100 kV that are determined to be necessary to support bulk power system reliability. By identifying all such BES and non-BES facilities and elements, the BES Exemption Process will establish the Points-of-Demarcation between Facilities and BES Elements and non-BES facilities and elements.</p> <p>Point-of-Demarcation: A physical point and/or electrical connection between facilities and BES Elements and non-BES facilities and elements, e.g., the upstream terminals of a disconnect switch (or a buss connection) representing the boundary between a BES supply bus and a non-BES radial feeder.</p> <p>b.) The BES exemption process has not yet been finalized or approved. So, it is somewhat difficult to know a priori whether any element, elements or a group of elements or facilities should or should not be classified as part of the BES definition.</p> <p>c.) This document uses both “exemption process” and “exception process”. Recommend that the phraseology be standardized on “exception process” as the exception (not the exemption) can be to include or exclude elements and facilities.</p>

Organization	Yes or No	Question 13 Comment
		<p>d.) It is envisioned that the BES Exemption Process will contain 3 sub-processes; one for Exclusion, one for Exemption, and one for Inclusion. Each sub-process will establish provisions and guidelines for the three different tasks. In order to ensure consistency across the continent, it is our view that NERC should be the facilitator of these processes. NERC may choose to have some of these tasks performed at the regional levels through the existing delegation agreements.</p> <p>e.) The BES Exemption Process must be an active and ongoing aspect of the ERO program. With the addition of new or deletion of existing Transmission and Generation Elements, facilities, or systems. It needs to be recognized that Exclusions, Inclusions, and Exemptions might need alteration over time. By establishing appropriate guidelines and processes, the ERO will be able to monitor and maintain information of what is the Bulk Electric System, or BES.</p>
<p>Response:</p> <p>a.) The SDT is not currently contemplating any additional definitions beyond BES. In regards to the term “BES Exemption Process”; it has been determined that the process will reside in the NERC Rules of Procedure (ROP) and therefore it seems logical that the purpose of the process would be defined within the boundaries of the NERC ROP.</p> <p>b.) Exception criteria Agree. The Exemption Process is being developed by a separate team and will be posted for stakeholder comment.</p> <p>c.) The inconsistency of the use of ‘exemption’ vs. ‘exception’ in several documents has been identified by the SDT and the team has determined that ‘exception’ is the proper term to be used in reference to the Bulk Electric System definition and supporting processes.</p> <p>d.) The ‘Exception Process’ will be developed by the NERC Rules of Procedure Team while coordinating with the DBESSDT. The ‘Exception Process’ and the responsibilities associated with the implementation and oversight will be defined by the NERC Rules of Procedure Team. Based on the language contained in FERC Order No. 743, there are Commission expectations associated with the process oversight by the ERO and allowances for the delegation of responsibilities to Regional Entities as appropriate, while ensuring the process is clear and capable of being applied consistently, objectively, and uniformly across all regions. Note, however, that the drafting team has revised the definition of BES so that it now includes the exceptions (both inclusions and exclusions) stakeholders have already proposed be applied to the 100 kV bright line threshold.</p> <p>e.) The SDT agrees that the Bulk Electric System is dynamic and that the implementation and continued application of the BES Definition and supporting processes will require active oversight and management to ensure that changing conditions (i.e., operational & new construction) surrounding the Bulk Electric System will be addressed and result in proper evaluation and identification of BES & non-BES Elements.</p>		
American Transmission company		<p>1. ATC suggests that once the term “exemption” is replaced with the term “exception”, then consider modifying the BES definition wording to, “All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher, necessary to support bulk power system reliability. Elements and Facilities</p>

Organization	Yes or No	Question 13 Comment
		<p>operated at voltages of 100kV or higher, including Radial Transmission systems, may be excluded through the BES definition exception process and Elements and Facilities operated at voltages less than 100kV may be included through the BES definition exception process”.</p> <p>2. The “Concept Paper” does not specifically call out Transmission Lines above 100 kV as in the BES definition (the proposed definition does, however) and there is a circular exemption criteria in the concept paper. In criterion #2, it refers to the exemption process "consistent with the criteria". The criteria exempt generating plant controls and Transmission Elements or Systems that are radial to a load or generator not included in the BES List. However, the BES list is defined prior to the criteria in the concept paper. Exception criterion #1 points to BES list elements #6 and #7, which in turn, refer to the exception process. But, the exemption criteria never define how to exempt the elements referred to in #6 and #7.</p> <p>3. The revised definition of the BES and exception process does not address a timeframe for the implementation of this standard once approved, allowing enough time for the entities to provide justification, and then make the necessary changes to their internal programs?</p> <p>4. How often would a Registered Entity revisit this Exception Process? ATC can envision a scenario where they are doing that every year or two because the loads, generation and transmission changes. The process should also allow for multi-year distinctions for exceptions. In other words, if a Registered Entity gets a facility excluded, then that exclusion should be allowed for 3 or more years. Annual certifications and approval are too restrictive.</p> <p>5. ATC believes the exception criteria needs to be developed by the SDT. NERC Staff should focus on the process (identification, notification, appeal and rights) but the SDT is in the better position to develop the technical piece of the exception criterion.</p> <p>6. ATC also supports the comments as submitted by EEI REAC on the Draft Concept Paper on the Definition of BES Project 2010-17.</p>
<p>Response:</p> <ol style="list-style-type: none"> 1. The SDT has considered your comments in the further development of the core definition and the exception criteria. The drafting team has revised the definition of BES so that it now includes the exceptions stakeholders have already proposed be applied to the 100 kV bright line threshold. The word, “exemption” is not used in the proposed definition of BES. 2. The SDT has considered your comments in the further development of the core definition and the exception criteria. Please see the revised definition of BES. 3. The Implementation Plan will need to address the impact of the revised BES definition and exception criteria, the Exception Process (ROP), and the 		

Organization	Yes or No	Question 13 Comment
		<p>regional Transition Plans on affected entities and provide sufficient time to ensure a smooth transition into the realm of mandatory and enforceable Reliability Standards.</p> <p>4. The 'Exception Process' will be developed by the NERC Rules of Procedure Team while coordinating with the DBESSDT. The DBESSDT recognizes that the Bulk Electric System is dynamic and that the implementation and continued application of the BES Definition and supporting processes will require active oversight and management to ensure that changing conditions (i.e., operational & new construction) surrounding the Bulk Electric System will be addressed and result in proper evaluation and identification of BES & non-BES Elements. The time frames associated with the 'review' processes will be determined by the NERC ROP Team. The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions.</p> <p>5. The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>The 'Exception Process' will be developed by the NERC Rules of Procedure Team while coordinating with the DBES SDT.</p> <p>6. See responses to EEI comments.</p>
The Dow Chemical Company		Dow has reviewed and generally supports the comments prepared by The Electricity Consumers Resource Council (ELCON).
Response: See response to ELCON comments.		
National Rural Electric Cooperative Association (NRECA)		<p>a.) BES definition exemption criteria must be developed by the same SDT that is modifying the BES definition and through the standards development procedure. The BES exemption criteria must not be developed by a separate group outside of the standard development procedure, e.g., through a NERC Rules of Procedure (ROP) modification process as is currently proposed in the SAR. The BES exemption process, not criteria, can be included in the ROP by utilizing the process for making such modifications to the ROP. The BES definition exemption process should refer to the procedure for applying for such an exemption, not the criteria that such an exemption application would be based upon. It is critical for the final SAR to provide clarity as it relates to what is considered exemption criteria and exemption process.</p>

Organization	Yes or No	Question 13 Comment
		<p>b.) We appreciate the work of the Regional BES Definition Coordination Group, however, this group must conclude its work now that a SAR has been proposed and is posted for comment. This group can provide comment on this SAR and future products from the SDT in same way as any other stakeholder can provide comment. Having a parallel effort led by Regional Entity staff, outside the formal Project 2010-17 SDT process, will create confusion and potentially cause inefficient use of industry resources. All efforts should be focused on the formal standard development activities including related future comment and ballot periods. Compliance registry criteria should only be reviewed and potentially modified if specifically needed to implement a modified BES definition and associated exemption criteria.</p> <p>c.) The SDT is tasked with addressing definition modifications to ensure consistent and uniform application of the BES definition across the Regional Entities. The focus of the SDT's work should first be on the BES definition and exemption criteria. Any Compliance Registry Criteria modifications would have to be approached very carefully as it was developed through a lengthy stakeholder consensus process.</p>
<p>Response:</p> <p>a.) The NERC Standard Processes Manual is the governing document for the development of the revised BES definition and exception criteria. The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements. The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.).</p> <p>The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP team. The goal (identified key to the project's success) is to have postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria, and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>b.) When the NERC Standards Committee accepted the SAR and established the SDT, the RBESDCG acknowledged that the primary development of definition and supporting documents had shifted from the RBESDCG to the SDT. The RBESDCG agrees that parallel efforts will result in inconsistencies and disruption of the SDT's efforts. Therefore, the RBESDCG forwarded all applicable work products to the SDT and to the NERC ROP Team for consideration. Going forward, the RBESDCG will support the development of the definition, supporting documents, and the revisions to the ROP by collectively participating in the respective development processes (i.e., providing consensus comments to posting and participating in the associated</p>		

Consideration of Comments on Definition of Bulk Electric System — Project 2010-17

Organization	Yes or No	Question 13 Comment
<p>balloting process).</p> <p>c.) Any impact of the revised core definition, the exception criteria, or Exception Process on the current Registry Criteria will be addressed in the Implementation Plan.</p>		
City of Austin dba Austin Energy		<p>The word “exemption” in the last line is confusing. Lines above 100kV would be “exempted” from inclusion as part of the BES. Lines below 100kV would be “added” to the BES (under certain circumstances) which, technically, is not an “exemption.” (In fact, the Word document on the NERC web page refers to the process as an “Exception Process”) AE recommends the following language: Bulk Electric System: All Transmission and Generation Elements and Facilities operated at voltages of 100 kV or higher necessary to support bulk power system reliability. Elements and Facilities operated at voltages of 100kV or higher, including Radial Transmission systems, and Elements and Facilities operated at voltages less than 100kV may be included if approved through the process described in the BES Definition Exception Process.</p>
<p>Response: The inconsistency of the use of ‘exemption’ vs. ‘exception’ in several documents has been identified by the SDT and the team has determined that ‘exception’ is the proper term to be used in reference to the Bulk Electric System definition and supporting processes. In the development of the core definition and the exception criteria, the SDT has considered your comments. Please see the revised definition of BES – it now includes a list of both “Inclusions” and “Exclusions” as part of the definition and no longer references an exemption (or exception) process).</p>		
Duke Energy		<p>There should be a provision for the Planning Coordinator or Transmission Planner to include individual generators and generation plants that are not included in these criteria through a technical evaluation, either in the definition or in the inclusion of facilities below 100 kV portion of the exemption process. For example, generating facilities connected to generator step up transformers below 100 kV that have a demonstrated ability to have a significantly adverse affect on the reliability on the bulk power grid or a major urban load center should be included.</p>
<p>Response: The SDT agrees with the commenter, in that any Exception Process should establish a process for exceptions from and inclusions to the BES. As stated in FERC Order No. 743, P83 “The Commission’s proposed approach to addressing these concerns will enable affected entities to pursue exemptions for facilities they believe should not be included in the bulk electric system, and also will allow Regional Entities to add facilities below 100 kV they believe should be included”. The Regional Entities currently have the authority to include Elements operated at voltages below 100 kV that are deemed necessary for the reliable operation of the BES. The Order does not eliminate this authority, but rather emphasizes the need to maintain the Regional Entity’s ability of establishing inclusions to the BES through the Exception Process. Under these circumstances, the SDT feels that a Planning Coordinator or Transmission Planner could pursue inclusion of selected Elements into the BES by lobbying with their Regional Entity. exception criteria</p>		
BGE		<p>a.) NERC should use the FERC-approved standards development process for developing the technical criteria for both the BES definition and exemptions process. We view this as a single exercise. BGE</p>

Organization	Yes or No	Question 13 Comment
		<p>feels joint development of the BES Definition & Exception Process under a single SDT would be preferable. The standards drafting project should ensure that the definition expressly incorporates these exclusions for facilities below 100 kV. Entities should not have to seek an exemption for facilities below 100 kV or for radial lines. They should be clearly excluded in the BES definition itself.</p> <p>b.) We encourage the drafting team to embrace a design concept that seeks to maximize the “brightness” of bright line criteria. The BES exemptions process should contemplate very few exemptions. The TFE process is an example of a process not to be repeated here.</p>
<p>Response:</p> <p>a.) The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project’s success) is to have postings from each aspect of the project, which will enable the industry to review the entire project ‘package’ at one time and effectively provide comments simultaneously on the core definition, the exception criteria and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>b.) The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ (now proposed for inclusion in the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p>		
<p>City Water Light and Power (CWLP) - Springfield, IL</p>		<p>Relative to the BES Definition Exclusion Process, CWLP has chosen to comment on the inclusion/exclusion process as a whole. The current lack of detailed, firm administrative guidelines as well as an unambiguous process for resolving disputes between parties involved in the process of adjudicating inclusions/exclusions is problematic. It is CWLP’s belief that developing the proposed administrative framework for the process is needed first. Focusing on the data to be submitted as shown in (1) and (2) above does not address the scope, nature, and criteria applicable to the review of requests for inclusions/exclusions. Regardless, CWLP feels strongly that the sole basis for approval or rejection of a request should be technical justification.</p> <p>Speaking to the process in general, any inclusion or exclusion should be a specific request for a specific facility; continent-wide, interconnect-wide, and region-wide applicability for inclusions/exclusions departs from the intent of FERC Order 743 to establish a definition without regional variances.</p>
<p>Response: The SDT has considered your comments in the further development of the core definition and the exception criteria .</p>		

Organization	Yes or No	Question 13 Comment
		<p>The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>A revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff. With that in mind, the SDT agrees with the commenter in that the Exception Process should be a manageable process that is clear, unambiguous, and repeatable and establishes consistency on a continent-wide basis.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project's success) is to have postings from each aspect of the project, which will enable the industry to review the entire project 'package' at one time and effectively provide comments simultaneously on the core definition, the exception criteria, and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project.</p>
Lewis County PUD		<p>The ever increasing regulatory environment does little to improve electric reliability. Suggest that the BES definition only include the most critical elements of the electric system and leave the smaller elements out of the definition, e.g. less than 100kV and less than 150MVA.</p>
<p>Response: The SDT has established basic goals and assumptions that will be used to guide the development of the BES definition and supporting documents. The assumptions include: 'The revised definition will not significantly expand or contract what are currently considered BES Elements, nor will the revised definition drive entity registration or de-registration. Based on these goals and assumptions the overall impact of the revised definition is expected to be minimized for the majority of the Regions and Registered Entities. exception criteria</p>		
American Electric Power (AEP)		<p>There needs to be more comprehensive BES nomenclature established that distinguishes among the applicable primary-voltage equipment, the associated auxiliary equipment having an impact to the BES, and the associated ancillary equipment having no electrical impact to the BES.</p> <p>The draft versions of PRC-005-2, Protection System Maintenance, look to bring into scope "system-connected station service transformers for generators that that are part of the BES". These transformers are not clearly included within the proposed BES criteria, and consistency must be obtained between the two</p>

Organization	Yes or No	Question 13 Comment
		documents.
<p>Response: The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively indentified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>The SDT will be reviewing all NERC and Regional Reliability Standards to ensure that no conflicts have been established between the core definition, the supporting documents and procedures, and the applicability or requirements in the standards.</p>		
Southern Company		<ul style="list-style-type: none"> a. The proposed definition includes the phrase "... necessary to support bulk power system reliability". The exemption process should resolve the question related to precisely which transmission and generation elements and facilities are necessary to support reliability of the bulk power system. b. A clear definition of what is included in "Generation Elements and Facilities" is needed. Does it include components other than the GSU transformer? As written, does the BES extend beyond the low voltage side of a GSU transformer?
<p>Response: The SDT has considered your comments in the further development of the core definition and the exception criteria.</p> <ul style="list-style-type: none"> a. The SDT is continuing the development of the concept of a component-based 'bright-line' definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The 'exception criteria' (now proposed for inclusion in the definition of BES) utilizes the same 'bright-line' criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively indentified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions). <p>A revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff. With that in mind, the SDT agrees with the commenter in that the Exception Process should be a manageable process that is clear, unambiguous, repeatable, and establishes consistency on a continent-wide basis. We will forward your comment to the NERC ROP Team.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception</p>		

Organization	Yes or No	Question 13 Comment
		<p>Process by the NERC ROP Team. The goal (identified key to the project’s success) is to have postings from each aspect of the project, which will enable the industry to review the entire project ‘package’ at one time and effectively provide comments simultaneously on the core definition, the exception criteria, and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743 the decision was made to establish two teams working in close coordination to address the issues related to the project.</p> <p>b. The SDT is not contemplating any further definitions beyond BES based on the latest revision to the definition. Please see the revised definition of BES as this incorporates more details about including specific generation elements.</p>
Independent Electricity System Operator		<p>a. On the SAR, it indicates an SC approval date of December 8. It is misleading since the SC did not approve the SAR; it only approved posting of the SAR for industry comment.</p> <p>b. We have a concern with the concept paper on the exemption/inclusion criteria/process. Please see other comments on that paper submitted separately.</p> <p>c. We suggest use of consistent term between “exception” and “exemption”.</p> <p>d. We suggest the exception/inclusion criteria to be included in the definition and developed/approved by the balloting body. Determining these criteria via any other processes will not provide the industry the opportunity to fully vet the criteria.</p> <p>e. The SAR indicates that “...the definition drafting team will work closely with the team developing the BES definition exemption process to develop a single coordinated implementation plan. It is also envisioned, that the team working to develop the BES definition exemption process will solicit input from drafting teams, stakeholders....” We find this confusing and have a concern that having two teams working on this definition/criteria package leads to misalignment and confusion. Further, while the definition drafting team is formed by a nomination process and appointed by the NERC Standards Committee, there is no transparency and/or public announcement to solicit nominations for the team working to develop the exemption process. We urge the NERC Standards Committee to direct the definition drafting team to also be responsible for developing the exemption process, and include the exemption criteria as part of the definition hence subjecting them to industry comment and balloting.</p>
<p>Response:</p> <p>a. The default language in the form is misleading and implies that the NERC Standards Committee’s approval is required. Per the NERC Standard Process Manual the Standards Committee authorizes posting of the SAR for industry comment. The DBES SDT will provide a recommendation to NERC Standards Staff to revise the SAR form to read, “Date SC Authorized Posting the SAR”.</p> <p>b. The SDT has considered your comments in the further development of the core definition and the exception criteria. Note that the revised definition of BES now includes lists of criteria for both “inclusion” and “exclusion”.</p>		

Organization	Yes or No	Question 13 Comment
		<p>c. The inconsistency of the use of ‘exemption’ vs. ‘exception’ in several documents has been identified by the SDT and the team has determined that ‘exception’ is the proper term to be used in reference to the Bulk Electric System definition and supporting processes.</p> <p>d. The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ (now proposed for inclusion in the definition of BES) utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>e. The SDT is continuing the development of the concept of a component-based ‘bright-line’ definition which consists of a core definition that establishes the overall starting point for assessing BES and non-BES Elements (100 kV threshold). The ‘exception criteria’ utilizes the same ‘bright-line’ criteria to provide further guidance as to whether an Element is considered BES or non-BES (i.e., bright-line criteria for identifying generation Facilities, radials, etc.). The tight linkage between the core definition and the exception criteria provides the framework for identifying BES and non-BES for the vast majority of the Elements under consideration. The remaining Elements that cannot be definitively identified as BES or non-BES utilizing the core definition and exception criteria would be candidates for application of the Exception Process where the technical justification would be required to identify Elements as BES (inclusions) or non-BES (exclusions).</p> <p>The revision process for the NERC ROP will be utilized to develop the Exception Process and will be coordinated by NERC staff and governed by current practice for administering such revisions. The NERC ROP Team will be established by NERC staff and will include representation from the DBESSDT along with industry experts and NERC staff personnel. The process for establishing the NERC ROP Team will be determined and administered by NERC staff.</p> <p>The development of the core definition of the BES and the exception criteria by the SDT will be closely coordinated with the development of the Exception Process by the NERC ROP Team. The goal (identified key to the project’s success) is to have postings from each aspect of the project, which will enable the industry to review the entire project ‘package’ at one time and effectively provide comments simultaneously on the core definition, the exception criteria and the Exception Process. Based on the Commission imposed time requirements for filing and the amount of work required to be responsive to the directives in Order No. 743, the decision was made to establish two teams working in close coordination to address the issues related to the project.</p>
APPA		See text submitted under Question 12.
Response: See response to Q12.		
Xcel Energy		It is not clear as to why the Reliability Assurer is included as an applicable entity in the SAR.

Organization	Yes or No	Question 13 Comment
		<p>Response: The NERC Functional Model Version 5 defines the role of the Reliability Assurer as: “The functional entity that monitors and evaluates the activities related to planning and operations, and coordinates activities of functional entities to secure the reliability of the Bulk Electric System within a Reliability Assurer area and adjacent areas”. Any revision to the definition of the Bulk Electric System could potentially expand or contract the ‘Reliability Assurer area’ which would have a direct effect on the responsibilities identified in the Functional Model.</p>