

## Consideration of Comments on Initial Ballot — Definition of BES (Project 2010-17)

Date of Initial Ballot: September 30, 2011 - October 10, 2011

**Summary Consideration:** Many commenters followed instructions and cast their ballot while simply pointing to their detailed comments in the posted comment report. The SDT thanks those commenters as this greatly reduces the administrative workload on the SDT. Those who decided to place comments in the ballot report for the most part echoed comments that had already been seen by the SDT in the posted comment report which was administered first by the SDT. As a result, there were no changes to the definition due to comments received in the ballot report. However, for ease of reference, the changes to the definition made as a result of those comments are repeated here.

The SDT made the following changes to the definition due to industry comments received:

- Clarified the wording in Inclusion I1 to indicate that at least one secondary terminal must be at 100 kV or higher to accommodate multiple terminal transformers.
- Removed the reference to the ERO Statement of Compliance Registry Criteria in Inclusion I2 so that there is no chance of the registry values being changed and affecting the definition prior to resolution of threshold values in Phase II of this project.
- Clarified that generators were not part of Inclusion I5 to avoid improperly pulling in small generators.
- Clarified the language of Exclusion E2 by re-ordering the text as suggested.
- Clarified the language of Exclusion E3.b as suggested.

The SDT feels that it is important to remind the industry that Phase II of this project will begin immediately after the conclusion of Phase I as SDT resources clear up. The same SDT will follow through with Phase II.

The SDT is recommending that this project be moved forward to the recirculation ballot stage.

There were two comments that were repeated multiple times throughout the various documents. The first topic was about how to sort through the definition inclusions and exclusions, i.e., which takes precedence. The SDT offers this guidance on that issue:

The application of the draft 'bright-line' BES definition is a three (3) step process that when appropriately applied will identify the vast majority of BES Elements in a consistent manner that can be applied on a continent-wide basis.

Initially, the BES 'core' definition is used to establish the bright-line of 100 kV, which is the overall demarcation point between BES and non-BES Elements. Additionally, the 'core' definition identifies the Real Power and Reactive Power resources connected at 100 kV or higher as included in the BES. To fully appreciate the scope of the 'core' definition an understanding of the term Element is needed. Element is defined in the NERC Glossary of Terms as:

“Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components. “

Element is basically any electrical device that is associated with the transmission or the generation (generating resources) of electric energy.

Step two (2) provides additional clarification for the purposes of identifying specific Elements that are included through the application of the ‘core’ definition. The Inclusions address transmission Elements and Real Power and Reactive Power resources with specific criteria to provide for a consistent determination of whether an Element is classified as BES or non-BES.

Step three (3) is to evaluate specific situations for potential exclusion from the BES (classification as non-BES Elements). The exclusion language is written to specifically identify Elements or groups of Elements for potential exclusion from the BES.

Exclusion E1 provides for the exclusion of ‘transmission Elements’ from radial systems that meet the specific criteria identified in the exclusion language. This does not include the exclusion of Real Power and Reactive Power resources captured by Inclusions I2 – I5. The exclusion (E1) only speaks to the transmission component of the radial system. Similarly, Exclusion E3 (local networks) should be applied in the same manner. Therefore, the only inclusion that Exclusions E1 and E3 supersede is Inclusion I1.

Exclusion E2 provides for the exclusion of the Real Power resources that reside behind the retail meter (on the customer’s side) and supersedes inclusion I2.

Exclusion E4 provides for the exclusion of retail customer owned and operated Reactive Power devices and supersedes Inclusion I5.

In the event that the BES definition incorrectly designates an Element as BES that is not necessary for the reliable operation of the interconnected transmission network or an Element as non-BES that is necessary for the reliable operation of the interconnected transmission network, the Rules of Procedure exception process may be utilized on a case-by-case basis to either include or exclude an Element.

The second item is about providing specific guidance on how the information on the exception request form will be used in making decisions on inclusions/exclusions in the exception process. While not technically part of this document which is about the definition, since the question did come up in these comments, the SDT provides the following information:

The SDT understands the concerns raised by the commenters in not receiving hard and fast guidance on this issue. The SDT would like nothing better than to be able to provide a simple continent-wide resolution to this matter. However, after many hours of discussion and an initial attempt at doing so, it has become obvious to the SDT that the simple answer that so many desire is not achievable. If the SDT could have come up with the simple answer, it would have been supplied within the bright-line. The SDT would also like to point out to the commenters that it directly solicited assistance in this matter in the first posting of the criteria and received very little in the form of substantive comments.

There are so many individual variables that will apply to specific cases that there is no way to cover everything up front. There are always going to be extenuating circumstances that will influence decisions on individual cases. One could take this statement to say that the regional discretion hasn't been removed from the process as dictated in the Order. However, the SDT disagrees with this position. The exception request form has to be taken in concert with the changes to the ERO Rules of Procedure and looked at as a single package. When one looks at the rules being formulated for the exception process, it becomes clear that the role of the Regional Entity has been drastically reduced in the proposed revision. The role of the Regional Entity is now one of reviewing the submittal for completion and making a recommendation to the ERO Panel, not to make the final determination. The Regional Entity plays no role in actually approving or rejecting the submittal. It simply acts as an intermediary. One can counter that this places the Regional Entity in a position to effectively block a submittal by being arbitrary as to what information needs to be supplied. In addition, the SDT believes that the visibility of the process would belie such an action by the Regional Entity and also believes that one has to have faith in the integrity of the Regional Entity in such a process. Moreover, Appendix 5C of the proposed NERC Rules of Procedure, Sections 5.1.5, 5.3, and 5.2.4, provide an added level of protection requiring an independent Technical Review Panel assessment where a Regional Entity decides to reject or disapprove an exception request. This panel's findings become part of the exception request record submitted to NERC. Appendix 5C of the proposed NERC Rules of Procedure, Section 7.0, provides NERC the option to remand the request to the Regional Entity with the mandate to process the exception if it finds the Regional Entity erred in rejecting or disapproving the exception request. On the other side of this equation, one could make an argument that the Regional Entity has no basis for what constitutes an acceptable submittal. Commenters point out that the explicit types of studies to be provided and how to interpret the information aren't shown in the request process. The SDT again points to the variations that will abound in the requests as negating any hard and fast rules in this regard. However, one is not dealing with amateurs here. This is not something that hasn't been handled before by either party and there is a great deal of professional experience involved on both the submitter's and the Regional Entity's side of this equation. Having viewed the request details, the SDT believes that both sides can quickly arrive at a resolution as to what information needs to be supplied for the submittal to travel upward to the ERO Panel for adjudication.

Now, the commenters could point to lack of direction being supplied to the ERO Panel as to specific guidelines for them to follow in making their decision. The SDT re-iterates the problem with providing such hard and fast rules. There are just too many variables to take into account. Providing concrete guidelines is going to tie the hands of the ERO Panel and inevitably result in bad decisions being made. The SDT also refers the commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.1 where the basic premise on evaluating an exception request must be based on whether the Elements are necessary for the reliable operation of the interconnected transmission system. Further, reliable operation is defined in the Rules of Procedure as operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber security incident, or unanticipated failure of system elements. The SDT firmly believes that the technical prowess of the ERO Panel, the visibility of the process, and the experience gained by having this same panel review multiple requests will result in an equitable, transparent, and consistent approach to the problem. The SDT would also point out that there are options for a submitting entity to pursue that are outlined in the proposed ERO Rules of Procedure changes if they feel that an improper decision has been made on their submittal.

Some commenters have asked whether a single 'yes' or 'no' response to an item on the exception request form will mandate a negative response to the request. To that item, the SDT refers commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.2 of the proposed Rules of

Procedure that states “No single piece of evidence provided as part of an Exception Request or response to a question will be solely dispositive in the determination of whether an Exception Request shall be approved or disapproved.”

The SDT would like to point out several changes made to the specific items in the form that were made in response to industry comments. The SDT believes that these clarifications will make the process tighter and easier to follow and improve the quality of the submittals.

Finally, the SDT would point to the draft SAR for Phase II of this project that calls for a review of the process after 12 months of experience. The SDT believes that this time period will allow industry to see if the process is working correctly and to suggest changes to the process based on actual real-world experience and not just on suppositions of what may occur in the future. Given the complexity of the technical aspects of this problem and the filing deadline that the SDT is working under for Phase I of this project, the SDT believes that it has developed a fair and equitable method of approaching this difficult problem. The SDT asks the commenter to consider all of these facts in making your decision and casting your ballot and hopes that these changes will result in a favorable outcome.

If you feel that the drafting team overlooked your comments, 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 404-446-2560 or at [herb.schrayshuen@nerc.net](mailto:herb.schrayshuen@nerc.net). In addition, there is a NERC Reliability Standards Appeals Process.<sup>1</sup>

Voter	Entity	Segment	Vote	Comment
Kirit Shah	Ameren Services	1	Negative	Please refer to Ameren comments submitted using the Comment Form.
Andrew Z Puztai	American Transmission Company, LLC	1	Negative	Comments submitted.
John Bussman	Associated Electric Cooperative, Inc.	1	Negative	comments posted on comment form
Michael S Crowley	Dominion Virginia Power	1	Negative	Please see Dominion's submitted comments

<sup>1</sup> The appeals process is in the Standards Processes Manual: [http://www.nerc.com/docs/standards/sc/Standard\\_Processes\\_Manual\\_Approved\\_May\\_2010.pdf](http://www.nerc.com/docs/standards/sc/Standard_Processes_Manual_Approved_May_2010.pdf).

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Bernard Pelletier	Hydro-Quebec TransEnergie	1	Negative	Please see our comments on the BES Definition
Terry Harbour	MidAmerican Energy Co.	1	Negative	See the MidAmerican submitted comments. The BES definition needs additional specific inclusion or exclusion provisions that clearly exclude variable resource generation collector circuits rated below 100 kV and generators less than 20 MVA connected to those collector circuits in accordance with the registration criteria.
Tracy Sliman	Tri-State G & T Association, Inc.	1	Negative	Comments submitted by electronic form.
Kathleen Goodman	ISO New England, Inc.	2	Negative	please refer to detailed comments submitted for this project.
Charles Yeung	Southwest Power Pool, Inc.	2	Negative	SPP's comments on this concurrent ballot/comment period have been submitted and provide support for our Negative vote. In addition, SPP is a member of the IRC SRC and is in support of those comments on this standard. Please refer to these sets of comments for our recommendations.
Chris W Bolick	Associated Electric Cooperative, Inc.	3	Negative	Please see comments of AECI.
Linda Jacobson	City of Farmington	3	Negative	FEUS appreciates the SDT work in defining the BES. While the proposed definition is an improvement over the current definition, FEUS feels there is some additional clarification necessary before approval. Seperate comments have been submitted.
Richard Blumenstock	Consumers Energy	3	Negative	See Consumers Energy's comments on the official submittal form.
Michael F. Gildea	Dominion Resources Services	3	Negative	See Dominion's submitted comments.
David Kiguel	Hydro One Networks, Inc.	3	Negative	After careful analysis of the proposed documents, Hydro One Networks Inc. is casting a negative vote. We commend the SDT for the effort in facing the challenge. However, we believe that the proposed definition and the exception request criteria still need further work. Some issues need to be resolved before a

Voter	Entity	Segment	Vote	Comment
				final approval is granted. Please see our detailed comments as provided in the on-line system.
Tony Eddleman	Nebraska Public Power District	3	Negative	Comments were submitted through the Nebraska Public Power District comment form.
Janelle Marriott	Tri-State G & T Association, Inc.	3	Negative	Tri-State G&T Load Serving Entity comments were submitted via electronic comment process.
David Frank Ronk	Consumers Energy	4	Negative	See Comments provided by Consumers Energy Company
Brock Ondayko	AEP Service Corp.	5	Negative	AEP believes the drafting team is on the correct path, and the concepts expressed appear to be appropriate. However, AEP has a number of questions and recommended refinements that if addressed by the drafting team, will make the definition more clear to industry. These comments are being submitted via electronic form by Thad Ness on behalf of American Electric Power.
Francis J. Halpin	Bonneville Power Administration	5	Negative	Please refer to formal BPA Comments submitted on 10/7/2011.
David C Greyerbiehl	Consumers Energy Company	5	Negative	See Consumers Energy's comments on the official comment submittal forms.
Mike Garton	Dominion Resources, Inc.	5	Negative	See comments filed on this project.
Dan Roethemeyer	Dynegy Inc.	5	Negative	Comments will be included with those to be submitted with the SERC OC Standards Review Group.
Christopher Schneider	MidAmerican Energy Co.	5	Negative	See the MidAmerican submitted comments. The BES definition needs additional specific inclusion or exclusion provisions that clearly exclude variable resource generation collector circuits rated below 100 kV and generators less than 20 MVA connected to those collector circuits in accordance with the registration criteria.

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Don Schmit	Nebraska Public Power District	5	Negative	Please see comments submitted by Nebraska Public Power District on 10/10/2011.
Mahmood Z. Safi	Omaha Public Power District	5	Negative	see Doug Peterchuck's comments
Bo Jones	Westar Energy	5	Negative	Please see comments submitted electronically.
Edward P. Cox	AEP Marketing	6	Negative	AEP believes the drafting team is on the correct path, and the concepts expressed appear to be appropriate. However, AEP has a number of questions and recommended refinements that if addressed by the drafting team, will make the definition more clear to industry. These comments are being submitted via electronic form by Thad Ness on behalf of American Electric Power.
Louis S. Slade	Dominion Resources, Inc.	6	Negative	See comments submitted by Dominion.
David Ried	Omaha Public Power District	6	Negative	See Doug Peterchucks comments from OPPD.
Donald G Jones	Texas Reliability Entity, Inc.	10	Negative	See comment form submitted separately.
John C. Allen	Rochester Gas and Electric Corp.	1	Negative	Comments to be submitted separately.
Paul B. Johnson	American Electric Power	1	Negative	AEP believes the drafting team is on the correct path, and the concepts expressed appear to be appropriate. However, AEP has a number of questions and recommended refinements that if addressed by the drafting team, will make the definition more clear to industry. These comments are being submitted via electronic form by Thad Ness on behalf of American Electric Power.
Ajay Garg	Hydro One Networks, Inc.	1	Negative	After careful analysis of the proposed documents, Hydro One Networks Inc. is casting a negative vote. We commend the SDT for the effort in facing the challenge. However, we believe that the proposed definition and the exception

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				request criteria still need further work. Some issues need to be resolved before a final approval is granted. Please see our detailed comments as provided in the on-line system.
Steven L. Rueckert	Western Electricity Coordinating Council	10	Affirmative	Comments Submitted
Robert Smith	Arizona Public Service Co.	1	Affirmative	Comments submitted
Christopher L de Graffenried	Consolidated Edison Co. of New York	1	Affirmative	See Con Edison's comments on the BES Definition submitted separately by electronic survey form.
Stuart Sloan	Consumers Power Inc.	1	Affirmative	Please see CPI's separate comment form.
William J Smith	FirstEnergy Corp.	1	Affirmative	FirstEnergy supports the proposed BES definition and offers comments and suggestions through the formal comment period.
Gordon Pietsch	Great River Energy	1	Affirmative	Please see MRO NSRF comments.
Joe D Petaski	Manitoba Hydro	1	Affirmative	Please see comments provided by Manitoba Hydro in formal commenting period
David Thorne	Potomac Electric Power Co.	1	Affirmative	Comments submitted
Denise M Lietz	Puget Sound Energy, Inc.	1	Affirmative	See comments of Denise Lietz.
Rich Salgo	Sierra Pacific Power Co.	1	Affirmative	Comments submitted.

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Richard Burt	Minnkota Power Coop. Inc.	1	Affirmative	While MPC is voting affirmative, we ask that you see the comments submitted by the MRO NERC Standards Review Forum (NSRF).
Tim Reed	Muscatine Power & Water	1	Affirmative	MPW agrees with the comments submitted by the MRO NERC Standards Review Forum (NSRF).
David Boguslawski	Northeast Utilities	1	Affirmative	NU contributed to and joins with NPCC comments.
Larry Akens	Tennessee Valley Authority	1	Affirmative	TVA has submitted comments through the Comment Form for 2nd Draft of Definitions of BES (Project 2010-17)
Charles B Manning	Electric Reliability Council of Texas, Inc.	2	Affirmative	ERCOT ISO has joined the IRC SRC comments submitted.
Bud Tracy	Blachly-Lane Electric Co-op	3	Affirmative	Please see BLEC's separate comment form.
Dave Markham	Central Electric Cooperative, Inc. (Redmond, Oregon)	3	Affirmative	Please see Central's separate comment form.
Steve Alexanderson	Central Lincoln PUD	3	Affirmative	Comments previously submitted.
Dave Hagen	Clearwater Power Co.	3	Affirmative	Please see Clearwater Power's separate comment form.
Peter T Yost	Consolidated Edison Co. of New York	3	Affirmative	Con Edison comments have been submitted separately.

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Roman Gillen	Consumers Power Inc.	3	Affirmative	Please see CPI's separate comment form.
Roger Meader	Coos-Curry Electric Cooperative, Inc	3	Affirmative	Please see CCEC's separate comment form.
Russell A Noble	Cowlitz County PUD	3	Affirmative	Comments submitted.
Dave Sabala	Douglas Electric Cooperative	3	Affirmative	Please see DEC's separate comment form.
Bryan Case	Fall River Rural Electric Cooperative	3	Affirmative	Please see FREC's separate comment form.
Stephan Kern	FirstEnergy Energy Delivery	3	Affirmative	FirstEnergy supports the proposed BES definition and offers comments and suggestions through the formal comment period.
Joe McKinney	Florida Municipal Power Agency	3	Affirmative	Please see comments submitted through the formal comments
William N. Phinney	Georgia Systems Operations Corporation	3	Affirmative	See electronic comment form from Georgia System Operations Corporation
William Bush	Holland Board of Public Works	3	Affirmative	Please see comment form.
Dave Kahly	Kootenai Electric Cooperative	3	Affirmative	Reference the comments of KEC in response to the SDT comment form.

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Rick Crinklaw	Lane Electric Cooperative, Inc.	3	Affirmative	Please see LEC's separate comment form.
Michael Henry	Lincoln Electric Cooperative, Inc.	3	Affirmative	Please see Lincoln's separate comment form.
Greg C. Parent	Manitoba Hydro	3	Affirmative	Please see comments provided by Manitoba Hydro in formal commenting period
Jeff Franklin	Mississippi Power	3	Affirmative	"Comments Submitted"
John S Bos	Muscatine Power & Water	3	Affirmative	MPW agrees with the comments submitted by the MRO NERC Standards Review Forum (NSRF)
Jon Shelby	Northern Lights Inc.	3	Affirmative	Please see NLI's separate comment form.
Ray Ellis	Okanogan County Electric Cooperative, Inc.	3	Affirmative	Please see Okanogan's separate comment form.
Heber Carpenter	Raft River Rural Electric Cooperative	3	Affirmative	Please see RREC's separate comment form.
Jeff Nelson	Springfield Utility Board	3	Affirmative	Please refer to SUB's comments on the BES Definition.
Ian S Grant	Tennessee Valley Authority	3	Affirmative	My company has submitted comments via the comment form.
Steve Eldrige	Umatilla Electric Cooperative	3	Affirmative	Please see UEC's separate comment form.

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Marc Farmer	West Oregon Electric Cooperative, Inc.	3	Affirmative	Please see WOEC's separate comment form.
James R Keller	Wisconsin Electric Power Marketing	3	Affirmative	Comments submitted.
Shamus J Gamache	Central Lincoln PUD	4	Affirmative	See Central Lincoln PUD comments (CLPUD) Posted by Steve Alexanderson.
John Allen	City Utilities of Springfield, Missouri	4	Affirmative	City Utilities of Springfield, Missouri supports the comments from SPP.
Frank Gaffney	Florida Municipal Power Agency	4	Affirmative	Please see comments through the formal comments
Guy Andrews	Georgia System Operations Corporation	4	Affirmative	See electronic comment form submitted by Georgia System Operations Corp
Joseph DePoorter	Madison Gas and Electric Co.	4	Affirmative	Please see the MRO NSRF comments concerning this project.
Douglas Hohlbaugh	Ohio Edison Company	4	Affirmative	FirstEnergy supports the proposed BES definition and offers comments and suggestions through the formal comment period.
Aleka K Scott	Pacific Northwest Generating Cooperative	4	Affirmative	Please see PNGC's separate comment form.
Wilket (Jack) Ng	Consolidated Edison Co. of New York	5	Affirmative	See Con Edison's comments on the BES Definition submitted separately by electronic survey form.

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David Schumann	Florida Municipal Power Agency	5	Affirmative	Please see comments submitted through the formal comments
Preston L Walsh	Great River Energy	5	Affirmative	Please see the comments submitted by the MRO / NSRF
James M Howard	Lakeland Electric	5	Affirmative	Refer to comments from FMPA.
Gary Carlson	Michigan Public Power Agency	5	Affirmative	Comments submitted separately
William D Shultz	Southern Company Generation	5	Affirmative	Comments from Southern Company Generation are being submitted via the electronic comment form available on the project web page.
Linda Horn	Wisconsin Electric Power Co.	5	Affirmative	Comments submitted.
Nickesha P Carrol	Consolidated Edison Co. of New York	6	Affirmative	Con Edison comments have been submitted separately.
Kevin Querry	FirstEnergy Solutions	6	Affirmative	FirstEnergy supports the proposed BES definition and offers comments and suggestions through the formal comment period.
Richard L. Montgomery	Florida Municipal Power Agency	6	Affirmative	Please see comments submitted through the formal comments
Thomas Washburn	Florida Municipal Power Pool	6	Affirmative	See FMPA's comments
Daniel Prowse	Manitoba Hydro	6	Affirmative	Please see comments provided by Manitoba Hydro in formal commenting period

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Margaret Ryan	Pacific Northwest Generating Cooperative	8	Affirmative	Please see PNGC's separate comment form.
Bruce Lovelin	Central Lincoln PUD	9	Affirmative	I support the comments sent in by Steve Alexanderson of Central Lincoln PUD
Alan Adamson	New York State Reliability Council	10	Affirmative	The New York State Reliability Council will be separately submitting a comment form.
Guy V. Zito	Northeast Power Coordinating Council, Inc.	10	Affirmative	NPCC will be submitting comments regarding concerns expressed by our members through the formal comment process along with suggestions to address those comments.
Anthony E Jablonski	ReliabilityFirst Corporation	10	Affirmative	Comments submitted
<p><b>Response:</b> The SDT thanks you for following the instructions on submitting comments. This greatly decreases the amount of administrative work for the SDT and will help accelerate the process.</p>				
Mike Ramirez	Sacramento Municipal Utility District	4	Negative	SMUD believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although SMUD in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. SMUD recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SMUD agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, SMUD is prepared to support the BES definition as proposed by the SDT going forward. SMUD has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are

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				encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
James Leigh-Kendall	Sacramento Municipal Utility District	3	Negative	SMUD believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although SMUD in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. SMUD recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SMUD agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, SMUD is prepared to support the BES definition as proposed by the SDT going forward. SMUD has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
Terry L Baker	Platte River Power Authority	3	Negative	Platte River believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although Platte River ballots "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. Platte River recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, Platte River agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification. That said, Platte River is prepared to support the BES definition as proposed by the SDT going forward. Platte River has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded

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Jeanie Doty	City of Austin dba Austin Energy	5	Negative	AE believes the SDT has made substantial progress towards a clear and workable definition of the BES. Although AE voted "Negative," we strongly support the approach to defining the Bulk Electric System as proposed here. AE recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, AE agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as detailed in our comments. That said, AE is prepared to support the BES definition as proposed by the SDT going forward. AE has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far.
Lisa L Martin	City of Austin dba Austin Energy	6	Negative	AE believes the SDT has made substantial progress towards a clear and workable definition of the BES. Although AE voted "Negative," we strongly support the approach to defining the Bulk Electric System as proposed here. AE recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, AE agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as detailed in our comments. That said, AE is prepared to support the BES definition as proposed by the SDT going forward. AE has taken the opportunity to provide this industry feedback, as it is our understanding that we

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Andrew Gallo	City of Austin dba Austin Energy	3	Negative	Austin Energy (AE) believes the SDT has made substantial progress toward a clear and workable definition of the BES. Although AE votes "Negative," we strongly support the approach to defining the BES as proposed here. AE recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, AE agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, we believe the second draft would benefit from further clarification or modification in a number of respects, as detailed in our comments (filed separately). That said, AE is prepared to support the BES definition as proposed by the SDT going forward. AE has taken the opportunity to provide this industry feedback, as it is our understanding that we will have another ballot opportunity (on a recirculation ballot). If this were to be our sole opportunity to vote, we would vote "Affirmative" at this time. We are encouraged by the work completed to date and commend the SDT for their commitment and extensive work thus far.
Kevin Smith	Balancing Authority of Northern California NCR11118	1	Negative	BANC believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although BANC in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. BANC recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, BANC agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, BANC is prepared to support the BES definition as proposed by the SDT going forward. BANC has taken the opportunity to provide this industry feedback, as it is our understanding

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				that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
Carol Ballantine	Platte River Power Authority	6	Negative	Platte River believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although Platte River ballots "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. Platte River recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, Platte River agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification. That said, Platte River is prepared to support the BES definition as proposed by the SDT going forward. Platte River has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far.
John C. Collins	Platte River Power Authority	1	Negative	Platte River believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although Platte River ballots "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. Platte River recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, Platte River agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification. That said, Platte River is prepared to support the BES definition as proposed by the SDT going forward. Platte River has taken the opportunity to

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				provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far.
Bethany Hunter	Sacramento Municipal Utility District	5	Negative	SMUD believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although SMUD in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. SMUD recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SMUD agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, SMUD is prepared to support the BES definition as proposed by the SDT going forward. SMUD has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
Claire Warshaw	Sacramento Municipal Utility District	6	Negative	SMUD believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although SMUD in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. SMUD recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SMUD agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, SMUD is

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				prepared to support the BES definition as proposed by the SDT going forward. SMUD has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
Tim Kelley	Sacramento Municipal Utility District	1	Negative	SMUD believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although SMUD in balloting "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. SMUD recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SMUD agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments. That said, SMUD is prepared to support the BES definition as proposed by the SDT going forward. SMUD has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far. Detailed Comments submitted separately.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II.</p>				
Philip Riley	Public Service Commission of South Carolina	9	Negative	The Public Service Commission of South Carolina does not believe adequate technical evaluations have been done for basing the BES definition on the 100 kV and 20 MVA thresholds as proposed. In addition, the Public Service Commission of South Carolina does not believe adequate cost benefit studies have been done to justify the proposal for the 100

Voter	Entity	Segment	Vote	Comment
				kV and 20 MVA thresholds. Lack of cost benefit analyses has been a recurring comment of the Public Service Commission of South Carolina on proposed NERC standards.
<p><b>Response:</b> Both the 20 MVA and 100 kV thresholds are items for consideration in Phase II. At that time, technical evaluations and studies will be performed to provide the details the SDT needs to have to adequately address the issues.</p>				
<p>The responsibilities assigned to the SDT included the revision of the definition of BES contained in the NERC Glossary of Terms to improve clarity, to reduce ambiguity, and to establish consistency across all Regions in distinguishing between BES and non-BES Elements. The SDT’s efforts are directed at fulfilling their responsibilities and developing a definition that addresses the Commission’s concerns as expressed in the directives contained in Orders No. 743 &amp; 743-A. To accomplish these goals, the SDT has pursued a definition that remains as consistent as possible with the existing definition, while not significantly expanding or contracting the current scope of the BES or driving registration or de-registration. With this in mind, the SDT acknowledges that the current BES definition has varying degrees of Regional application and has resulted in different conclusions on what is currently considered to be part of the BES. This inconsistency in the application and subsequent results were also identified by the Commission in Orders No. 743 &amp; 743-A as a significant concern. The SDT acknowledges that by developing a bright-line definition coupled with the inconsistency in application of the current definition there is a potential for varying degrees of impact on Regions. Without an approved BES definition any assumptions utilized in a cost benefit analysis would be purely speculative and the results would have little meaning in regards to potential improvements in the reliable operation of the interconnected transmission grid on a continent-wide basis. Therefore, the SDT believes that best opportunity to address cost concerns will be through the development of Regional transition plans once the definition has been approved by the Commission.</p>				
Dale Bodden	CenterPoint Energy Houston Electric	1	Negative	Inclusion I5 provides for the inclusion of static devices dedicated to supplying or absorbing Reactive Power based upon their connection to the transmission system. The wording concerning their connection to the transmission system appears reasonable; however, CenterPoint Energy believes the size of a static reactive device should be taken into consideration. Static reactive devices are more widely distributed across a transmission system than generation resources. We recommend that only static reactive devices that are greater than 150 MVAR be included. CenterPoint Energy could support Draft 2 if a reasonable size threshold is established for static reactive devices.

Voter	Entity	Segment	Vote	Comment
<p><b>Response:</b> The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p>				
Robert Ganley	Long Island Power Authority	1	Negative	<p>LIPA has voted NO to the proposed definition of Bulk Electric System as posted and offers the following comments with our vote: 1. The SDT needs to provide clarifying language for the following terms so that facilities can be adequately addressed in determining whether they are BES elements or not:</p> <ul style="list-style-type: none"> <li>a. "local distribution" as used in the BES core definition</li> <li>b. "common point" as used in Inclusion I4</li> <li>c. "single point of interconnection" as used in Exclusion E1</li> <li>d. "underlying Elements" as used in Exclusion E3a</li> </ul> <p>2. The core definition and exclusion E3b and E3c adequately define a Local Network. It seems like the intent to exclude non bulk distribution systems would still be included because of E3a. ( limits on connected generation ) We believe E3a should be eliminated in defining a Local Network.</p>
<p><b>Response:</b> a) The SDT believes that the wording in the core definition plus Exclusions E1 and E3 provide the basis for defining local distribution. In the event that the BES definition incorrectly designates an Element as BES that is not necessary for the reliable operation of the interconnected transmission network or an Element as non-BES that is necessary for the reliable operation of the interconnected transmission network, the Rules of Procedure exception process may be utilized on a case-by-case basis to either include or exclude an Element.</p> <p>b) While the SDT has determined no additional clarification of the term "common point" is needed in the BES definition, the following guidance is provided. The SDT believes the common point of connection, which is the point from where generation is</p>				

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<p>aggregated to determine if the 75 MVA threshold is met, to be the point where the individual transmission Element(s) of a collector system ultimately meet the 100 kV transmission system.</p> <p>c) The “single point of connection of 100 kV or higher” is where the radial system will begin if it meets the language of Exclusion E1 including parts a, b, or c and does not necessarily include an automatic interrupting device (AID). For example, the start of the radial system may be a hard tap of the transmission line where no automatic interruption device is used. The owner of the transmission line will need to insure the reliability of the transmission line. Another example is the tap point within a ring or breaker and a half bus configuration could also be the beginning of the radial system and the owner of the bus would need to insure the reliability of the substation.</p> <p>d) The SDT believes that the existing phrase in ExclusionE3.a “and its underlying Elements” has sufficient clarity and meets the intent of the exclusion with brevity. No change made.</p> <p>e) The SDT continues to believe that it is necessary to establish a limit on the allowable quantity of generation that may be significant to the reliable operation of the surrounding interconnected transmission system. Please note that the issues surrounding the appropriate generation threshold, among other topics, will be taken up in Phase 2 of this BES definition effort. No change made.</p>				
Martyn Turner	Lower Colorado River Authority	1	Negative	<p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments:</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: LCRA TSC supports the inclusion of transformers (with both the primary and secondary windings operated at 100-kV or higher) in the BES definition; however, additional clarification is suggested. The term transformers needs to be further defined with respect to function (auto transformers, phase angle regulators, generator step-up transformers, etc.). Similarly, a separate definition for “Transformer” could be developed and included</p>

Voter	Entity	Segment	Vote	Comment
				<p>in the NERC Glossary of Terms.</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments:</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments:</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: LCRA TSC suggests consistency between this inclusion criteria and the criteria used in I2 for "generation".</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: This inclusion conflicts with exclusion E4. Which one takes priority?</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The current wording is unclear with respect to the treatment of normally open switching devices. LCRA TSC suggests the following language to replace the existing language on the note to E1: "Two radial systems connected by a normally open, manually operated switching</p>

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				<p>device, as depicted on prints or one-line diagrams for example, may be considered as radial systems under this exclusion." The current wording is unclear with respect to "non-retail generation". The sudden loss of large, radial-supplied load may result in reliability deficiencies. LCRA TSC suggests stating a load level or a load capacity in the exclusion.</p> <p>8. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments:</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments:</p> <p>10. The SDT has added specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E4 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: This exclusion conflicts with inclusion item 15. Which one takes priority?</p> <p>11. Are there any other concerns with this definition that haven't been covered in previous questions and comments remembering that the exception criteria are posted separately for comment? Yes: X No: Comments: LCRA TSC supports the direction the standards drafting team taking with this project on the BES Definition and encourages further clarification as noted in these comments for proper application.</p>
<p><b>Response:</b> The SDT refers LCRA to the individual comment responses in the definition comment form as the comments expressed here are exactly identical to the comments submitted by LCRA on that form.</p>				
Danny Dees	MEAG Power	1	Negative	MEAG believes that a Yes vote for the draft BES Definition will result in minimal or no changes. We have identified a few changes that if made will secure a Yes vote on the next ballot.

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				<p>The most important change is needed in I5 reactive resources noted below. I5 reactive resources - We feel that this inclusion should be limited to dynamic devices with an aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) connected through a common point.</p> <p>E1 - Non-retail generation needs to be defined to clarify why it is used in this exclusion.</p> <p>E2 (ii) The reference to generation on the customer's side of the retail meter needs to be clarified to provide a better understanding as to what is intended with this phrase.</p> <p>E3 b - We would agree with the exclusion if the wording of the exclusion includes the following phrase (in italics) added at the end of E3 b): Power flows only into the LN: The LN does not transfer energy originating outside the LN for delivery through the LN "under normal operating conditions".</p>
<p><b>Response:</b> The SDT refers MEAG to the individual comment responses in the definition comment form as the comments expressed here are exactly identical to the comments submitted by MEAG on that form.</p>				
Ernest Hahn	Metropolitan Water District of Southern California	1	Affirmative	<p>MWDSC generally supports the core definition of the Bulk Electric System as proposed. However, some of the proposed Inclusions and Exclusions need to be clarified as identified below.</p> <p>Inclusion 5 should be changed to be consistent with the core definition and to clarify Reactive Power devices. Under I5, the additional phrase "or through a dedicated transformer with a high-side voltage of 100 kV or higher," appears to conflict with the core definition's phrase "and Real Power and Reactive Power resources connected at 100 kV or higher". For example, if you have a device connected to a 69Kv system which is used solely for an end-user's load, but the 69kv system is transformed up to a 115kV system, such device could be included as BES or you would have to define what is meant by "dedicated. If Reactive Power is meant to agree with the definition under NERC's Glossary of Terms, there should be consistency and less verbiage.</p> <p>MWDSC also agrees with WECC's comment that there should be some minimum threshold for Reactive Power devices similar to that identified for generating resources in Inclusion 2.</p> <p>MWDSC recommends that Inclusion 5 be changed as follows: I5 - "Reactive</p>

Voter	Entity	Segment	Vote	Comment
				<p>Power devices dedicated to support the BES that are connected at 100kV or higher, or through a transformer that is designated in Inclusion I1."</p> <p>Exclusion 4 appears to limit the devices just to retail customers. However, any end-user load, including wholesale or retail, should be included. NERC's Glossary of Terms uses the phrase "end-use customer", not retail customers to describe loads. MWDSC recommends that Exclusion 4 be changed as follows: E4 - Reactive Power devices owned and operated by an end-use customer solely for its own use.</p>
<p><b>Response:</b> The SDT refers MWDSC to the individual comment responses in the definition comment form as the comments expressed here are exactly identical to the comments submitted by MWDSC on that form.</p>				
William Palazzo	New York Power Authority	6	Negative	<p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: In general NYPA agrees with the definition. However, NYPA believes that clarifying revisions need to be made as described in the responses to Questions 2 -11 below.</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to auto transformers, phase angle regulators and generator step-up transformers. Recommend the following wording: "All transformers (including auto-transformers, voltage regulators, and phase angle regulators) with primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100KV, unless excluded by E1 or E3."</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language</p>

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				<p>would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion 12 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion 12 and the current Compliance Registry Criteria.</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion 13 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend that the concept and the words "material to and designated as part of" be included in Inclusion 13. Recommend rewording Inclusion 13 as follows "Blackstart resources material to and designated as part of the Transmission Operator's restoration plan."</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion 14 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion 15 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Technical studies need to be conducted to</p>

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				<p>confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording in E1c should more clearly reflect what is intended by using the term "non-retail". The E1 reference Note should be re-worded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. Recommend that the potential inclusion in the BES of protective relay systems which protect radial lines emanating from a ring bus or breaker and a half bus design be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: It is our understanding that a sub-team of the SDT performed a technical study to support the limits outlined in Exclusion E3.</p>

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				<p>This study should be made available. Recommend removing the sentence in the definition that states: "This does not include facilities used in the local distribution of electric energy." This sentence leads to confusion as it overlaps with language in Exclusion E3.</p> <p>10. The SDT has added specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E4 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The statement "owned or operated by the retail customer" is confusing and arguably inaccurate and should be revised. Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Are there any other concerns with this definition that haven't been covered in previous questions and comments remembering that the exception criteria are posted separately for comment? Yes: X No: Comments: Recommend integrating the Inclusions into the base definition wording to eliminate confusion. Format of the definition is confusing by referencing both Inclusions and Exclusions. NYPA supports many of the comments</p>
Marilyn Brown	New York Power Authority	3	Negative	<p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: In general NYPA agrees with the definition. However, NYPA believes that clarifying revisions need to be made as described in the responses to Questions 2 -11 below.</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to auto transformers, phase angle regulators and generator step-up transformers. Recommend the</p>

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				<p>following wording: "All transformers (including autotransformers, voltage regulators, and phase angle regulators) with primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100KV, unless excluded by E1 or E3."</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what New York Power Authority's Comments Final: October 05, 2011 Comment Form for 2nd Draft of Definition of BES (Project 2010-17) Page 4 of 6 appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion I2 and the current Compliance Registry Criteria.</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend that the concept and the words "material to and designated as part of" be included in Inclusion I3. Recommend rewording Inclusion I3 as follows "Blackstart resources material to and designated as part of the Transmission Operator's restoration plan."</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language</p>

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				<p>would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2). New York Power Authority's Comments Final: October 05, 2011 Comment Form for 2nd Draft of Definition of BES (Project 2010-17) Page 5 of 6</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording in E1c should more clearly reflect what is intended by using the term "non-retail". The E1 reference Note should be re-worded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. Recommend that the potential inclusion in the BES of protective relay systems which protect radial lines emanating from a ring bus or breaker and a half bus design be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. The SDT has revised the specific exclusions to the core definition in response</p>

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				<p>to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: It is our understanding that a sub-team of the SDT performed a technical study to support the limits outlined in Exclusion E3. This study should be made available. Recommend removing the sentence in the definition that states: "This does not include facilities used in the local distribution of electric energy." This sentence leads to confusion as it overlaps with language in Exclusion E3. New York Power Authority's Comments Final: October 05, 2011 Comment Form for 2nd Draft of Definition of BES (Project 2010-17) Page 6 of 6</p> <p>10. The SDT has added specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E4 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The statement "owned or operated by the retail customer" is confusing and arguably inaccurate and should be revised. Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Are there any other concerns with this definition that haven't been covered in previous questions and comments remembering</p>
Arnold J. Schuff	New York Power Authority	1	Negative	<p>You do not have to answer all questions. Enter All Comments in Simple Text Format. Insert a "check" mark in the appropriate boxes by double-clicking the gray areas. The SDT has asked one specific question for each specific aspect of the definition.</p> <p>1. The SDT has made clarifying changes to the core definition in response to</p>

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				<p>industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: In general NYPA agrees with the definition. However, NYPA believes that clarifying revisions need to be made as described in the responses to Questions 2 -11 below.</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to auto transformers, phase angle regulators and generator step-up transformers. Recommend the following wording: "All transformers (including auto-transformers, voltage regulators, and phase angle regulators) with primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100KV, unless excluded by E1 or E3."</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion I2 and the current Compliance Registry Criteria.</p>

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				<p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Recommend that the concept and the words “material to and designated as part of” be included in Inclusion I3. Recommend rewording Inclusion I3 as follows “Blackstart resources material to and designated as part of the Transmission Operator’s restoration plan.”</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The term “common point” needs clarification with respect to connection to the BES. Recommend the following wording: “connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above.”</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording in E1c should more clearly reflect</p>

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				<p>what is intended by using the term “non-retail”. The E1 reference Note should be re-worded to state “Radial systems shall be assessed with all normally open switching devices in their open positions.” The current wording is unclear with respect to the treatment of normally open switching devices. Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. Recommend that the potential inclusion in the BES of protective relay systems which protect radial lines emanating from a ring bus or breaker and a half bus design be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: It is our understanding that a sub-team of the SDT performed a technical study to support the limits outlined in Exclusion E3. This study should be made available. Recommend removing the sentence in the definition that states: “This does not include facilities used in the local distribution of electric energy.” This sentence leads to confusion as it overlaps with language in Exclusion E3.</p> <p>10. The SDT has added specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E4 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: The statement “owned or operated by the retail customer” is confusing and arguably inaccurate and should be revised. Refer to comments related to reactive resources for Question 6 regarding</p>

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				<p>Inclusion I5.            11. Are there any other concerns with this definition that haven't been covered in previous questions and comments remembering that the exception criteria are posted separately for</p>
<p><b>Response:</b> 1. The SDT refers NYPA to the responses below for Q2 – Q10.            2. The SDT believes the existing language is clear and the proposed additional language would be redundant. No change made.            3. The SDT made a clarifying change removing the ERO Statement of Compliance Registry Criteria reference in Inclusion I2, instead specifying the 20/75 MVA reference threshold values in order to avoid the possibility of the registry values being changed and thus affecting the BES Definition prior to the resolution of the threshold values in Phase 2 of this project.            4. The SDT believes that adding language such as “material to” does not provide clarity and remains immeasurable. No change made.            5. The “single point of connection of 100 kV or higher” is where the radial system will begin if it meets the language of Exclusion E1 including parts a, b, or c and does not necessarily include an automatic interrupting device (AID). For example, the start of the radial system may be a hard tap of the transmission line where no automatic interruption device is used. The owner of the transmission line will need to insure the reliability of the transmission line. Another example is the tap point within a ring or breaker and a half bus configuration could also be the beginning of the radial system and the owner of the bus would need to insure the reliability of the substation.            6. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects of the definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will provide compelling justification. No change made.            7. “Non-retail generation” means that generation which is on the system (supply) side of the retail meter. Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator</p>				

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<p>from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator’s responsibility to indicate how a switch is used in the normal operating environment. The “single point of connection of 100 kV or higher” is where the radial system will begin if it meets the language of Exclusion E1 including parts a, b, or c and does not necessarily include an automatic interrupting device (AID). For example, the start of the radial system may be a hard tap of the transmission line where no automatic interruption device is used. The owner of the transmission line will need to insure the reliability of the transmission line. Another example is the tap point within a ring or breaker and a half bus configuration could also be the beginning of the radial system and the owner of the bus would need to insure the reliability of the substation. Treatment of protection systems is but one of many items to be studied and clarified in Phase II.</p> <p>8. The threshold levels of generators and the relationship between the ERO Statement of Compliance Registry Criteria and the BES definition will be considered in the Phase 2 review. However, the SDT believes that a value was needed for Phase I and decided to proceed with the single 75 MVA threshold. No change made.</p> <p>9. No study was run by the SDT concerning the limits in E3. The SDT does not see any conflict between the cited statement and the language in E3.</p> <p>10. The SDT believes the wording is clear and absent any concrete suggestions has not made a change in this regard.</p>				
Doug Peterchuck	Omaha Public Power District	1	Negative	<p>We believe that this version of the definition and associated Inclusion and Exclusion criteria will again create regional inconsistency in identifying BES facilities. We believe the best way to address this is to condense the definition by applying a bright-line threshold within the definition itself that uses the defined inclusions to describe transmission and generation facilities operating or connecting at 100 kV or above as BES facilities.</p> <p>Further, the definition should include existing registration criteria for generation facilities (including real and reactive resources), which includes both single units at or above 20 MVA and aggregate units at 75 MVA or above that are directly connected to facilities at 100kV or higher.</p> <p>The proposed Exception Process should only allow Registered Entities to remove facilities from BES designation based on technical justification (i.e. perform system impact studies to show facility not impacting reliable operation of BES). If the BES definition is properly created and defined, there should not be a need</p>

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				<p>to have an exception process for a registered entity to add a facility to the BES. With coordination led by NERC, the RE should have the final approval of any registered entity requesting a facility exemption. Exemptions should be granted based on result of the system impact study performed. Saying this, the proposed exclusion list should actually be listed as "Typical Exceptions to be considered by Regional Entities and NERC".</p>
<p><b>Response:</b> The SDT strived to create a bright-line as requested in the comment. The inclusions and exclusions are seen as necessary clarifications to the core definition and every attempt was made to make them bright-line as well. The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I. The exception process has been designed with maximum flexibility in mind to allow for all possible conditions. Therefore, it is set up to allow for both deletion and inclusion requests. Order 743 directs that the ERO be the final arbiter of exception requests.</p>				
Robert Kondziolka	Salt River Project	1	Negative	<p>Definition of Bulk Electric System (BES) The Blackstart "Cranking Path" has been deleted from Inclusion 3 of the BES definition. However, NERC standards EOP-005 and CIP-002, R1.2.4 require documenting the Cranking Path. In addition, CIP-002-4 identifies the Cranking Path as a Critical Asset in Attachment 1. Compliance to the NERC Standards needs to be an exact science whenever possible. SRP does not argue the inclusion or exclusion of Cranking Path. However, if it is excluded, guidance must be provided on whether or not a Cranking Path is subject to the previously mentioned Standards.</p> <p>Detailed Information to Support BES Exceptions Request SRP agrees with the WECC Staff recommendation on the "Detailed Information to Support BES Exceptions Request." "WECC Staff believes that the proposed Technical Principles for Demonstrating BES Exceptions Request does not provide the necessary clarity as to what applying entities must provide to support their request, nor does it provide any criteria for consistency among regions in their assessment of requests. We believe that the checklist items for transmission and generation facilities are appropriate questions that must be answered in considering all requests. However, without objective criteria defining what must be submitted and how to assess the materials submitted, the current methodology leaves it to</p>

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				<p>each region to develop their own methodology and criteria for evaluating the submittals. We believe the lack of clarity regarding what studies must be submitted and what must be demonstrated by the studies submitted will be overly burdensome on the submitting entity and the Region, as multiple studies may be required for the two to agree that there is sufficient justification for an exemption request. We believe that additional work is necessary to develop clear, objective methods and criteria for identifying which facilities may be excluded from or should be included in the Bulk Electric System. Clear, objective methods and criteria will enable the submitter of requests to understand what is necessary for submitting an exception request and will provide for consistency among the regions in their initial assessment and recommendations to the ERO."</p>
John T. Underhill	Salt River Project	3	Negative	<p>Definition of Bulk Electric System (BES) The Blackstart "Cranking Path" has been deleted from Inclusion 3 of the BES definition. However, NERC standards EOP-005 and CIP-002, R1.2.4 require documenting the Cranking Path. In addition, CIP-002-4 identifies the Cranking Path as a Critical Asset in Attachment 1. Compliance to the NERC Standards needs to be an exact science whenever possible. SRP does not argue the inclusion or exclusion of Cranking Path. However, if it is excluded, guidance must be provided on whether or not a Cranking Path is subject to the previously mentioned Standards.</p> <p>Detailed Information to Support BES Exceptions Request SRP agrees with the WECC Staff recommendation on the "Detailed Information to Support BES Exceptions Request." "WECC Staff believes that the proposed Technical Principles for Demonstrating BES Exceptions Request does not provide the necessary clarity as to what applying entities must provide to support their request, nor does it provide any criteria for consistency among regions in their assessment of requests. We believe that the checklist items for transmission and generation facilities are appropriate questions that must be answered in considering all requests. However, without objective criteria defining what must be submitted and how to assess the materials submitted, the current methodology leaves it to each region to develop their own methodology and criteria for evaluating the submittals. We believe the lack of clarity regarding what studies must be</p>

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				<p>submitted and what must be demonstrated by the studies submitted will be overly burdensome on the submitting entity and the Region, as multiple studies may be required for the two to agree that there is sufficient justification for an exemption request. We believe that additional work is necessary to develop clear, objective methods and criteria for identifying which facilities may be excluded from or should be included in the Bulk Electric System. Clear, objective methods and criteria will enable the submitter of requests to understand what is necessary for submitting an exception request and will provide for consistency among the regions in their initial assessment and recommendations to the ERO."</p>
<p><b>Response:</b> Cranking Paths are subject to any standard in which they are specifically spelled out. The SDT understands the concerns raised by the commenters in not receiving hard and fast guidance on this issue. The SDT would like nothing better than to be able to provide a simple continent-wide resolution to this matter. However, after many hours of discussion and an initial attempt at doing so, it has become obvious to the SDT that the simple answer that so many desire is not achievable. If the SDT could have come up with the simple answer, it would have been supplied within the bright-line. The SDT would also like to point out to the commenters that it directly solicited assistance in this matter in the first posting of the criteria and received very little in the form of substantive comments.</p> <p>There are so many individual variables that will apply to specific cases that there is no way to cover everything up front. There are always going to be extenuating circumstances that will influence decisions on individual cases. One could take this statement to say that the regional discretion hasn't been removed from the process as dictated in the Order. However, the SDT disagrees with this position. The exception request form has to be taken in concert with the changes to the ERO Rules of Procedure and looked at as a single package. When one looks at the rules being formulated for the exception process, it becomes clear that the role of the Regional Entity has been drastically reduced in the proposed revision. The role of the Regional Entity is now one of reviewing the submittal for completion and making a recommendation to the ERO Panel, not to make the final determination. The Regional Entity plays no role in actually approving or rejecting the submittal. It simply acts as an intermediary. One can counter that this places the Regional Entity in a position to effectively block a submittal by being arbitrary as to what information needs to be supplied. In addition, the SDT believes that the visibility of the process would belie such an action by the Regional Entity and also believes that one has to have faith in the integrity of the Regional Entity in such a process. Moreover, Appendix 5C of the</p>				

Voter	Entity	Segment	Vote	Comment
				<p>proposed NERC Rules of Procedure, Sections 5.1.5, 5.3, and 5.2.4, provide an added level of protection requiring an independent Technical Review Panel assessment where a Regional Entity decides to reject or disapprove an exception request. This panel’s findings become part of the exception request record submitted to NERC. Appendix 5C of the proposed NERC Rules of Procedure, Section 7.0, provides NERC the option to remand the request to the Regional Entity with the mandate to process the exception if it finds the Regional Entity erred in rejecting or disapproving the exception request. On the other side of this equation, one could make an argument that the Regional Entity has no basis for what constitutes an acceptable submittal. Commenters point out that the explicit types of studies to be provided and how to interpret the information aren’t shown in the request process. The SDT again points to the variations that will abound in the requests as negating any hard and fast rules in this regard. However, one is not dealing with amateurs here. This is not something that hasn’t been handled before by either party and there is a great deal of professional experience involved on both the submitter’s and the Regional Entity’s side of this equation. Having viewed the request details, the SDT believes that both sides can quickly arrive at a resolution as to what information needs to be supplied for the submittal to travel upward to the ERO Panel for adjudication.</p> <p>Now, the commenters could point to lack of direction being supplied to the ERO Panel as to specific guidelines for them to follow in making their decision. The SDT re-iterates the problem with providing such hard and fast rules. There are just too many variables to take into account. Providing concrete guidelines is going to tie the hands of the ERO Panel and inevitably result in bad decisions being made. The SDT also refers the commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.1 where the basic premise on evaluating an exception request must be based on whether the Elements are necessary for the reliable operation of the interconnected transmission system. Further, reliable operation is defined in the Rules of Procedure as operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber security incident, or unanticipated failure of system elements. The SDT firmly believes that the technical prowess of the ERO Panel, the visibility of the process, and the experience gained by having this same panel review multiple requests will result in an equitable, transparent, and consistent approach to the problem. The SDT would also point out that there are options for a submitting entity to pursue that are outlined in the proposed ERO Rules of Procedure changes if they feel that an improper decision has been made on their submittal.</p>

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<p>Some commenters have asked whether a single ‘yes’ or ‘no’ response to an item on the exception request form will mandate a negative response to the request. To that item, the SDT refers commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.2 of the proposed Rules of Procedure that states “No single piece of evidence provided as part of an Exception Request or response to a question will be solely dispositive in the determination of whether an Exception Request shall be approved or disapproved.”</p> <p>The SDT would like to point out several changes made to the specific items in the form that were made in response to industry comments. The SDT believes that these clarifications will make the process tighter and easier to follow and improve the quality of the submittals.</p> <p>Finally, the SDT would point to the draft SAR for Phase II of this project that calls for a review of the process after 12 months of experience. The SDT believes that this time period will allow industry to see if the process is working correctly and to suggest changes to the process based on actual real-world experience and not just on suppositions of what may occur in the future. Given the complexity of the technical aspects of this problem and the filing deadline that the SDT is working under for Phase I of this project, the SDT believes that it has developed a fair and equitable method of approaching this difficult problem. The SDT asks the commenter to consider all of these facts in making your decision and casting your ballot and hopes that these changes will result in a favorable outcome.</p>				
Barbara Constantinescu	Independent Electricity System Operator	2	Negative	This is our response to Question 4 in the comment form: We thank the SDT for excluding the cranking paths from the BES definition, a point we had raised in our comments to the previous posting. However, we had also disagreed with the inclusion of Blackstart Resources and reiterate our view that their inclusion is superfluous given there is already a designation specific for system restoration covered by an existing standard, to recognize their reliability impacts and to ensure their expected performance. NERC Standards EOP-005-2 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, which meets the intent of identifying their criticality to reliability. We therefore suggest removing Inclusion I3 entirely.

Voter	Entity	Segment	Vote	Comment
				<p>We support the provisions of E1 in principle but require clarification of some issues and suggest alternative wording in some cases. It is unclear if the connection voltage of generation referred to in E1.b affects whether a radial system could be excluded under E1 although from the context it appears that it would. For clarity we suggest appending "connected at 100 kV or higher." Please provide in the BES definition document an explanation of "non-retail" and "retail" generation used in E1.c.</p> <p>Additionally, despite the fact the revisions to Inclusion I3 (Blackstart Resources) removed any reference to Cranking Paths, Exclusion 1 (b) and (c) both indicate that the exclusion of a radial system would not be allowed if generation identified in I3 were connected to it. This implies that the Cranking Path for this Blackstart Resource would have to be BES. This appears to be an inconsistency. We suggest removing the phrase "not identified in Inclusion I3" in both instances. We disagree with notion that the capacity of generation connected to a radial system ought to determine whether that radial system should be classified as BES. Firstly, it is a given that the generation connected to the subject radial that meets the registry criteria would already be captured within the core BES definition and Inclusion I2.</p> <p>This is our response to Question 7 in the comment form: The function served by a radial that is of importance in the current context is that of delivering surplus power to the rest of the bulk power system and so, the impact on the BES of loss of the radial system or its connected generation needs to be considered. In our view, the "BES-status" of the radial itself is immaterial and so too is the aggregate capacity of generation resources connected to it. Detailed arguments regarding impact on the BES can be made in support of an application for an exclusion under the Exception Process, but it would be beneficial to avoid unnecessarily including a radial merely because it has more than 75 MVA of qualifying generation connected to it, without equal consideration of the connected load. To put a "bright line" on the consideration of impact referred to above, we suggest: In E1 (b): Replace "an aggregate capacity less than or equal to 75 MVA (gross</p>

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				<p>nameplate rating)" with "a net capacity provided to the BES of less than or equal to 75 MVA." In E1 (c): Replace "an aggregate capacity of non-retail generation less than or equal to 75 MVA (gross nameplate rating)" with "a net capacity of non-retail generation provided to the BES of 75 MVA." This wording would be consistent with E2 (i).</p> <p>Finally the word "affect" stated in the note accompanying E1 lends itself to mis-interpretation. We therefore suggest the following revision to achieve greater clarity: "This exclusion applies to radial systems connected by a normally open switch."</p> <p>This is our response to Question 9 of the comment form: Consistent with our comments in response to Q7, we propose removing E3 (a) since, as explicitly described in E3 (b), one of the characteristic of the LN is that power flows only into the LN. The level of generation contained within the LN is therefore immaterial, particularly where the most onerous contingency or system operating condition occurring within the LN, results in acceptable BES performance as defined by the applicable criteria of the NERC transmission planning standards. The generation connected within the LN that meets the registry criteria would already be captured within the definition of the BES as provided for in Inclusion I2.</p>
<p><b>Response:</b> The SDT refers IESO to the individual comment responses in the definition comment form as the comments expressed here are exactly identical to the comments submitted by IESO on that form.</p>				
Marie Knox	Midwest ISO, Inc.	2	Negative	<p>While we agree with the changes to the definition of the Bulk Electric System (BES), there are a few key refinements left to be addressed. The BES drafting team needs to clarify that facilities below 100 kV are defined "local distribution facilities", are beyond NERC jurisdiction, and are excluded from the NERC BES. Facilities below 100 kV are used for the local distribution of electric energy. We fear that equipment that is connected to the BES, would be considered a part of the BES as well, and we disagree.</p>

Voter	Entity	Segment	Vote	Comment
<p><b>Response:</b> The SDT points the commenter to the core definition which clearly states that the BES is 100 kV and above unless modified by the inclusions/exclusions and also clearly states that local distribution facilities are not included. The inclusions/exclusions were carefully developed to try to avoid bringing in any equipment that is truly local distribution. The SDT would also point out that the way the definition has been framed that it would not bring in local distribution facilities simply because they were connected to the BES at some location.</p>				
Alden Briggs	New Brunswick System Operator	2	Negative	Please see comments submitted by the Reliability Standards Committee. The draft definition will significantly increase the number of BES elements. Many elements and connected facilities will be added to the BES and subject to NERC standards under the draft definition. Most of these requirements for elements will unnecessary introduce administrative burden and operating expenses. As a NPCC study identifies, this would impose significant costs to the ratepayer, with little or no increase in reliability benefits to the Bulk Power System (BPS) as currently defined by NPCC.
<p><b>Response:</b> The SDT refers NBSO to the individual comment responses in the definition comment form as the comments expressed here are identical to the comments submitted by NBSO on that form.</p>				
Jack W Savage	Modesto Irrigation District	3	Negative	MID is voting No with the following comments. Inclusions and exclusions are based upon the ERO Statement of Compliance Registry Criteria - currently 75MVA. What is the SDT's technical justification for using this generation level? If 75MVA is the criteria for including facilities as part of the BES, why is that same criteria not applied at voltages below 100kv? Is 75MVA of generation within an area whose load far exceeds that 75MVA cause to classify that entire area as part of the BES and not exclude it as a Local Network? Why are customer owned generators treated differently than other generators? Where is "non-retail generation" defined? As worded, I5 will make any and all reactive devices connected at 100kv or higher part of the BES. Is it intended that capacitors attached to the tertiary of a 115/69kv transformer for local voltage support be included as part of the BES? By implication, if they are, then the 115/69kv transformer should also be included. Is that the intent? Did the SDT consider and attempt to include and reconcile the WECC BES Task

Voter	Entity	Segment	Vote	Comment
				Force's definition of the BES and their technical basis for defining exclusions? Please explain.
<p><b>Response:</b> As has been previously stated in the first posting consideration of comments, the SDT is using the existing thresholds for generation due to the scope limitations of the FERC Order. Phase II of this project will include a thorough investigation of, and a technical justification for, any threshold values used in the definition.</p> <p>The SDT is using the same criteria that exists in today's definition for generation threshold values and will be exploring all issues associated with these threshold values in Phase II of this project when more time will be available for technical analysis of the issues.</p> <p>The SDT recognizes that some candidate local networks will have far in excess of 75 MVA of load demand, yet it believes that the 75 MVA threshold value given in Exclusion E3.a is an appropriate level regardless of the amount of load. This value is consistent with the existing threshold of aggregate generation in the ERO Statement of Compliance Registry Criteria. The generation values used in the BES definition will receive more attention and refinement as part of phase 2 of this Project 2010-17.</p> <p>Customer owned generation has traditionally been treated differently and the SDT is retaining this important distinction. Non-retail generation is a widely used and understood term and is not defined here.</p> <p>The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>The SDT considered all of the previous work done by several of the regional entities in the revision of the definition. WECC is well represented on the SDT.</p>				

Voter	Entity	Segment	Vote	Comment
Steven M. Jackson	Municipal Electric Authority of Georgia	3	Negative	MEAG believes that a Yes vote for the draft BES Definition will result in minimal or no changes. We have identified a few changes that if made will secure a Yes vote on the next ballot. The most important change is needed in I5 reactive resources noted below. I5 reactive resources - We feel that this inclusion should be limited to dynamic devices with an aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) connected through a common point. E1 - Non-retail generation needs to be defined to clarify why it is used in this exclusion. E2 (ii) The reference to generation on the customer's side of the retail meter needs to be clarified to provide a better understanding as to what is intended with this phrase. E3 b - We would agree with the exclusion if the wording of the exclusion includes the following phrase (in italics) added at the end of E3 b): Power flows only into the LN: The LN does not transfer energy originating outside the LN for delivery through the LN "under normal operating conditions".
Steven Grego	MEAG Power	5	Negative	MEAG believes that a Yes vote for the draft BES Definition will result in minimal or no changes. We have identified a few changes that if made will secure a Yes vote on the next ballot. The most important change is needed in I5 reactive resources noted below. I5 reactive resources - We feel that this inclusion should be limited to dynamic devices with an aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) connected through a common point. E1 - Non-retail generation needs to be defined to clarify why it is used in this exclusion. E2 (ii) The reference to generation on the customer's side of the retail meter needs to be clarified to provide a better understanding as to what is intended with this phrase. E3 b - We would agree with the exclusion if the wording of the exclusion includes the following phrase (in italics) added at the end of E3 b): Power flows only into the LN: The LN does not transfer energy originating outside the LN for delivery through the LN "under normal operating conditions".
<p><b>Response:</b> The SDT refers MEAG to the individual comment responses in the definition comment form as the comments expressed here are identical to the comments submitted by MEAG on that form.</p>				

Voter	Entity	Segment	Vote	Comment
Spencer Tacke	Modesto Irrigation District	4	Negative	The choice of 75 MVA as the determining generating capacity seems to have been an arbitrary choice with no technical basis. We strongly support the E3 (Local Networks) exception, if it were not for the 75 MVA generation requirement. So I believe a technical basis for selecting 75 MVA as the generator size needs to be developed before the definition would be acceptable. Thank you.
<p><b>Response:</b> Comments were received that either posed a challenge to the generator thresholds in Exclusion E3.a or suggested that the Exclusion for local networks should be silent on generator thresholds until such time as the additional consideration of appropriate generation thresholds is addressed in Phase 2 of Project 2010-17. The SDT agrees that the threshold(s) for generation throughout the BES definition are appropriately addressed in Phase 2 of this effort; however, in the meantime and for the purpose of satisfying the Commission’s Order in 743 and 743a in a timely fashion, the SDT believes it is necessary to use a generation threshold that is consistent with the in-force ERO Statement of Compliance Registry Criteria.</p>				
Chifong Thomas	BrightSource Energy, Inc.	5	Negative	<p>BrightSource Energy supports the core definition of the Bulk Electric System as proposed. However, we believe the following clarification will be needed. For Inclusion 3 we agree that Blackstart units should be considered vital to the overall operation of the BES, and therefore included in the definition of the BES. However, we do not agree with the deletion of the cranking path from Inclusion 3. The cranking path should be included in the definition since NERC standards EOP-005 and CIP-002, R1.2.4 require documenting the cranking path and the revised CIP-002-4 identifies the cranking path as a critical asset. To be able to count on a Blackstart unit to perform as designed in the Blackstart Restoration Plan, it must be ensured that the cranking path is available.</p> <p>We believe that additional clarity is needed in the wording of Inclusion 4. It is our understanding, for example, that Inclusion 4 is not intended to include each individual wind turbine generating unit in a wind farm, or each PV panel as a BES element, but rather to include the point at which the aggregated capacity reaches the threshold of 75 MVA. However, the current wording of Inclusion 4 does not provide sufficient clarity. We believe that the wording of Inclusion 4 could be modified to add clarity on this topic.</p> <p>We believe that Inclusion 5 should be modified to identify some minimum Reactive Power threshold for static or dynamic devices similar to that identified for generating sources in Inclusion 2. As worded a 1 MVA device supplying or</p>

Voter	Entity	Segment	Vote	Comment
				<p>absorbing Reactive Power that is connected at 100 kV or higher would be included in the BES.</p> <p>We believe that Exclusion 2 should be modified to include a size threshold for individual generating units, similar to that identified in Inclusion 2. As currently worded Exclusion 2 places the same threshold (75 MVA) on a single generating unit as is placed on multiple generating units.</p>
<p><b>Response:</b> Cranking Paths identified in a Transmission Operator’s restoration plans are often composed of distribution system Elements. The Transmission Operator’s restoration plans identify a number of possible system restoration scenarios to address the uncertainty of the actual requirements needed to address a particular restoration event including Cranking Paths. Therefore, the SDT maintains that Cranking Paths are not required to be included in the BES definition as they are essentially a moving target and could include distribution Elements. The Cranking Paths issue will be discussed anew in Phase II of this project. No change made. Inclusion I4 denotes an aggregate threshold. This is clear from the requirement inclusion threshold of “aggregate capacity greater than 75 MVA (gross aggregate nameplate rating).”</p> <p>The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>The threshold levels of generators and the relationship between the ERO Statement of Compliance Registry Criteria and the BES definition will be considered in the Phase 2 review. However, the SDT believes that a value was needed for Phase I and decided to proceed with the single 75 MVA threshold. No change made.</p>				
Rex A Roehl	Indeck Energy Services, Inc.	5	Negative	As acknowledged in the response to Question 12 comments on the previous BES definition, the BES definition is expansive compared to the definition of the BPS in

Voter	Entity	Segment	Vote	Comment
				<p>the FPA Section 215. The inclusion of the limited Exclusions is an attempt to remedy the situation. However, the Exclusions need to include a fifth one that if, based on studies or other assessments, it can be shown that any transmission or generator element otherwise identified as part of the BES is not important to the reliability of the BPS, then that element should be excluded from the mandatory standards program. There has never been a study to show that elements, such as a 20 MW wind farm, 60 MW merchant generator (which operates infrequently in the depressed market) in a large BA (eg NYISO) or a radial transmission line connecting a small generator are important to the reliability of the BPS. They are covered by the mandatory standards program through the registration criteria. The BES Definition is the opportunity to permit an entity to demonstrate that an element is unimportant to reliability of the BPS. The SDT has identified a small subset of elements that it is willing to exclude. By their very nature, these exclusions dim the bright line that is the stated goal of this project. However, the SDT's foresight seems limited in its selections. Analytical studies are used to evaluate contingencies that could lead to the Big Three (cascading outages, instability or voltage collapse). Such a study showing that a transmission or generation element is bounded by the N-1 or N-2 contingency would exclude it from the BES definition. For example, in a BA with a NERC definition Reportable Disturbance of approximately 400 MW (eg NYISO), a 20 MW wind farm, 60 MW merchant generator or numerous other smaller facilities would be bounded by larger contingencies. It would take more than six 60 MW merchant generators with close location and common mode failure to even be a Reportable Disturbance, much less become the N-1 contingency for the Big Three. Exclusion E5 should be "E5 - Any facility that can be demonstrated to the Regional Entity by analytical study or other assessment to be unimportant to the reliability of the BPS (with periodic reports by the Regional Entity to NERC of any such assessments)."</p>
<p><b>Response:</b> The SDT refers to the individual comment responses in the definition comment form as the comments expressed here are identical to the comments submitted by Indeck on that form.</p>				

Voter	Entity	Segment	Vote	Comment
Gerald Mannarino	New York Power Authority	5	Negative	<p>Comments: For Question 2 on page 2, recommend that the specific types of studies to be provided are defined to add consistency and transparency to the Exception request process. Recommend that the concept and the words “material to” be included as part of the question as follows “Is the facility material to permanent Flowgates in the Eastern Interconnection.....”</p> <p>For Question 4 on page 2, recommend that single contingency analysis be performed and submitted to demonstrate impacts to the BES.</p> <p>For Question 6 on page 3, recommend that “Cranking Path” be removed to be consistent with the draft BES Definition. Recommend that the concept and the words “material to and designated as part of” be included as part of the question. Recommend rewording Question 6 as follows “Is the facility a Blackstart resource material to and designated as part of the Transmission Operator’s restoration plan?”</p> <p>For Question 7 on page 3, facilities less than two years old or under construction would not be able to provide SCADA data for the most recent consecutive two calendar year period. Facility rating changes and the magnitude of such changes which trigger application or reapplication of the exception process are not addressed. Recommend that Question 7 be revised to address these issues.</p> <p>Comments: For Question 2 on page 4, recommend that the specific generator ancillary service products be defined to add consistency and transparency to the Exception Request process.</p> <p>For Question 3 on page 4, recommend that confirmation of must-run generation be provided by the Reliability Coordinator, Reliability Planner, or the Balancing Authority as a clarification to the “appropriate reference”.</p>
<p><b>Response:</b> These questions have been provided to those members of the SDT who are working on responses to the criteria posting questions. They will be responded to in detail in those documents.</p>				
Colin Anderson	Ontario Power Generation Inc.	5	Negative	<p>OPG continues to question the need for the changes required (and costs imposed) as a result of this new definition. This is particularly true in the NPCC region where an impact based methodology is being used to determine the set of BES elements. A very clear 100kV bright line, as proposed in this draft, will dramatically increase the list of generation elements that must meet reliability standards, without a corresponding increase in wide-area reliability.</p>

Voter	Entity	Segment	Vote	Comment
				<p>OPG recommends that the work planned for phase II, technical justification of the generation and voltage thresholds, should be completed before implementing the new definition of BES. OPG does not agree that the question of the 20 MVA (single) versus 75 MVA (aggregate) threshold should be deferred until a subsequent phase of the standard development process ("Phase II"). This question should be resolved now. In general, key elements of the development process should not be parsed out into multiple phases, in hopes that "Standard Development Fatigue" will eliminate critics of the approach.</p> <p>Further, selecting the generator terminals as the boundary for BES within the generating station means that the Isolated Phase Bus (IPB), which connects the generator terminals to the Low Voltage (LV) terminals of the generator step-up (GSU) transformer, is now included as a BES element. The IPB is operated at low voltage, no more than 22kV, so including it as a BES element is going beyond the FERC order 743 and 743a. OPG strongly recommends that the BES boundary be moved to the LV terminals of the GSU transformer.</p> <p>To assure availability of the generation blackstart resources identified in the Transmission Operator's Power System Restoration Plan the generators are tested according to the requirements of reliability standard EOP-009. Blackstart resources are only required post LOBES (Loss of Bulk Electric System) and in many cases do not contribute to the reliability of the BES under normal operating conditions. OPG recommends that this inclusion be removed from the new definition of BES.</p> <p>OPG disagrees in general with proceeding to implement a 100 kV brightline definition in the absence of a properly quantified cost/benefit analysis. Entities are being asked to incur a high cost for no demonstrated benefit in wide-area reliability.</p>
<p><b>Response:</b> The SDT refers OPG to the individual comment responses in the definition comment form as the comments expressed here are identical to the comments submitted by OPG on that form.</p>				
Roland Thiel	Platte River Power Authority	5	Negative	<p>Definition of BES Platte River believes that the SDT has made substantial progress towards a clear and workable definition of the BES. Although Platte River ballots "Negative" we strongly support the approach to defining the Bulk Electric System as proposed here. Platte River recognizes that, given the deadlines imposed by</p>

Voter	Entity	Segment	Vote	Comment
				<p>FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, Platte River agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification. That said, Platte River is prepared to support the BES definition as proposed by the SDT going forward. Platte River has taken the opportunity to provide this industry feedback, as it is our understanding that we will be afforded another ballot opportunity. If this were to be our sole occasion to ballot, we would vote "Affirmative" at this time. We are encouraged by the work that has been completed and we commend the SDT for their commitment and extensive work thus far.</p> <p>Detailed Information to Support BES Exceptions Requests Platte River believes that a Yes vote for the Technical Principles for Demonstrating BES Exceptions Request will result in minimal changes to today's process under the current definition which includes the language "as defined by the Regional Reliability Organization." While the proposed Technical Principles for Demonstrating BES Exceptions Request includes a checklist that must be submitted with exception requests, a yes vote will still require each region to develop their own methods and criteria for assessing materials submitted with exemption requests. We believe that a No vote with guidance to the drafting team that objective methods and criteria must be developed and applied continent-wide will result in the desired uniformity and consistency among regions in their assessment of exception requests.</p>
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II.</p> <p>The SDT understands the concerns raised by the commenters in not receiving hard and fast guidance on this issue. The SDT would like nothing better than to be able to provide a simple continent-wide resolution to this matter. However, after many hours of discussion and an initial attempt at doing so, it has become obvious to the SDT that the simple answer that so many desire is not achievable. If the SDT could have come up with the simple answer, it would have been supplied within the bright-line. The SDT</p>				

Voter	Entity	Segment	Vote	Comment
				<p>would also like to point out to the commenters that it directly solicited assistance in this matter in the first posting of the criteria and received very little in the form of substantive comments.</p> <p>There are so many individual variables that will apply to specific cases that there is no way to cover everything up front. There are always going to be extenuating circumstances that will influence decisions on individual cases. One could take this statement to say that the regional discretion hasn't been removed from the process as dictated in the Order. However, the SDT disagrees with this position. The exception request form has to be taken in concert with the changes to the ERO Rules of Procedure and looked at as a single package. When one looks at the rules being formulated for the exception process, it becomes clear that the role of the Regional Entity has been drastically reduced in the proposed revision. The role of the Regional Entity is now one of reviewing the submittal for completion and making a recommendation to the ERO Panel, not to make the final determination. The Regional Entity plays no role in actually approving or rejecting the submittal. It simply acts as an intermediary. One can counter that this places the Regional Entity in a position to effectively block a submittal by being arbitrary as to what information needs to be supplied. In addition, the SDT believes that the visibility of the process would belie such an action by the Regional Entity and also believes that one has to have faith in the integrity of the Regional Entity in such a process. Moreover, Appendix 5C of the proposed NERC Rules of Procedure, Sections 5.1.5, 5.3, and 5.2.4, provide an added level of protection requiring an independent Technical Review Panel assessment where a Regional Entity decides to reject or disapprove an exception request. This panel's findings become part of the exception request record submitted to NERC. Appendix 5C of the proposed NERC Rules of Procedure, Section 7.0, provides NERC the option to remand the request to the Regional Entity with the mandate to process the exception if it finds the Regional Entity erred in rejecting or disapproving the exception request. On the other side of this equation, one could make an argument that the Regional Entity has no basis for what constitutes an acceptable submittal. Commenters point out that the explicit types of studies to be provided and how to interpret the information aren't shown in the request process. The SDT again points to the variations that will abound in the requests as negating any hard and fast rules in this regard. However, one is not dealing with amateurs here. This is not something that hasn't been handled before by either party and there is a great deal of professional experience involved on both the submitter's and the Regional Entity's side of this equation. Having viewed the request details, the SDT believes that both sides can quickly arrive at a resolution as to what information needs to be supplied for the submittal to travel upward to the ERO Panel for adjudication.</p> <p>Now, the commenters could point to lack of direction being supplied to the ERO Panel as to specific guidelines for them to follow in making their decision. The SDT re-iterates the problem with providing such hard and fast rules. There are just too many variables</p>

Voter	Entity	Segment	Vote	Comment
				<p>to take into account. Providing concrete guidelines is going to tie the hands of the ERO Panel and inevitably result in bad decisions being made. The SDT also refers the commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.1 where the basic premise on evaluating an exception request must be based on whether the Elements are necessary for the reliable operation of the interconnected transmission system. Further, reliable operation is defined in the Rules of Procedure as operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber security incident, or unanticipated failure of system elements. The SDT firmly believes that the technical prowess of the ERO Panel, the visibility of the process, and the experience gained by having this same panel review multiple requests will result in an equitable, transparent, and consistent approach to the problem. The SDT would also point out that there are options for a submitting entity to pursue that are outlined in the proposed ERO Rules of Procedure changes if they feel that an improper decision has been made on their submittal.</p> <p>Some commenters have asked whether a single ‘yes’ or ‘no’ response to an item on the exception request form will mandate a negative response to the request. To that item, the SDT refers commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.2 of the proposed Rules of Procedure that states “No single piece of evidence provided as part of an Exception Request or response to a question will be solely dispositive in the determination of whether an Exception Request shall be approved or disapproved.”</p> <p>The SDT would like to point out several changes made to the specific items in the form that were made in response to industry comments. The SDT believes that these clarifications will make the process tighter and easier to follow and improve the quality of the submittals.</p> <p>Finally, the SDT would point to the draft SAR for Phase II of this project that calls for a review of the process after 12 months of experience. The SDT believes that this time period will allow industry to see if the process is working correctly and to suggest changes to the process based on actual real-world experience and not just on suppositions of what may occur in the future. Given the complexity of the technical aspects of this problem and the filing deadline that the SDT is working under for Phase I of this project, the SDT believes that it has developed a fair and equitable method of approaching this difficult problem. The SDT asks the commenter to consider all of these facts in making your decision and casting your ballot and hopes that these changes will result in a favorable outcome.</p>

Voter	Entity	Segment	Vote	Comment
Steven Grega	Public Utility District No. 1 of Lewis County	5	Negative	The bright line definition makes the BES too inclusive. Many smaller facilities are caught in the definition that are NOT BES facilities. Would suggest only the major transmission cranking paths, in our area, as defined by WECC, should be included. Why subject so many to these regulation when there is no or little return on reliability to the system. We worry about compliance not reliability. In our case, our small public utility has a run-of-river 70MW hydro (29MWave), non-dispatchable, similar to wind. We made the mistake of connection to BPA's 230kV system rather than our 69kV system. Our portion of the 230kV is uncontrolled by a SCADA system. In our utility, we rely on phone calls for all outage reporting. Since the 230kV line our feeds our utility substation and we have an alternative 69kV connection, many time it is not a concern if the 230kV line is out. The definition of the BES should be limited to truly only the major transmission paths and major generation plants. I beleive it is good utility practce to make sure right of ways are clear and relays are tested, but a number of Standards go way too far with little or no benefit to the system, especially for smaller utilities. I think it is time that we step back and evaluate what is truly important in making the BES more reliable. Limiting the BES definition would be a good start.
<p><b>Response:</b> The bright-line definition is a continent-wide definition. In these instances, there will always be one off situations where the bright-line might not apply. With the changes to the ERO Rules of Procedure for exception requests, an entity will have the right to request exception from the definition even if the application of the bright-line would have brought them into the fold.</p>				
Dennis Kimm	MidAmerican Energy Co.	6	Negative	The BES definition needs additional specific inclusion or exclusion provisions that clearly exclude variable resource generation collector circuits rated below 100 kV and generators less than 20 MVA connected to those collector circuits in accordance with the registration criteria.
<p><b>Response:</b> Inclusion I4 denotes an aggregate threshold. This is clear from the requirement inclusion threshold of “aggregate capacity greater than 75 MVA (gross aggregate nameplate rating).”</p>				
Steven J Hulet	Salt River Project	6	Negative	The Blackstart “Cranking Path” has been deleted from Inclusion 3 of the BES definition. However, NERC standards EOP-005 and CIP-002, R1.2.4 require documenting the Cranking Path. In addition, CIP-002-4 identifies the Cranking Path as a Critical Asset in Attachment 1. Compliance to the NERC Standards needs to be an exact science whenever possible. SRP does not argue the

Voter	Entity	Segment	Vote	Comment
				inclusion or exclusion of Cranking Path. However, if it is excluded, guidance must be provided on whether or not a Cranking Path is subject to the previously mentioned Standards.
<b>Response:</b> Cranking Paths are subject to any standard in which they are specifically spelled out.				
Donald Nelson	Commonwealth of Massachusetts Department of Public Utilities	9	Negative	<p>Please refer to our detailed comments filed today. As described further in our comments, the MA DPU is primarily concerned with the substance of the definition and the process for developing this standard as follows: 1) Phased Approach. While well-intentioned, separating the BES definition project into two separate phases is problematic from both a procedural and substantive perspective. While we recognize that the filing due date is rapidly approaching, the BES definition cannot be considered in a vacuum, divorced from the concerns raised by a number of parties in response to past postings of the BES definition. The issues NERC has identified for consideration during the proposed "Phase 2" are inseparable from the development of the BES definition (e.g., generation thresholds, technical justification for the 100 kV threshold) and should be squarely addressed before a definition is adopted and ratepayers incur costs related to compliance with mandates that may or may not be revised through the second phase of the project. The importance of considering concerns before adopting a definition is heightened by the proposed two-year implementation requirement. This short implementation period almost guarantees that entities will commit resources shortly after adoption of the definition to ensure compliance within the mandated period. In other words, ratepayers will bear costs related to compliance irrespective of any change resulting from the Phase 2 process or the exception process. Expediency, while understandable given the filing deadline, must be balanced against the risk that a multi-phased approach could lead to significant consumer costs without attendant meaningful reliability benefits.</p> <p>2) Cost-Benefit Analysis. A cost impact analysis should be performed as part of developing any reliability standard. However, the development of the BES definition has failed to consider the cost impacts of the definition (and its inclusions and exclusions) and has not weighed these impacts against identified</p>

Voter	Entity	Segment	Vote	Comment
				<p>benefits that the definition would achieve. The MA DPU supported the May 21, 2011 comments from the New England States Committee on Electricity (“NESCOE”) on the last posting of the BES definition. In these comments, NESCOE stated that “any new costs a revised definition imposes - which fall ultimately on consumers - should provide meaningful reliability benefits.” A cost-benefit analysis should be integral to the development of a BES definition and, indeed, any reliability standard. This analysis should include a probabilistic risk assessment examining the likelihood of an event and the costs and risks resulting from such event, which should be weighed against the costs of complying with the proposed reliability measures.</p> <p>3) Technical Justification. In addition to performing a cost-benefit analysis, a technical basis must be provided to justify a proposed reliability standard. However, the proposed BES definition does not provide a technical justification for the 100 kV threshold, the threshold for generation resources, or other elements of the definition. As stated above, while well-intentioned and understandable, deferring this technical justification to a later and separate phase of the project is a flawed and potentially costly approach. Providing a technical justification for a reliability standard is a core function of standards development and should be addressed at the forefront of the process rather than relegated to a separate phase largely undertaken after a standard is filed.</p>
<p><b>Response:</b> 1. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II. Since the revised definition relies heavily on the status quo of the current definition, the SDT does not anticipate that many entities will be burdened with additional costs.</p> <p>2. The responsibilities assigned to the SDT included the revision of the definition of BES contained in the NERC Glossary of Terms to improve clarity, to reduce ambiguity, and to establish consistency across all Regions in distinguishing between BES and non-BES Elements. The SDT’s efforts are directed at fulfilling their responsibilities and developing a definition that addresses the Commission’s concerns as expressed in the directives contained in Orders No. 743 &amp; 743-A. To accomplish these goals, the SDT has pursued a definition that remains as consistent as possible with the existing definition, while not significantly expanding or contracting the current scope of the BES or driving registration or de-registration. With this in mind, the SDT acknowledges that the</p>				

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<p>current BES definition has varying degrees of Regional application and has resulted in different conclusions on what is currently considered to be part of the BES. This inconsistency in the application and subsequent results were also identified by the Commission in Orders No. 743 &amp; 743-A as a significant concern. The SDT acknowledges that by developing a bright-line definition coupled with the inconsistency in application of the current definition there is a potential for varying degrees of impact on Regions. Without an approved BES definition any assumptions utilized in a cost benefit analysis would be purely speculative and the results would have little meaning in regards to potential improvements in the reliable operation of the interconnected transmission grid on a continent-wide basis. Therefore, the SDT believes the best opportunity to address cost concerns will be through the development of Regional transition plans once the definition has been approved by the Commission.</p> <p>3. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II. Technical justifications for all variables involved in the definition will be done in Phase II.</p>				
Diane J Barney	National Association of Regulatory Utility Commissioners	9	Negative	There is a lack of clarity as to how the information is to be used and by what weight in the exception process.
<p><b>Response:</b> The SDT understands the concerns raised by the commenters in not receiving hard and fast guidance on this issue. The SDT would like nothing better than to be able to provide a simple continent-wide resolution to this matter. However, after many hours of discussion and an initial attempt at doing so, it has become obvious to the SDT that the simple answer that so many desire is not achievable. If the SDT could have come up with the simple answer, it would have been supplied within the bright-line. The SDT would also like to point out to the commenters that it directly solicited assistance in this matter in the first posting of the criteria and received very little in the form of substantive comments.</p> <p>There are so many individual variables that will apply to specific cases that there is no way to cover everything up front. There are always going to be extenuating circumstances that will influence decisions on individual cases. One could take this statement to say that the regional discretion hasn't been removed from the process as dictated in the Order. However, the SDT disagrees with this position. The exception request form has to be taken in concert with the changes to the ERO Rules of Procedure and looked at</p>				

Voter	Entity	Segment	Vote	Comment
<p>as a single package. When one looks at the rules being formulated for the exception process, it becomes clear that the role of the Regional Entity has been drastically reduced in the proposed revision. The role of the Regional Entity is now one of reviewing the submittal for completion and making a recommendation to the ERO Panel, not to make the final determination. The Regional Entity plays no role in actually approving or rejecting the submittal. It simply acts as an intermediary. One can counter that this places the Regional Entity in a position to effectively block a submittal by being arbitrary as to what information needs to be supplied. In addition, the SDT believes that the visibility of the process would belie such an action by the Regional Entity and also believes that one has to have faith in the integrity of the Regional Entity in such a process. Moreover, Appendix 5C of the proposed NERC Rules of Procedure, Sections 5.1.5, 5.3, and 5.2.4, provide an added level of protection requiring an independent Technical Review Panel assessment where a Regional Entity decides to reject or disapprove an exception request. This panel's findings become part of the exception request record submitted to NERC. Appendix 5C of the proposed NERC Rules of Procedure, Section 7.0, provides NERC the option to remand the request to the Regional Entity with the mandate to process the exception if it finds the Regional Entity erred in rejecting or disapproving the exception request. On the other side of this equation, one could make an argument that the Regional Entity has no basis for what constitutes an acceptable submittal. Commenters point out that the explicit types of studies to be provided and how to interpret the information aren't shown in the request process. The SDT again points to the variations that will abound in the requests as negating any hard and fast rules in this regard. However, one is not dealing with amateurs here. This is not something that hasn't been handled before by either party and there is a great deal of professional experience involved on both the submitter's and the Regional Entity's side of this equation. Having viewed the request details, the SDT believes that both sides can quickly arrive at a resolution as to what information needs to be supplied for the submittal to travel upward to the ERO Panel for adjudication.</p> <p>Now, the commenters could point to lack of direction being supplied to the ERO Panel as to specific guidelines for them to follow in making their decision. The SDT re-iterates the problem with providing such hard and fast rules. There are just too many variables to take into account. Providing concrete guidelines is going to tie the hands of the ERO Panel and inevitably result in bad decisions being made. The SDT also refers the commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.1 where the basic premise on evaluating an exception request must be based on whether the Elements are necessary for the reliable operation of the interconnected transmission system. Further, reliable operation is defined in the Rules of Procedure as operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber</p>				

Voter	Entity	Segment	Vote	Comment
<p>security incident, or unanticipated failure of system elements. The SDT firmly believes that the technical prowess of the ERO Panel, the visibility of the process, and the experience gained by having this same panel review multiple requests will result in an equitable, transparent, and consistent approach to the problem. The SDT would also point out that there are options for a submitting entity to pursue that are outlined in the proposed ERO Rules of Procedure changes if they feel that an improper decision has been made on their submittal.</p> <p>Some commenters have asked whether a single ‘yes’ or ‘no’ response to an item on the exception request form will mandate a negative response to the request. To that item, the SDT refers commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.2 of the proposed Rules of Procedure that states “No single piece of evidence provided as part of an Exception Request or response to a question will be solely dispositive in the determination of whether an Exception Request shall be approved or disapproved.”</p> <p>The SDT would like to point out several changes made to the specific items in the form that were made in response to industry comments. The SDT believes that these clarifications will make the process tighter and easier to follow and improve the quality of the submittals.</p> <p>Finally, the SDT would point to the draft SAR for Phase II of this project that calls for a review of the process after 12 months of experience. The SDT believes that this time period will allow industry to see if the process is working correctly and to suggest changes to the process based on actual real-world experience and not just on suppositions of what may occur in the future. Given the complexity of the technical aspects of this problem and the filing deadline that the SDT is working under for Phase I of this project, the SDT believes that it has developed a fair and equitable method of approaching this difficult problem. The SDT asks the commenter to consider all of these facts in making your decision and casting your ballot and hopes that these changes will result in a favorable outcome.</p>				
Thomas Dvorsky	New York State Department of Public Service	9	Negative	The currently proposed definition of the BES is based neither on a technical analysis nor on a cost impact study.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II. Technical justifications for all variables involved in the definition will be done in Phase II.</p>				

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<p>The responsibilities assigned to the SDT included the revision of the definition of BES contained in the NERC Glossary of Terms to improve clarity, to reduce ambiguity, and to establish consistency across all Regions in distinguishing between BES and non-BES Elements. The SDT’s efforts are directed at fulfilling their responsibilities and developing a definition that addresses the Commission’s concerns as expressed in the directives contained in Orders No. 743 &amp; 743-A. To accomplish these goals, the SDT has pursued a definition that remains as consistent as possible with the existing definition, while not significantly expanding or contracting the current scope of the BES or driving registration or de-registration. With this in mind, the SDT acknowledges that the current BES definition has varying degrees of Regional application and has resulted in different conclusions on what is currently considered to be part of the BES. This inconsistency in the application and subsequent results were also identified by the Commission in Orders No. 743 &amp; 743-A as a significant concern. The SDT acknowledges that by developing a bright-line definition coupled with the inconsistency in application of the current definition there is a potential for varying degrees of impact on Regions. Without an approved BES definition any assumptions utilized in a cost benefit analysis would be purely speculative and the results would have little meaning in regards to potential improvements in the reliable operation of the interconnected transmission grid on a continent-wide basis. Therefore, the SDT believes that best opportunity to address cost concerns will be through the development of Regional transition plans once the definition has been approved by the Commission.</p>				
Larry Nordell	Montana Consumer Counsel	8	Abstain	The BES definition must be cognizant of costs and benefits. At the very least it needs to have an exclusion for elements whose failure would have no consequential impacts on the bulk system, and an exclusion for elements for which the costs inclusion are clearly in excess of the benefits of inclusion.
<p><b>Response:</b> The responsibilities assigned to the SDT included the revision of the definition of BES contained in the NERC Glossary of Terms to improve clarity, to reduce ambiguity, and to establish consistency across all Regions in distinguishing between BES and non-BES Elements. The SDT’s efforts are directed at fulfilling their responsibilities and developing a definition that addresses the Commission’s concerns as expressed in the directives contained in Orders No. 743 &amp; 743-A. To accomplish these goals, the SDT has pursued a definition that remains as consistent as possible with the existing definition, while not significantly expanding or contracting the current scope of the BES or driving registration or de-registration. With this in mind, the SDT acknowledges that the current BES definition has varying degrees of Regional application and has resulted in different conclusions on what is currently considered to be part of the BES. This inconsistency in the application and subsequent results were also identified by the Commission in Orders No. 743 &amp; 743-A as a significant concern. The SDT acknowledges that by developing a bright-line definition</p>				

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<p>coupled with the inconsistency in application of the current definition there is a potential for varying degrees of impact on Regions. Without an approved BES definition any assumptions utilized in a cost benefit analysis would be purely speculative and the results would have little meaning in regards to potential improvements in the reliable operation of the interconnected transmission grid on a continent-wide basis. Therefore, the SDT believes that best opportunity to address cost concerns will be through the development of Regional transition plans once the definition has been approved by the Commission.</p>				
John D Varnell	Tenaska Power Services Co.	6	Abstain	Which part of this definition has the highest priority inclusions or exclusions.
<p><b>Response:</b> The application of the draft ‘bright-line’ BES definition is a three (3) step process that when appropriately applied will identify the vast majority of BES Elements in a consistent manner that can be applied on a continent-wide basis.</p> <p>Initially, the BES ‘core’ definition is used to establish the bright-line of 100 kV, which is the overall demarcation point between BES and non-BES Elements. Additionally, the ‘core’ definition identifies the Real Power and Reactive Power resources connected at 100 kV or higher as included in the BES. To fully appreciate the scope of the ‘core’ definition an understanding of the term Element is needed. Element is defined in the NERC Glossary of Terms as:</p> <p>“Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components. “</p> <p>Element is basically any electrical device that is associated with the transmission or the generation (generating resources) of electric energy.</p> <p>Step two (2) provides additional clarification for the purposes of identifying specific Elements that are included through the application of the ‘core’ definition. The Inclusions address transmission Elements and Real Power and Reactive Power resources with specific criteria to provide for a consistent determination of whether an Element is classified as BES or non-BES.</p> <p>Step three (3) is to evaluate specific situations for potential exclusion from the BES (classification as non-BES Elements). The exclusion language is written to specifically identify Elements or groups of Elements for potential exclusion from the BES.</p>				

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<p>Exclusion E1 provides for the exclusion of ‘transmission Elements’ from radial systems that meet the specific criteria identified in the exclusion language. This does not include the exclusion of Real Power and Reactive Power resources captured by Inclusions 12 – 15. The exclusion (E1) only speaks to the transmission component of the radial system. Similarly, Exclusion E3 (local networks) should be applied in the same manner. Therefore, the only inclusion that Exclusions E1 and E3 supersede is Inclusion I1.</p> <p>Exclusion E2 provides for the exclusion of the Real Power resources that reside behind the retail meter (on the customer’s side) and supersedes inclusion I2.</p> <p>Exclusion E4 provides for the exclusion of retail customer owned and operated Reactive Power devices and supersedes Inclusion I5.</p> <p>In the event that the BES definition incorrectly designates an Element as BES that is not necessary for the reliable operation of the interconnected transmission network or an Element as non-BES that is necessary for the reliable operation of the interconnected transmission network, the Rules of Procedure exception process may be utilized on a case-by-case basis to either include or exclude an Element.</p>				
William M Chamberlain	California Energy Commission	9	Affirmative	<p>While we are voting in favor of this definition as an improvement over the current status quo, we agree with WECC that additional improvements are necessary as set forth below. For Inclusion 3 we agree that Blackstart units should be considered vital to the overall operation of the BES, and therefore included in the definition of the BES. However, we do not agree with the deletion of the cranking path from Inclusion 3. The cranking path should be included in the definition since NERC standards EOP-005 and CIP-002, R1.2.4 require documenting the cranking path and the revised CIP-002-4 identifies the cranking path as a critical asset in Attachment 1. To be able to count on a Blackstart unit to perform as designed in the Blackstart Restoration Plan, it must be ensured that the cranking path is available.</p> <p>We believe that additional clarity is needed in the wording of Inclusion 4. It is our understanding, for example, that Inclusion 4 is not intended to include each individual wind turbine generating unit in a wind farm as a BES element, but</p>

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				<p>rather to include the point at which the aggregation becomes large enough to meet the aggregate capacity threshold of 75 MVA. However, the response to comments from the last comment posting and the current wording of Inclusion 4 do not provide sufficient clarity to answer this question. We believe that the wording of Inclusion 4 could be modified to add clarity on this topic.</p> <p>We believe that Inclusion 5 should be modified to identify some minimum Reactive Power threshold for static or dynamic devices similar to that identified for generating sources in Inclusion 2. As worded a 1 MVA device supplying or absorbing Reactive Power that is connected at 100 kV or higher would be included in the BES. We believe that Exclusion 2 should be modified to include a size threshold for individual generating units, similar to that identified in Inclusion 2.</p> <p>As currently worded Exclusion 2 places the same threshold (75 MVA) on a single generating unit as is placed on multiple generating units.</p>
<p><b>Response:</b> Cranking Paths identified in a Transmission Operator’s restoration plans are often composed of distribution system Elements. The Transmission Operator’s restoration plans identify a number of possible system restoration scenarios to address the uncertainty of the actual requirements needed to address a particular restoration event including Cranking Paths. Therefore, the SDT maintains that Cranking Paths are not required to be included in the BES definition as they are essentially a moving target and could include distribution Elements. The Cranking Paths issue will be discussed anew in Phase II of this project. No change made. Inclusion I4 denotes an aggregate threshold. This is clear from the requirement inclusion threshold of “aggregate capacity greater than 75 MVA (gross aggregate nameplate rating).”</p> <p>The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction</p>				

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<p>with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>The threshold levels of generators and the relationship between the ERO Statement of Compliance Registry Criteria and the BES definition will be considered in the Phase 2 review. However, the SDT believes that a value was needed for Phase I and decided to proceed with the single 75 MVA threshold. No change made.</p>				
Claston Augustus Sunanon	Orlando Utilities Commission	6	Affirmative	Orlando Utilities Commission supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date.
<p><b>Response:</b> The exceptions process and the definition are being worked on in parallel and will be filed as one document. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II.</p>				
Brenda Powell	Constellation Energy Commodities Group	6	Affirmative	While we support the proposed definition to satisfy the FERC Order, we also support continued work on the threshold questions slated for "Phase II", in particular the refinement of the generation thresholds.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. Thresholds will be analyzed at that time.</p>				
Michelle R D'Antuono	Occidental Chemical	5	Affirmative	1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments: However, one of the FERC directives in Order 743 charged NERC with delineating the difference between transmission and distribution. The Inclusions and Exclusions are a step in that direction, but this subject will need more consideration in Phase II.

Voter	Entity	Segment	Vote	Comment
				<p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments:</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. No: X Comments: Since an aggregate of 75 MVA is allowed at a single site, there is no basis for maintaining the 20 MVA for a single generator. The proposed MOD-026 assigns thresholds by region that are much higher than 20 MVA for modeling purposes. Since modeling generally would require more granularity than what is necessary for the reliable operation of the interconnected transmission system (BES), the SDT might want to review the threshold basis for NERC Project 2007-09 (Generator Verification). It is understood that the threshold will be reconsidered in Phase II of the BES Definition Project; however, a modest change from 20 to 75 MVA seems appropriate in the interim period justified by the current 75f MVA aggregate per site. For clarity purposes the following should be added at the end "unless excluded under Exclusion E2".</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments:</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments: To distinguish this Inclusion from Inclusion I2, the SDT might want to clarify that the collection system (usually at voltage below 100</p>

Voter	Entity	Segment	Vote	Comment
				<p>KV anyway) is not part of the BES-just the resources and any transformers included by I1, if this is indeed the intent of this Inclusion.</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments:</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments: A much needed change from the first posting, as this will maintain the status quo referred to in the introduction text.</p> <p>8. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments:</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments: This Exclusion and Exclusion E1 aid in the delineation of distribution versus transmission.</p> <p>10. The SDT has added specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E4 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X Comments: This is a needed exception to Inclusion I5 as these reactive power resources are used by retail customers for power factor correction at their own facilities in order avoid imposed power factor penalties.</p> <p>11. Are there any other concerns with this definition that haven't been covered in</p>

Voter	Entity	Segment	Vote	Comment
				<p>previous questions and comments remembering that the exception criteria are posted separately for comment? Yes: X Comments: It might be worthwhile to explain the relationship (timeline) between the BES Definition implementation plan and the compliance implementation plan proposed in the BES RoP team's new Appendix 5C for the NERC Rules of Procedure.</p>
<p><b>Response:</b> 1. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. The first step in Phase II will be the posting of the Phase II draft SAR for comment. At that time, you will have the opportunity to submit comments for the inclusion of items and issues to be considered by the SDT in Phase II.</p> <p>2. Thank you for your support.</p> <p>3. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. Correlation to MOD standards would be included in Phase II.</p> <p>4. Thank you for your support.</p> <p>5. The essential distinction between Inclusions I2 and I4 is that Inclusion I2 may not include generating resources that use lower voltage collection systems while Inclusion I4 is specifically designed to accomplish this purpose. Inclusion I4 speaks towards the inclusion of the resources themselves, not the transmission Element(s) of the collector systems operated below 100 kV or not included under Inclusion I2.</p> <p>6. – 10. Thank you for your support.</p> <p>11. For a newly identified Element(s) under the revised BES definition, the time period to be in full compliance with all applicable Reliability Standards is 24 months from the effective date of the definition. If the entity wishes to file for an exception of a newly</p>				

Voter	Entity	Segment	Vote	Comment
<p>identified Element(s) under the revised BES definition through the Rules of Procedure Exception Process, the entity will have 12 months from the effective date of the revised BES definition in which to file such a request. If the exception request is rejected or disapproved and the classification of the Element(s) remains as a BES Element, the Regional Entity and the owner of such a BES Element(s) shall agree to an Implementation Plan for full compliance obligations, which will establish an implementation date no earlier than the date established by the definition Implementation Plan (24 months from the effective date of the definition).</p>				
Gary Ofner	North Carolina Electric Membership Corp.	1	Affirmative	<p>In general, we support the proposed definition of the BES. However, we have identified a few concerns that warrant the SDT's consideration. We'd prefer to see the language from the ERO Statement of Compliance Registry Criteria repeated within the BES Definition itself instead of referencing an outside document. As it stands right now, the Compliance Registry Criteria needs to stay intact for Phase 1 of this project. That makes the Compliance Registry Criteria reliant on the BES Definition and vice versa.</p> <p>We understand that the Statement of Compliance Registry Criteria may be reviewed/revised at the same time Phase 2 of this project is being developed, therefore we agree with Inclusion 12 of this draft.</p> <p>Blackstart Resources can actually be on the distribution system. There is still the question of whether the distribution system would then be subjected to the enforceable standards. If so, there would most likely be a significant cost increase associated with tracking compliance for these distribution systems without a commensurate increase in reliability since Blackstart Resources are rarely used. This could very well cause entities to un-designate Blackstart Resources on distribution systems to avoid these distribution systems from becoming part of the BES. The same rationale that was used for eliminating cranking paths could also be applied to Blackstart Resources.</p> <p>A flowgate should not be used to limit applicability of E3. First, there is no definition for what constitutes a permanent flowgate. Second, flowgates are often created for a myriad of reasons that have nothing to do with them being necessary to operate the BES. While section c) in E3 attempts to limit the applicability to permanent flowgates, there is no definition for what constitutes a permanent flowgate particularly since no flowgate is truly permanent. The NERC Glossary of Terms definition of flowgate includes flowgates in the IDC. This is a</p>

Voter	Entity	Segment	Vote	Comment
				<p>problem because flowgates are included in the IDC for many reasons not just because reliability issues are identified. Flowgates could be included to simply study the impact of schedules on a particular interface as an example. It does not mean the interface is critical. As an example, it could be used to generate evidence that there are no transactional impacts to support exclusion from the BES. Furthermore, the list of flowgates in the IDC is dynamic. The master list of IDC flowgates is updated monthly and IDC users can add temporary flowgates at anytime. While the "permanent" adjective applied to flowgates probably limits the applicability from the "temporary" flowgates, it is not clear which of the monthly flowgates would be included from the IDC since they might be added one month and removed another. Flowgates are created for many reasons that have nothing to do with them being necessary to operate the BES. First, flowgates are created to manage congestion. The IDC is more of a congestion management tool than a reliability tool. FERC recognized this in Order 693, when they directed NERC to make clear in IRO-006 that the IDC should not be relied upon to relieve IROs that have been violated. Rather, other actions such as re-dispatch must be used in conjunction. Second, flowgates are used as a convenient point to calculate flows to sell transmission service. The characteristics of the flowgate make it a good proxy for estimating how much contractual use has been sold not necessarily how much flow will actually occur. While some flowgates definitely are created for reliability issues such as IROs, many simply are not. The term "non-retail generation" used in Exclusion E1 (item c) and again in E3 (item a) should be clarified (see comments for question 8 below). The Note after item c should also be clarified to indicate that closing a normally open switch doesn't affect this exclusion.</p>
Jeffrey S Brame	North Carolina Electric Membership Corp.	5	Affirmative	<p>In general, we support the proposed definition of the BES. However, we have identified a few concerns that warrant the SDT's consideration. We'd prefer to see the language from the ERO Statement of Compliance Registry Criteria repeated within the BES Definition itself instead of referencing an outside document. As it stands right now, the Compliance Registry Criteria needs to stay intact for Phase I of this project. That makes the Compliance Registry Criteria reliant on the BES Definition and vice versa.</p>

Voter	Entity	Segment	Vote	Comment
				<p>We understand that the Statement of Compliance Registry Criteria may be reviewed/revise at the same time Phase 2 of this project is being developed, therefore we agree with Inclusion 12 of this draft.</p> <p>Blackstart Resources can actually be on the distribution system. There is still the question of whether the distribution system would then be subjected to the enforceable standards. If so, there would most likely be a significant cost increase associated with tracking compliance for these distribution systems without a commensurate increase in reliability since Blackstart Resources are rarely used. This could very well cause entities to un-designate Blackstart Resources on distribution systems to avoid these distribution systems from becoming part of the BES. The same rationale that was used for eliminating cranking paths could also be applied to Blackstart Resources.</p> <p>A flowgate should not be used to limit applicability of E3. First, there is no definition for what constitutes a permanent flowgate. Second, flowgates are often created for a myriad of reasons that have nothing to do with them being necessary to operate the BES. While section c) in E3 attempts to limit the applicability to permanent flowgates, there is no definition for what constitutes a permanent flowgate particularly since no flowgate is truly permanent. The NERC Glossary of Terms definition of flowgate includes flowgates in the IDC. This is a problem because flowgates are included in the IDC for many reasons not just because reliability issues are identified. Flowgates could be included to simply study the impact of schedules on a particular interface as an example. It does not mean the interface is critical. As an example, it could be used to generate evidence that there are no transactional impacts to support exclusion from the BES. Furthermore, the list of flowgates in the IDC is dynamic. The master list of IDC flowgates is updated monthly and IDC users can add temporary flowgates at anytime. While the "permanent" adjective applied to flowgates probably limits the applicability from the "temporary" flowgates, it is not clear which of the monthly flowgates would be included from the IDC since they might be added one month and removed another. Flowgates are created for many reasons that have nothing to do with them being necessary to operate the BES. First, flowgates are created to manage congestion. The IDC is more of a congestion management tool than a</p>

Voter	Entity	Segment	Vote	Comment
				<p>reliability tool. FERC recognized this in Order 693, when they directed NERC to make clear in IRO-006 that the IDC should not be relied upon to relieve IROs that have been violated. Rather, other actions such as re-dispatch must be used in conjunction. Second, flowgates are used as a convenient point to calculate flows to sell transmission service. The characteristics of the flowgate make it a good proxy for estimating how much contractual use has been sold not necessarily how much flow will actually occur. While some flowgates definitely are created for reliability issues such as IROs, many simply are not.</p> <p>The term “non-retail generation” used in Exclusion E1 (item c) and again in E3 (item a) should be clarified (see comments for question 8 below).</p> <p>The Note after item c should also be clarified to indicate that closing a normally open switch doesn't affect this exclusion.</p>
<p><b>Response:</b> The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I.</p> <p>Thank you for your support.</p> <p>The SDT disagrees that Blackstart Resources should not be included in the BES Definition. 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 associated resources of the electric system that can be isolated and then energized to deliver electric power during a restoration event are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s restoration plan. For these reasons, the SDT continues to include Blackstart Resources identified in the Transmission Operator’s restoration plan as BES elements. No change made.</p> <p>The SDT believes that the language in Exclusion E3.c prohibiting “Flowgates” from qualifying for definitional exclusion is appropriate and necessary. As a definitional exclusion characteristic, Exclusion E3.c must follow the principle of being a bright-line and easily identifiable, and as such, the SDT feels that the definition cannot allow some types of Flowgates and disallow others. Flowgates must continue to be a prohibiting characteristic under Exclusion E3, since these facilities are more likely to be used in the transfer</p>				

Voter	Entity	Segment	Vote	Comment
<p>of bulk power than not. An entity who wishes to make a case for exclusion of a unique type of Flowgate facility can do so through the exception process. The SDT believes that the continued qualifier of “permanent” associated with the term “Flowgate” addresses the majority of the concern in this comment. No change made.</p> <p>“Non-retail generation” means that generation which is on the system (supply) side of the retail meter.</p> <p>Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator’s responsibility to indicate how a switch is used in the normal operating environment.</p>				
Paul Cummings	City of Redding	5	Affirmative	An affirmative vote is conditional on NERC's dedication to phase 2 of the Project.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up.</p>				
Pawel Krupa	Seattle City Light	1	Affirmative	<p>Comments: 1. Core Definition: Yes Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p> <p>2. I1 - Transformer inclusions: No Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to multiphase transformers and generator step-up transformers. Recommend the following wording: “All transformers with at least two primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100kV, unless excluded by E1 or E3.”</p> <p>3. I2 - Generation Thresholds: Yes Comments: Recommend removing the</p>

Voter	Entity	Segment	Vote	Comment
				<p>reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion 12 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion.</p> <p>4. 13 - Blackstart Units: Yes Comments: None</p> <p>5. 14 - Dispersed Power: No Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. 15 - Reactive Power devices: No Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion 15 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. E1 - Radial System: Yes Comments: (1) The E1 Reference Note should be re-worded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. (2) Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. (3) Recommend that the potential inclusion in the BES of protective relay systems which reach beyond a load network or ring bus should be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. E2 - Behind-the-Meter-Generation: Yes Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in</p>

Voter	Entity	Segment	Vote	Comment
				<p>Section III.c.4.</p> <p>9. E3 - Local Network: Yes Comments: Defining characteristic b) "Power flows only into the LN" is confusing. For example, is this condition meant as an absolute, that power never under any circumstances flows out? Are exceptions allowed, such as during a switching operation or a catastrophic outage? Does power flow through a local net load sink, as might be determined by superposition of supply sources over time, negate that sink from exclusion as a LN? Recommend additional clarity for this characteristic.</p> <p>10. E4 - Customer Reactive Power devices: No Comments: Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Other concerns: No Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p>
Dana Wheelock	Seattle City Light	3	Affirmative	<p>Comments: 1. Core Definition: Yes Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p> <p>2. I1 - Transformer inclusions: No Comments: The wording of Inclusion I1 is not</p>

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				<p>clear. The term transformers needs to be further defined with respect to multiphase transformers and generator step-up transformers. Recommend the following wording: "All transformers with at least two primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100kV, unless excluded by E1 or E3."</p> <p>3. I2 - Generation Thresholds: Yes Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion.</p> <p>4. I3 - Blackstart Units: Yes Comments: None</p> <p>5. I4 - Dispersed Power: No Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. I5 - Reactive Power devices: No Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. E1 - Radial System: Yes Comments: (1) The E1 Reference Note should be reworded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. (2) Recommend that</p>

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				<p>load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. (3) Recommend that the potential inclusion in the BES of protective relay systems which reach beyond a load network or ring bus should be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. E2 - Behind-the-Meter-Generation: Yes Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. E3 - Local Network: Yes Comments: Defining characteristic b) "Power flows only into the LN" is confusing. For example, is this condition meant as an absolute, that power never under any circumstances flows out? Are exceptions allowed, such as during a switching operation or a catastrophic outage? Does power flow through a local net load sink, as might be determined by superposition of supply sources over time, negate that sink from exclusion as a LN? Recommend additional clarity for this characteristic.</p> <p>10. E4 - Customer Reactive Power devices: No Comments: Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Other concerns: No Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p>
Dennis Sismaet	Seattle City Light	6	Affirmative	<p>Comments: 1. Core Definition: Yes Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the</p>

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				<p>approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p> <p>2. I1 - Transformer inclusions: No Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to multiphase transformers and generator step-up transformers. Recommend the following wording: "All transformers with at least two primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100kV, unless excluded by E1 or E3."</p> <p>3. I2 - Generation Thresholds: Yes Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion.</p> <p>4. I3 - Blackstart Units: Yes Comments: None</p> <p>5. I4 - Dispersed Power: No Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. I5 - Reactive Power devices: No Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive</p>

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				<p>resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. E1 - Radial System: Yes Comments: (1) The E1 Reference Note should be re-worded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. (2) Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. (3) Recommend that the potential inclusion in the BES of protective relay systems which reach beyond a load network or ring bus should be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. E2 - Behind-the-Meter-Generation: Yes Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. E3 - Local Network: Yes Comments: Defining characteristic b) "Power flows only into the LN" is confusing. For example, is this condition meant as an absolute, that power never under any circumstances flows out? Are exceptions allowed, such as during a switching operation or a catastrophic outage? Does power flow through a local net load sink, as might be determined by superposition of supply sources over time, negate that sink from exclusion as a LN? Recommend additional clarity for this characteristic.</p> <p>10. E4 - Customer Reactive Power devices: No Comments: Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Other concerns: No Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p>

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Michael J. Haynes	Seattle City Light	5	Affirmative	<p>1. Core Definition: Yes Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p> <p>2. I1 - Transformer inclusions: No Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to multiphase transformers and generator step-up transformers. Recommend the following wording: "All transformers with at least two primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100kV, unless excluded by E1 or E3."</p> <p>3. I2 - Generation Thresholds: Yes Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion.</p> <p>4. I3 - Blackstart Units: Yes Comments: None</p> <p>5. I4 - Dispersed Power: No Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. I5 - Reactive Power devices: No Comments: Technical studies need to be</p>

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				<p>conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. E1 - Radial System: Yes Comments: (1) The E1 Reference Note should be reworded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. (2) Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. (3) Recommend that the potential inclusion in the BES of protective relay systems which reach beyond a load network or ring bus should be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. E2 - Behind-the-Meter-Generation: Yes Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. E3 - Local Network: Yes Comments: Defining characteristic b) "Power flows only into the LN" is confusing. For example, is this condition meant as an absolute, that power never under any circumstances flows out? Are exceptions allowed, such as during a switching operation or a catastrophic outage? Does power flow through a local net load sink, as might be determined by superposition of supply sources over time, negate that sink from exclusion as a LN? Recommend additional clarity for this characteristic.</p> <p>10. E4 - Customer Reactive Power devices: No Comments: Refer to comments related to reactive resources for Question 6 regarding Inclusion I5.</p> <p>11. Other concerns: No Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis</p>

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				<p>within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p>
Hao Li	Seattle City Light	4	Affirmative	<p>Comments: 1. Core Definition: Yes Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p> <p>2. I1 - Transformer inclusions: No Comments: The wording of Inclusion I1 is not clear. The term transformers needs to be further defined with respect to multiphase transformers and generator step-up transformers. Recommend the following wording: "All transformers with at least two primary and secondary terminals operated at or above 100kV, and generator step-up transformers (GSU) with one terminal operated at or above 100kV, unless excluded by E1 or E3."</p> <p>3. I2 - Generation Thresholds: Yes Comments: Recommend removing the reference to the Statement of Compliance Registry Criteria. The definition should be the governing document and provide the details of what generating resources should be included. The current language induces circular arguments without a true governing document. The definition should drive what appears in the Registry Criteria. Inclusion I2 should be revised to read: "Generating resources with a gross nameplate rating of 20MVA or greater, or generating plant/facility connected at a common bus, with an aggregate nameplate rating of 75MVA or greater and is directly connected to a BES Element." This is consistent with proposed Inclusion.</p>

Voter	Entity	Segment	Vote	Comment
				<p>4. I3 - Blackstart Units: Yes Comments: None</p> <p>5. I4 - Dispersed Power: No Comments: The term "common point" needs clarification with respect to connection to the BES. Recommend the following wording: "connected at a common point through a dedicated step-up transformer with a high-side voltage of 100 KV or above."</p> <p>6. I5 - Reactive Power devices: No Comments: Technical studies need to be conducted to confirm reactive resource impacts on the reliability of the BES. The inclusion of reactive resources is a significant expansion of the current BES definition and therefore requires technical justification for inclusion. Inclusion I5 as written is generally confusing with multiple references to other inclusions and exclusions in the definition. Recommend removing references to reactive resources from Phase 1 until technical justification can be demonstrated (as part of Phase 2).</p> <p>7. E1 - Radial System: Yes Comments: (1) The E1 Reference Note should be re-worded to state "Radial systems shall be assessed with all normally open switching devices in their open positions." The current wording is unclear with respect to the treatment of normally open switching devices. (2) Recommend that load bus tie-breakers be excluded from the BES as these devices apply to the users of the BES. (3) Recommend that the potential inclusion in the BES of protective relay systems which reach beyond a load network or ring bus should be confirmed in Phase 2 pursuant to technical studies.</p> <p>8. E2 - Behind-the-Meter-Generation: Yes Comments: The wording of Exclusion E2 should be consistent with the Statement of Compliance Registry Criteria in Section III.c.4.</p> <p>9. E3 - Local Network: Yes Comments: Defining characteristic b) "Power flows only into the LN" is confusing. For example, is this condition meant as an absolute, that power never under any circumstances flows out? Are exceptions allowed, such as during a switching operation or a catastrophic outage? Does power flow through a local net load sink, as might be determined by superposition of supply sources over time, negate that sink from exclusion as a LN? Recommend additional clarity for this characteristic.</p> <p>10. E4 - Customer Reactive Power devices: No Comments: Refer to comments</p>

Voter	Entity	Segment	Vote	Comment
				<p>related to reactive resources for Question 6 regarding Inclusion 15.</p> <p>11. Other concerns: No Comments: Seattle City Light (SCL) believes that the SDT has made substantial progress towards a clear and workable definition of the BES. We strongly support the approach to defining the Bulk Electric System as proposed here. SCL recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct a technical analysis within the time available. Accordingly, SCL agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold level and other issues. However, it is our opinion that the second draft would benefit from further clarification or modification in a number of respects, as are detailed in our comments.</p>
<p><b>Response:</b> 1. Thank you for your support.</p> <p>2. The SDT believes the existing language is clear and the proposed additional language would be redundant. No change made.</p> <p>3. The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I.</p> <p>4. Thank you for your support.</p> <p>5. The “single point of connection of 100 kV or higher” is where the radial system will begin if it meets the language of Exclusion E1 including parts a, b, or c and does not necessarily include an automatic interrupting device (AID). For example, the start of the radial system may be a hard tap of the transmission line where no automatic interruption device is used. The owner of the transmission line will need to insure the reliability of the transmission line. Another example is the tap point within a ring or breaker and a half bus configuration could also be the beginning of the radial system and the owner of the bus would need to insure the reliability of the substation.</p> <p>6. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the</p>				

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<p>definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>7. Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator’s responsibility to indicate how a switch is used in the normal operating environment. The treatment of protection systems is but one of many items to be analyzed in Phase II.</p> <p>8. The wording of Exclusion E2 is essentially the same as the wording on this topic in the ERO Statement of Registry Criteria which has been in existence for several years and is well understood in the industry. The roles of the Balancing Authority, Generator Owner, and Generator Operator are implied in the ERO Statement of Compliance Registry Criteria and the terms were added to Exclusion E2 as the result of industry requests for clarification.</p> <p>9. Several commenters suggested that the requirement under Exclusion E3.b should apply only during normal operating conditions, in other words, commenters felt that some power flow should be allowed to flow from the candidate local network back into the BES as long as it only occurred under abnormal conditions. To this suggestion, the SDT considered the addition of the phrase “under normal operating conditions”, as a qualifier to Exclusion E3.b, and determined that in order to maintain the intent of a bright-line characteristic in the BES definition such a qualifier could not be accommodated. However, the SDT pointed out that for those circumstances where a candidate for local network is unable to utilize the local network exclusion due to an abnormal situation that caused power to flow out of the network, the network could be a suitable candidate that could apply for exclusion under the Exception Process.</p> <p>10. See response in #6 above.</p> <p>11. Thank you for your support.</p>				
Long T Duong	Snohomish County PUD No. 1	1	Affirmative	The Public Utility District No. 1 of Snohomish County (“SNPD”) believes the SDT continues to make substantial progress towards a clear and workable definition of the Bulk Electric System (“BES”) that markedly improves both the existing definition and the SDT’s previous proposal. SNPD therefore strongly supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and,

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				<p>(2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date.</p> <p>Below are SNPD’s responses to the NERC comment form for the 2nd Draft of Definition of BES (Project 2010-17). SNPD believes the refinements below will clarify the current draft of the BES definition, without changing the current intent.</p> <p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Comments: SNPD strongly supports the following elements of the revised BES definition: (1) Clarification of how lists of Inclusions and Exclusions applies: The revised core definition moves the phrase “Unless modified by the lists shown below” to the beginning of the definition. This change makes clear that the Inclusions and Exclusions apply to all Elements that would otherwise be included in or excluded from the core definition (i.e., “all Transmission Elements operated at 100 kV or higher and Real Time and Reactive Power resources connected at 100 kV or higher”) and eliminates a latent ambiguity in the first draft of the definition, discussed further in our comments on the first draft.</p> <p>(2) The exclusion for Local Distribution Facilities. As the starting point for the BES definition, SNPD supports use of the phrase “all Transmission Elements” and the qualifying sentence: “This does not include facilities used in the local distribution of electric energy.” This language helps ensure that FERC, NERC, and the Regional Entities (“REs”) will act within the jurisdictional constraints Congress placed in Section 215 of the Federal Power Act (“FPA”). In Section 215(a)(1), Congress unequivocally excluded “facilities used in the local distribution of electric energy” from the keystone “bulk-power system” definition. 16 U.S.C. Â§ 824o(a)(1). Including the same language in the definition helps ensure that entities involved in enforcement of reliability standards will act within their statutory limits. In addition, as a practical matter, inclusion of the language will</p>

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				<p>help focus both the industry and responsible agencies on the high-voltage interstate transmission system, where the reliability problems Congress intended to regulate - "instability, uncontrolled separation, [and] cascading failures," 16 U.S.C. Â§ 824o(a)(4) - will originate. At the same time, level-of-service issues arising in local distribution systems will be left to the authority of state and local regulatory agencies and governing bodies, just as Congress intended. 16 U.S.C. Â§ 824o(i)(2) (reserving to state and local authorities enforcement of standards for adequacy of service). For similar reasons, Snohomish believes use of the phrase "Transmission Elements" as the starting point for the base definition is desirable because both "Transmission" and "Elements" are already defined in the NERC Glossary of Terms Used, and the term "Transmission" makes clear that the BES includes only Elements used in Transmission and therefore excludes Elements used in local distribution of electric power.</p> <p>(3) Appropriate Generator Thresholds. In the standards development process, it has become apparent that the thresholds for classifying generators as BES in the current NERC Statement of Compliance Registry Criteria ("SCRC") (20 MVA for individual generators, 75 MVA for multiple generators aggregated at a single site), which predate the adoption of FPA Section 215, were never the product of a careful analysis to determine whether generators of that size are necessary for operation of the interconnected bulk transmission system. Ideally, such an analysis would be conducted as part of the current standards development process. Snohomish recognizes that, given the deadlines imposed by FERC in Order No. 743, it will not be possible for the SDT to conduct such an analysis within the time available. Accordingly, Snohomish agrees with the approach taken by the SDT, which is to propose a Phase II of the standards development process that would address the generator threshold issue and several other technical issues that have arisen during the current process. As long as Phase II proceeds expeditiously, Snohomish is prepared to support the BES definition as proposed by the SDT. While Snohomish strongly supports the overall approach adopted by the SDT and much of the specific language incorporated into the second draft of the BES definition, we believe the second draft would benefit from further clarification or modification in a number of respects, most of which are detailed in</p>

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				<p>our subsequent answers. Our support for the definition is not contingent upon these changes being adopted.</p> <p>Further, we believe a workable Exclusion Process is essential for a BES Definition that will meet the legal requirements of FPA Section 215, especially for systems operating in the Western Interconnection.</p> <p>As detailed in our previous comments, Snohomish believes a 200-kV threshold would be more appropriate for WECC than a 100-kV threshold. In addition, a 200-kV threshold for the West is backed by solid technical analysis conducted by the WECC Bulk Electric System Definition Task Force, and repeated claims that there is no technical analysis to support this view is therefore incorrect. That being said, we raise the issue here to emphasize the importance of the Exclusions for Local Networks and Radial Systems and the Exceptions process. These Exclusions and the Exceptions are essential for a definition that works in the Western Interconnection because the core definition will be over-inclusive in our region. As long as those Exclusions and the Exceptions Process are retained in a form substantially equivalent to those produced by the SDT at this juncture, Snohomish will support the SDT's proposal and will not further pursue its claims regarding the 200-kV threshold.</p> <p>Finally, we suggest that the SDT language address the circumstance when a facility is covered by both an Inclusion and an Exclusion. We note that some of the inclusions already contain language addressing this question. For example, Inclusion 1 indicates that transformers falling within the specified parameters are part of the BES ". . . unless excluded under Exclusions E1 or E3." Where it is not already included, similar language should be included in the other Inclusions and/or Exclusions to explain whether the SDT intends the Inclusions or the Exclusions to predominate in situations where facilities might be covered by both. We suggest clarifying language in our comments to I1 and I4 below. 2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments.</p> <p>Comments: We support the SDT's changes to the first Inclusion because it is</p>

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William T Moojen	Snohomish County PUD No. 1	6	Affirmative	<p>The Public Utility District No. 1 of Snohomish County (“SNPD”) believes the SDT continues to make substantial progress towards a clear and workable definition of the Bulk Electric System (“BES”) that markedly improves both the existing definition and the SDT’s previous proposal. SNPD therefore strongly supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date. Below are SNPD’s responses to the NERC comment form for the 2nd Draft of Definition of BES (Project 2010-17). SNPD believes the refinements below will clarify the current draft of the BES definition, without changing the current intent.</p> <p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Comments: SNPD strongly supports the following elements of the revised BES definition:</p> <p>(1) Clarification of how lists of Inclusions and Exclusions applies: The revised core definition moves the phrase “Unless modified by the lists shown below” to the beginning of the definition. This change makes clear that the Inclusions and Exclusions apply to all Elements that would otherwise be included in or excluded from the core definition (i.e., “all Transmission Elements operated at 100 kV or higher and Real Time and Reactive Power resources connected at 100 kV or higher”) and eliminates a latent ambiguity in the first draft of the definition, discussed further in our comments on the first draft.</p> <p>(2) The exclusion for Local Distribution Facilities. As the starting point for the BES definition, SNPD supports use of the phrase “all Transmission Elements” and the qualifying sentence: “This does not include facilities used in the local distribution</p>

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Sam Nietfeld	Snohomish County PUD No. 1	5	Affirmative	<p>The Public Utility District No. 1 of Snohomish County ("SNPD") believes the SDT continues to make substantial progress towards a clear and workable definition of the Bulk Electric System ("BES") that markedly improves both the existing definition and the SDT's previous proposal. SNPD therefore strongly supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date. Below are SNPD's responses to the NERC comment form for the 2nd Draft of Definition of BES (Project 2010-17). SNPD believes the refinements below will clarify the current draft of the BES definition, without changing the current intent.</p> <p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Comments: SNPD strongly supports the following elements of the revised BES definition:</p> <p>(1) Clarification of how lists of Inclusions and Exclusions applies: The revised core definition moves the phrase "Unless modified by the lists shown below" to the beginning of the definition. This change makes clear that the Inclusions and Exclusions apply to all Elements that would otherwise be included in or excluded</p>

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John D Martinsen	Public Utility District No. 1 of Snohomish County	4	Affirmative	<p>The Public Utility District No. 1 of Snohomish County (“SNPD”) believes the SDT continues to make substantial progress towards a clear and workable definition of the Bulk Electric System (“BES”) that markedly improves both the existing definition and the SDT’s previous proposal. SNPD therefore strongly supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date. Below are SNPD’s responses to the NERC comment form for the 2nd Draft of Definition of BES (Project 2010-17). SNPD believes the refinements below will clarify the current draft of the BES definition, without changing the current intent.</p> <p>1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would</p>

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<p><b>Response:</b> The SDT refers Snohomish to the individual comment responses in the definition comment form as the comments expressed here are identical to the comments submitted by Snohomish on that form.</p>				
Thomas Richards	Fort Pierce Utilities Authority	4	Affirmative	<p>FPUA supports the exclusion of Local Networks from the BES. Such systems are generally not "necessary for operating an interconnected electric transmission network," the standard in Orders 743 and 743-A. However, we have some suggestions to clarify the proposed language for this Exclusion. We have a major concern with the wording in E3 defining a Local Network. The requirement that "Power flows only into the LN" fails to recognize that loop flows are inevitable in a networked system, particularly during a contingency. It just doesn't make sense</p>

Voter	Entity	Segment	Vote	Comment
				<p>that E3 allows flows out of the LN when exporting power that was generated within the LN, yet de minimis loop flows are not. I am suggesting that the “Power flows only into the LN” requirement be replaced with different criteria to allow “minor” inadvertent transfers across the LN. Such a modification would bring E3 in line with the technical justification paper developed for this project. FPUA supports FMPA’s suggested change: “Power flows only into the LN, that is, at each individual connection at 100 kV or higher, the pre-contingency flow of power is from outside the LN into the LN for all hours of the previous 2 years” to help clarify the intent. Two years is suggested because it is the time period set out in the draft exception application form for which an applicant should state whether power flows through an Element to the BES.</p>
<p><b>Response:</b> Several commenters suggested that the requirement under Exclusion E3.b should apply only during normal operating conditions, in other words, commenters felt that some power flow should be allowed to flow from the candidate local network back into the BES as long as it only occurred under abnormal conditions. To this suggestion, the SDT considered the addition of the phrase “under normal operating conditions”, as a qualifier to Exclusion E3.b, and determined that in order to maintain the intent of a bright-line characteristic in the BES definition such a qualifier could not be accommodated. However, the SDT pointed out that for those circumstances where a candidate for local network is unable to utilize the local network exclusion due to an abnormal situation that caused power to flow out of the network, the network could be a suitable candidate that could apply for exclusion under the Exception Process.</p>				
Allen Mosher	American Public Power Association	4	Affirmative	<p>APPA would like to thank the Standard Drafting Team (SDT) for their work on this standard and will continue to support approval of the current draft of the Bulk Electric System (BES) definition to meet the FERC imposed deadline. APPA also fully supports immediate consideration in Phase 2 of this project of the technical issues raised by the drafting team and commenters in response to the current draft definition.</p> <p>The SDT should be applauded for addressing the issue of local distribution facilities by placing the exclusion in the BES definition itself: “This does not include facilities used in the local distribution of electric energy.” It is clearly spelled out in Section 215 that local distribution facilities are not subject to compliance with NERC standards. Including this statement in the definition ensures consistency between NERC’s technical standards and the legal foundation</p>

Voter	Entity	Segment	Vote	Comment
				<p>upon which these standards are based. The current BES definition allows for various interpretations which could allow for excessive compliance documentation on facilities that are not part of the BES. The drafting team has provided sufficient granularity through the specific inclusions and exclusions to provide clear direction to NERC, regional entities and registered entities on the specific subset of electric facilities that are included within (or excluded from) the BES.</p> <p>APPA applauds the SDT for understanding that many utilities have unique system configurations and there is a need to differentiate between networked and radial systems. Allowing the exclusion for radial systems serving only load to have a normally open switch between the BES and such a radial system provides an important distinction. This clarifies the issue that a single radial fed system is the same as a system with multiple feeds with normally open switches between them.</p> <p>The SDT should be commended for identifying and addressing the issue of local networks (LN). Even though these systems are built in a networked configuration, the electric energy delivered is intended only to serve local distribution load. APPA believes that level-of-service/quality-of-service issues arising in local distribution systems must be left to the authority of state and local regulatory agencies and governing bodies. Therefore local networks should be excluded from the BES.</p> <p>APPA is concerned that the 20MVA &amp; 75MVA generation threshold was not addressed in Phase 1 of this project, but fully recognizes the difficulty in timely completing development of the necessary technical studies and consensus development required to include this improvement in Phase 1. For these reasons, APPA supports the current draft BES definition and requests that the SDT move quickly to the phase 2 process to study what generation is necessary for reliable operation of the BES.</p> <p>APPA also requests more specificity on the detailed information required to support BES exceptions processed through the NERC Rules of Procedure drafting process. Additional technical specificity will help ensure consistency between regions and transparency for registered entities on the technical studies and data</p>

Voter	Entity	Segment	Vote	Comment
				required to support exception requests.
<p><b>Response:</b> Thank you for your support.</p> <p>Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up.</p> <p>The SDT understands the concerns raised by the commenters in not receiving hard and fast guidance on this issue. The SDT would like nothing better than to be able to provide a simple continent-wide resolution to this matter. However, after many hours of discussion and an initial attempt at doing so, it has become obvious to the SDT that the simple answer that so many desire is not achievable. If the SDT could have come up with the simple answer, it would have been supplied within the bright-line. The SDT would also like to point out to the commenters that it directly solicited assistance in this matter in the first posting of the criteria and received very little in the form of substantive comments.</p> <p>There are so many individual variables that will apply to specific cases that there is no way to cover everything up front. There are always going to be extenuating circumstances that will influence decisions on individual cases. One could take this statement to say that the regional discretion hasn't been removed from the process as dictated in the Order. However, the SDT disagrees with this position. The exception request form has to be taken in concert with the changes to the ERO Rules of Procedure and looked at as a single package. When one looks at the rules being formulated for the exception process, it becomes clear that the role of the Regional Entity has been drastically reduced in the proposed revision. The role of the Regional Entity is now one of reviewing the submittal for completion and making a recommendation to the ERO Panel, not to make the final determination. The Regional Entity plays no role in actually approving or rejecting the submittal. It simply acts as an intermediary. One can counter that this places the Regional Entity in a position to effectively block a submittal by being arbitrary as to what information needs to be supplied. In addition, the SDT believes that the visibility of the process would belie such an action by the Regional Entity and also believes that one has to have faith in the integrity of the Regional Entity in such a process. Moreover, Appendix 5C of the proposed NERC Rules of Procedure, Sections 5.1.5, 5.3, and 5.2.4, provide an added level of protection requiring an independent Technical Review Panel assessment where a Regional Entity decides to reject or disapprove an exception request. This panel's findings become part of the exception request record submitted to NERC. Appendix 5C of the proposed NERC Rules of Procedure, Section 7.0, provides NERC the option to remand the request to the Regional Entity with the mandate to process the exception if it finds the Regional Entity erred in rejecting or disapproving the exception request. On the other side of this equation, one could make an argument that the Regional Entity has no basis for what constitutes an acceptable submittal. Commenters point out that</p>				

Voter	Entity	Segment	Vote	Comment
				<p>the explicit types of studies to be provided and how to interpret the information aren't shown in the request process. The SDT again points to the variations that will abound in the requests as negating any hard and fast rules in this regard. However, one is not dealing with amateurs here. This is not something that hasn't been handled before by either party and there is a great deal of professional experience involved on both the submitter's and the Regional Entity's side of this equation. Having viewed the request details, the SDT believes that both sides can quickly arrive at a resolution as to what information needs to be supplied for the submittal to travel upward to the ERO Panel for adjudication.</p> <p>Now, the commenters could point to lack of direction being supplied to the ERO Panel as to specific guidelines for them to follow in making their decision. The SDT re-iterates the problem with providing such hard and fast rules. There are just too many variables to take into account. Providing concrete guidelines is going to tie the hands of the ERO Panel and inevitably result in bad decisions being made. The SDT also refers the commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.1 where the basic premise on evaluating an exception request must be based on whether the Elements are necessary for the reliable operation of the interconnected transmission system. Further, reliable operation is defined in the Rules of Procedure as operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber security incident, or unanticipated failure of system elements. The SDT firmly believes that the technical prowess of the ERO Panel, the visibility of the process, and the experience gained by having this same panel review multiple requests will result in an equitable, transparent, and consistent approach to the problem. The SDT would also point out that there are options for a submitting entity to pursue that are outlined in the proposed ERO Rules of Procedure changes if they feel that an improper decision has been made on their submittal.</p> <p>Some commenters have asked whether a single 'yes' or 'no' response to an item on the exception request form will mandate a negative response to the request. To that item, the SDT refers commenters to Appendix 5C of the proposed NERC Rules of Procedure, Section 3.2 of the proposed Rules of Procedure that states "No single piece of evidence provided as part of an Exception Request or response to a question will be solely dispositive in the determination of whether an Exception Request shall be approved or disapproved."</p> <p>The SDT would like to point out several changes made to the specific items in the form that were made in response to industry comments. The SDT believes that these clarifications will make the process tighter and easier to follow and improve the quality of the submittals.</p>

Voter	Entity	Segment	Vote	Comment
<p>Finally, the SDT would point to the draft SAR for Phase II of this project that calls for a review of the process after 12 months of experience. The SDT believes that this time period will allow industry to see if the process is working correctly and to suggest changes to the process based on actual real-world experience and not just on suppositions of what may occur in the future. Given the complexity of the technical aspects of this problem and the filing deadline that the SDT is working under for Phase I of this project, the SDT believes that it has developed a fair and equitable method of approaching this difficult problem. The SDT asks the commenter to consider all of these facts in making your decision and casting your ballot and hopes that these changes will result in a favorable outcome.</p>				
Greg Lange	Public Utility District No. 2 of Grant County	3	Affirmative	<p>The Public Utility District No. 1 of Grant County (“GCPD”) believes the SDT continues to make substantial progress towards a clear and workable definition of the Bulk Electric System (“BES”) that markedly improves both the existing definition and the SDT’s previous proposal. GCPD therefore strongly supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date.</p> <p>GCPD strongly supports the addition of the language regarding local distribution facilities, as it matches congressional intent to leave the regulation of these facilities to state and local authorities.</p> <p>We also support the SDT’s proposal to develop detailed guidance concerning the point of demarcation between BES and non-BES elements in the Phase II SAR. In this regard, we note that, while Inclusion 1 at least implicitly suggests that the dividing line between BES and non-BES Elements should be at the transformer where transmission-level voltages are stepped down to distribution-level voltages, we believe further clarification of this point of demarcation between the BES and non-BES Elements is necessary. Many different configurations of transformers and other equipment that may lie at the juncture between the BES and non-BES systems. If the point of demarcation is designated at the transformer without further elaboration, many entities that own equipment on the high side of a transformer will be swept into the BES, and thereby exposed to inappropriately</p>

Voter	Entity	Segment	Vote	Comment
				<p>stringent regulations and undue costs. For example, distribution-only utilities commonly own the switches, bus and transformer protection devices on the high side of transformers where they take delivery from their transmission provider. Ownership of these protective devices and high-voltage bus on the high side of the transformer should not cause these entities to be classified as BES owners. As the Phase II process moves forward, we recommend that SDT consider the extensive work performed on the point of demarcation question by the WECC BESDTF.</p> <p>GCPD does not support The inclusion of Reactive Power devices because Reactive Power devices produce power, they are “power producing resources” and we therefore believe Inclusion 5 is duplicative of Inclusion 4, which addresses “power producing devices.”</p> <p>Also, there is no capacity threshold specified in Inclusion 5 for Reactive Power devices that would be considered part of the BES. This is inconsistent with the approach taken in the balance of the definition, where thresholds are specified for generators and other types of power producing devices. Reactive Power devices should be subject to the same technical analysis for inclusion or exclusion that will cover generators in the Phase II process.</p> <p>GCPD strongly supports the revised Local Networks (“LNs”) exclusion from the BES. GCPD also supports specific refinements made to the LN exclusion by the SDT in the current draft of the BES definition. In particular, GCPD supports the clarification of the purposes of a LN. The current draft states that LNs connect at multiple points to “improve the level of service to retail customer Load and not to accommodate bulk power transfer across the interconnected system.” GCPD supports this change in language because it reflects the fundamental purposes of a LN and emphasizes one of the key distinctions between LNs and bulk transmission facilities. Similarly, we suggest that the SDT re-examine the assumptions underlying subparagraph (b), which seems to suggest that a local distribution system cannot be classified as a Local Network if power flows out of that system at any time, even if the amount is very small, the outward flow is only for a few hours a year, or the outward flow occurs only in an extreme contingency. Accordingly, we suggest that the initial clause of subparagraph (b)</p>

Voter	Entity	Segment	Vote	Comment
				be revised to read: "Except in unusual circumstances, power flows only into the LN."
<p><b>Response:</b> The exception process is being worked on in parallel with the definition. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up. Thank you for your support. The development of demarcation points will be included in Phase 2 of this project. Work done at WECC and other regions will be utilized as appropriate. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made. Several commenters suggested that the requirement under Exclusion E3.b should apply only during normal operating conditions, in other words, commenters felt that some power flow should be allowed to flow from the candidate local network back into the BES as long as it only occurred under abnormal conditions. To this suggestion, the SDT considered the addition of the phrase "under normal operating conditions", as a qualifier to Exclusion E3.b, and determined that in order to maintain the intent of a bright-line characteristic in the BES definition such a qualifier could not be accommodated. However, the SDT pointed out that for those circumstances where a candidate for local network is unable to utilize the local network exclusion due to an abnormal situation that caused power to flow out of the network, the network could be a suitable candidate that could apply for exclusion under the Exception Process.</p>				

Voter	Entity	Segment	Vote	Comment
John H Hagen	Pacific Gas and Electric Company	3	Affirmative	We support the overall approach with the following concerns: 1) Clarify what is included as a Blackstart Resource and do not rely on what is defined in local or regional restoration plans, as this will create regional variances; 2) Inclusion of generating units >20mva seems to low and
<p><b>Response:</b> 1. Blackstart Resource is a defined term that can be found in the NERC Glossary.</p> <p>2. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values.</p>				
Brad Chase	Orlando Utilities Commission	1	Affirmative	Orlando Utilities Commission supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date. in addition, phase II should include a clear distinction between the BES and BPS.
Ballard K Mutters	Orlando Utilities Commission	3	Affirmative	Orlando Utilities Commission supports the new definition, although our support is conditioned on: (1) a workable Exceptions process being developed in conjunction with the BES definition; and, (2) the SDT moving forward expeditiously on Phase II of the standards development process in accordance with the SAR recently put forward by the SDT, which would address a number of important technical issues that have been identified in the standards development process to date.

Voter	Entity	Segment	Vote	Comment
<p><b>Response:</b> The exception process is being worked on in parallel with the definition. Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up.</p>				
CJ Ingersoll	Constellation Energy	3	Affirmative	While we support the proposed definition to satisfy the FERC Order, we also support continued work on the threshold questions slated for "Phase II", in particular the refinement of the generation thresholds.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up.</p>				
Howard M. Mott Jr.	Clay Electric Cooperative	3	Affirmative	The Note under Exclusions: E1 - Radial Systems: should not include "...as depicted on prints or one-line diagrams..." and should be changed. "Note - A normally open switching device between radial systems, as depicted on prints or one-line diagrams for example, does not affect this exclusion." I recommend the note be changed to read: Note - A normally open switching device between radial systems operated in a 'make-before-break' fashion does not affect this exclusion.
<p><b>Response:</b> Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator's responsibility to indicate how a switch is used in the normal operating environment.</p>				
Brian Fawcett	Clatskanie People's Utility District	3	Affirmative	1. The SDT has made clarifying changes to the core definition in response to industry comments. Do you agree with these changes? If you do not support these changes or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: Yes No: Comments: We agree with the changes. We must point out that the overall flow, or how one proceeds through the inclusions and exclusions is not clear. Can an item that meets an inclusion be subsequently excluded? If so, this needs to be explicitly stated. So far, we only have the flow chart produced by the ROP team that indicates otherwise ( <a href="http://www.nerc.com/docs/standards/sar/20110428_BES_Flowcharts.pdf">http://www.nerc.com/docs/standards/sar/20110428_BES_Flowcharts.pdf</a> ). This was made evident by the question at the 9/28 webinar regarding an I5 capacitor on an E3 local network. The questioner thought the capacitor was BES per I5, but the answer was that it was excluded per E3. We can find no support for the

Voter	Entity	Segment	Vote	Comment
				<p>answer given. The listing of specific exclusions within I1 (exception proves the rule) argues for questioner’s stance that the capacitor is BES as written. Also, if included items could subsequently be excluded, they would be no different from any other item that met the voltage threshold of 100kV. There would be no need for any of the inclusions if all possible outputs from the inclusion tests go to the same exclusion test inputs.</p> <p>We strongly support the addition of the language regarding local distribution facilities, as it matches congressional intent to leave the regulation of these facilities to state and local authorities.</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: Clatskanie PUD strongly agrees with this inclusion as written. It is consistent with the recent PRC-004 and PRC-005 interpretation and the NERC definition of Transmission. We believe the recent changes to this inclusion add clarity.</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Referencing the Criteria which in turn references the BES definition creates a circular definition. Clatskanie PUD encourages the adoption of specific thresholds that are technically justified. We also note that the Criteria and its revisions do not go through the standards development process, so that thresholds may change with little warning and without triggering an implementation plan for facilities that may be swept into the BES as a result.</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language</p>

Voter	Entity	Segment	Vote	Comment
				<p>would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: We agree with the removal of the voltage language, since the inclusions and exclusions apply only to equipment over 100 kV.</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments: Clatskanie PUD agrees both with the inclusion and with the revised language. The revised language removes the need to provide a separate definition for "Collector System".</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: While we agree that reactive devices of sizable capacity connected at 100 kV or higher are needed for BES reliability, Clatskanie PUD fails to see why this inclusion is needed as they are already captured by the 100 kV threshold. We would propose instead to eliminate this inclusion and substitute an exclusion for smaller capacity devices. If the SDT really believes an inclusion for reactive devices is needed, we suggest the SDT provide a technically justified capacity limit within the inclusion. In addition we suggest also including the phrase "...unless excluded under Exclusion E1, E2 or E4" similar to that in I1. Please see the answer to Q1 above Q10 below.</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: Clatskanie PUD notes that a new term has been introduced, "non-retail generation," with no definition provided. The answer to the question on this during the 9/28 webinar indicated that non-retail generation was behind the retail customer's meter. We can see no reason why</p>

Voter	Entity	Segment	Vote	Comment
				<p>the net-metered PV systems should count toward the aggregate limit (exceeding the limit means no exclusion) while a non-blackstart thermal plant doesn't (the radial system is excluded if any amount of load is present). We have also heard the SDT meant just the opposite of what was stated in the webinar. We ask that a reasonable definition for non-retail be provided within the BES definition document. We strongly agree that radial systems should be excluded and that the presence of normally open switching devices between radial systems should not cause them to be considered non-radial. Such a result would cause the removal of these devices to the detriment of the local level of service. We note that the singular "A normally open switching device" is used and suggest that an allowance be made for the possibility of multiple devices. "Normally open switching devices..."</p> <p>8. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E2 (behind-the-meter generation)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: X No: Comments:</p> <p>9. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E3 (local network)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: X Comments: We strongly agree that local networks should be excluded, since they act much like the radial systems excluded in E1 while providing a higher level of service to customers. These networks should not be discouraged in the name of reliability. We again object to the introduction of the new confusing term "non-retail generation" with no definition provided.</p>
<p><b>Response:</b> 1. The application of the draft 'bright-line' BES definition is a three (3) step process that when appropriately applied will identify the vast majority of BES Elements in a consistent manner that can be applied on a continent-wide basis.</p>				
<p>Initially, the BES 'core' definition is used to establish the bright-line of 100 kV, which is the overall demarcation point between BES and non-BES Elements. Additionally, the 'core' definition identifies the Real Power and Reactive Power resources connected at 100</p>				

Voter	Entity	Segment	Vote	Comment
				<p>kV or higher as included in the BES. To fully appreciate the scope of the ‘core’ definition an understanding of the term Element is needed. Element as defined in the NERC Glossary of Terms as:</p> <p>“Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An element may be comprised of one or more components. “</p> <p>Element is basically any electrical device that is associated with the transmission or the generation (generating resources) of electric energy.</p> <p>Step two (2) provides additional clarification for the purposes of identifying specific Elements that are included through the application of the ‘core’ definition. The Inclusions address transmission Elements and Real Power and Reactive Power resources with specific criteria to provide for a consistent determination of whether an Element is classified as BES or non-BES.</p> <p>Step three (3) is to evaluate specific situations for potential exclusion from the BES (classification as non-BES Elements). The exclusion language is written to specifically identify Elements or groups of Elements for potential exclusion from the BES.</p> <p>Exclusion E1 provides for the exclusion of ‘transmission Elements’ from radial systems that meet the specific criteria identified in the exclusion language. This does not include the exclusion of Real Power and Reactive Power resources captured by Inclusions I2 – I5. The exclusion (E1) only speaks to the transmission component of the radial system. Similarly, Exclusion E3 (local networks) should be applied in the same manner. Therefore, the only inclusion that Exclusions E1 and E3 supersede is Inclusion I1.</p> <p>Exclusion E2 provides for the exclusion of the Real Power resources that reside behind-the-retail meter (on the customer’s side) and supersedes inclusion I2.</p> <p>Exclusion E4 provides for the exclusion of retail customer owned and operated Reactive Power devices and supersedes Inclusion I5.</p> <p>In the event that the BES definition incorrectly designates an Element as BES that is not necessary for the reliable operation of the</p>

Voter	Entity	Segment	Vote	Comment
				<p>interconnected transmission network or an Element as non-BES that is necessary for the reliable operation of the interconnected transmission network, the Rules of Procedure exception process may be utilized on a case-by-case basis to either include or exclude an Element.</p> <p>2. Thank you for your support.</p> <p>3. The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I.</p> <p>4. Thank you for your support.</p> <p>5. Thank you for your support.</p> <p>6. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>7. “Non-retail generation” means that generation which is on the system (supply) side of the retail meter. Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator’s responsibility to indicate how a switch is used in the normal operating environment.</p> <p>8. Thank you for your support.</p> <p>9. Thank you for your support. “Non-retail generation” means that generation which is on the system (supply) side of the retail meter.</p>

Voter	Entity	Segment	Vote	Comment
Gregg R Griffin	City of Green Cove Springs	3	Affirmative	<p>GCS appreciates the SDT's work on this project. For the most part, GCS supports what it believes to be the intent of the proposed language. The proposed specific exclusion of facilities used in the local distribution of electric energy is appropriate and consistent with Section 215 of the Federal Power Act. However, we have suggestions to better carry out what we believe to be the SDT's intent.</p> <p>The first sentence can be read as: "... all ... Real Power and Reactive Power resources connected at 100 kV or higher", which is surely not what the SDT intends. The basic problem is that Inclusions I2 and I4 do not modify the first sentence, e.g., from a set theory perspective, the set described by the first sentence includes the sets described in inclusions I2 and I4; hence, I2 and I4 do not modify the first sentence. From a literal reading, this would cause any size generator connected at 100 kV to be included, which is surely not the intent of the SDT. For similar reasons, the core definition and Inclusion I5 now has the effect of including all generators connected at 100 kV since a generator is a "dynamic device ... supplying or absorbing Reactive Power". The word "dedicated" in I5 is not sufficient in GCS's mind to unambiguously exclude generators from this statement. GCS suggests the following wording to address these issues: "Transmission Elements (not including elements used in the local distribution of electric energy) and Real Power and Reactive Power resources as described in the list below, unless excluded by Exclusion or Exception: a. Transmission Elements other than transformers and reactive resources operated at 100 kV or higher. b. Transformers with primary and secondary terminals operated at 100 kV or higher. c. Generating resource(s) (with gross individual or gross aggregate nameplate rating per the ERO Statement of Compliance Registry Criteria) including the generator terminals through the high-side of the step-up transformer(s) connected at a voltage of 100 kV or above. d. Blackstart Resources identified in the Transmission Operator's restoration plan. e. Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a system designed primarily for aggregating capacity, connected at a common point at a voltage of 100 kV or above, but not including generation on the retail side of the retail meter. f. Non-generator static or dynamic devices dedicated to supplying or absorbing more than 6 MVAR of</p>

Voter	Entity	Segment	Vote	Comment
				<p>Reactive Power that are connected at 100 kV or higher, or through a dedicated transformer with a high-side voltage of 100 kV or higher, or through a transformer that is designated in bullet 2 above."</p> <p>2. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I1 (transformers)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: Yes No: Comments: Please see comments to Question 1</p> <p>3. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I2 (generation) including the reference to the ERO Statement of Compliance Registry Criteria? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: yes No: Comments: Please see comments to Question 1</p> <p>4. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I3 (blackstart)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: Yes No: Comments: Please see comments to Question 1.</p> <p>5. The SDT has revised the specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I4 (dispersed power)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: Yes No: Comments: We recommend clarifying that the dispersed power resources covered by this inclusion do not include generators on the retail side of the retail meter. Specifically, we recommend that the Inclusion read: "Dispersed power producing resources with aggregate capacity greater than 75 MVA (gross aggregate nameplate rating) utilizing a system designed primarily for aggregating capacity, connected at a common point at a voltage of 100kV or above, but not including generation on the retail side of the retail meter."</p> <p>6. The SDT has added specific inclusions to the core definition in response to industry comments. Do you agree with Inclusion I5 (reactive resources)? If you</p>

Voter	Entity	Segment	Vote	Comment
				<p>do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: No: Comments: To help clarify and to avoid inclusion of de minimis reactive resources, we propose a size threshold of 6 MVAR consistent with the smallest size generator included in the BES at a 0.95 power factor, which is a common leading power factor used in Facility Connection Requirements for generators. In other words, 6 MVAR is consistent with typically the least amount of MVAR required to be absorbed by the smallest generator meeting the registry criteria.</p> <p>7. The SDT has revised the specific exclusions to the core definition in response to industry comments. Do you agree with Exclusion E1 (radial system)? If you do not support this change or you agree in general but feel that alternative language would be more appropriate, please provide specific suggestions in your comments. Yes: Yes No: Comments: GCS supports the exclusion of radial systems from the BES Definition. Such systems are generally not “necessary for operating an interconnected electric transmission network,” the standard in Orders 743 and 743-A. We have several suggestions to clarify the proposed language for this Exclusion. Proposed Exclusion E1 refers to “[a] group of contiguous transmission Elements that emanates from a single point of connection of 100 kV or higher.” We appreciate the SDT’s clarification of the point of connection requirement, but the term “a single point of connection” should be further defined (more clearly than just by voltage), and should be generic enough to encompass the various bus configurations. It is not the case, for example, that each individual breaker position in a ring bus is a separate point of connection for this purpose; in that situation, a bus at one voltage level at one substation should be considered “a single point of connection.” Some examples of configurations that should be considered a single point of connection for this purpose are at <a href="https://www.frc.com/Standards/StandardDocs/BES/BESAppendixA_V4_clean.pdf">https://www.frc.com/Standards/StandardDocs/BES/BESAppendixA_V4_clean.pdf</a>, Examples 1-6.</p> <p>Although the core definition (appropriately) refers to “Transmission Elements” (with a capital “T”), proposed Exclusion E1 refers to “transmission Elements” (with a lowercase “t”). To avoid confusion, either “Transmission” should be</p>

Voter	Entity	Segment	Vote	Comment
				capitalized in both locations, or the word “transmission” should simply be deleted from Exclusion E1, leaving a “group of contiguous Elements.” We understand that the lack of capitalization may have been a deliberate choice by the SDT in an attempt to avoid confusion that SDT members believe exists in the Glossary definition.
<p><b>Response:</b> 1. – 4. The SDT refers the commenter to the first phrase of the core definition starting with “Unless modified...” which the SDT believes handles the concern brought out here. The SDT considered your wording changes in its deliberations and refers the commenter to the revised redline of the definition posted in response to the consideration of comments.</p> <p>5. The SDT further clarifies that generating units on the customer’s side of the retail meter are not included under Inclusion I4 since customer-side retail generation typically does not “utilize[e] a system designed primarily for aggregating capacity, connected at a common point at a voltage of 100 kV or above.”</p> <p>6. The SDT acknowledges and appreciates the comments and recommendations associated with modifications to the technical aspects (i.e., the bright-line and component thresholds) of the BES definition. However, the SDT has responsibilities associated with being responsive to the directives established in Orders No. 743 &amp; 743-A, particularly in regards to the filing deadline of January 25, 2012, and this has not afforded the SDT with sufficient time for the development of strong technical justifications that would warrant a change from the current values that exist through the application of the definition today. These and similar issues have prompted the SDT to separate the project into phases which will enable the SDT to address the concerns of industry stakeholders and regulatory authorities. Therefore, the SDT will consider all recommendations for modifications to the technical aspects of the definition for inclusion in Phase 2 of Project 2010-17 Definition of the Bulk Electric System. This will allow the SDT, in conjunction with the NERC Technical Standing Committees, to develop analyses which will properly assess the threshold values and provide compelling justification for modifications to the existing values. No change made.</p> <p>7. The “single point of connection of 100 kV or higher” is where the radial system will begin if it meets the language of Exclusion E1 including parts a, b, or c and does not necessarily include an automatic interrupting device (AID). For example, the start of the radial system may be a hard tap of the transmission line where no automatic interruption device is used. The owner of the transmission line will need to insure the reliability of the transmission line. Another example is the tap point within a ring or breaker and a half bus configuration could also be the beginning of the radial system and the owner of the bus would need to insure the reliability of the substation. The SDT considered the disposition of the word “transmission” in the context of Exclusion E1, and determined that retention of this word – in lower-case – is necessary to modify the word “Element”. This is meant to eliminate the generation that would otherwise be</p>				

Voter	Entity	Segment	Vote	Comment
included in the term "Element".				
Thomas C Duffy	Central Hudson Gas & Electric Corp.	3	Affirmative	Due to the movement to a phased BES definition development process and assuming the definition is approved as proposed, there is an urgent need for NERC to provide clear guidance to Registered Entities regarding how to proceed with facilities and address changes to the NERC Compliance Registry registration obligations brought in/on by the application of the new definition. The problem stems from a likely scenario whereby the affected Registered Entities may be faced with an Implementation Plan and an Exception Request Procedure which must be completed prior to the completion of the Phase II definition development process. If that is the case, many Registered Entities will be confronted with either (1) spending large amounts of human and financial resources, not yet acquired, to address facilities/procedures necessary to address possible new compliance obligations only to find their efforts rendered unnecessary by the results produced in Phase II or, (2) waiting until the results of Phase II are provided and risking being found non-compliant and subject to substantial penalties in the future. Neither option can be viewed as a desirable, or for that matter, an acceptable position to be placed in.
<b>Response:</b> Part of the implementation plan for this project is for NERC to work with regional entities on transition plans. Those regional entities would then work with registered entities to try to avoid the situation described by the commenter.				
Richard K Vine	California ISO	2	Affirmative	We support the SDT's decision to exclude the cranking paths from the BES definition since testing and verification of the use of facilities in the cranking path is already covered by the appropriate EOP standards. However, we suggest removing the entirety of Inclusion I3. This inclusion is extraneous given there is already a designation specific for system restoration covered by an existing standard to recognize their reliability impacts and to ensure their expected performance. NERC Standards EOP-005-2 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, which meets the intent of identifying their criticality to reliability.

Voter	Entity	Segment	Vote	Comment
<p><b>Response:</b> The SDT disagrees that Blackstart Resources should not be included in the BES Definition. 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 associated resources of the electric system that can be isolated and then energized to deliver electric power during a restoration event are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s restoration plan. For these reasons, the SDT continues to include Blackstart Resources identified in the Transmission Operator’s restoration plan as BES elements. <b>No change made.</b></p>				
James Jones	Southwest Transmission Cooperative, Inc.	1	Affirmative	<p>In general, we support the proposed definition of the BES. However, we have identified a few concerns that warrant the SDT’s consideration. We’d prefer to see the language from the ERO Statement of Compliance Registry Criteria repeated within the BES Definition itself instead of referencing an outside document. As it stands right now, the Compliance Registry Criteria needs to stay intact for Phase 1 of this project. That makes the Compliance Registry Criteria reliant on the BES Definition and vice versa. We understand that the Statement of Compliance Registry Criteria may be reviewed/revise at the same time Phase 2 of this project is being developed, therefore we agree with Inclusion I2 of this draft.</p> <p>Blackstart Resources can actually be on the distribution system. There is still the question of whether the distribution system would then be subjected to the enforceable standards. If so, there would most likely be a significant cost increase associated with tracking compliance for these distribution systems without a commensurate increase in reliability since Blackstart Resources are rarely used. This could very well cause entities to un-designate Blackstart Resources on distribution systems to avoid these distribution systems from becoming part of the BES. The same rationale that was used for eliminating cranking paths could also be applied to Blackstart Resources.</p> <p>A flowgate should not be used to limit applicability of E3. First, there is no</p>

Voter	Entity	Segment	Vote	Comment
				<p>definition for what constitutes a permanent flowgate. Second, flowgates are often created for a myriad of reasons that have nothing to do with them being necessary to operate the BES. While section c) in E3 attempts to limit the applicability to permanent flowgates, there is no definition for what constitutes a permanent flowgate particularly since no flowgate is truly permanent. The NERC Glossary of Terms definition of flowgate includes flowgates in the IDC. This is a problem because flowgates are included in the IDC for many reasons not just because reliability issues are identified. Flowgates could be included to simply study the impact of schedules on a particular interface as an example. It does not mean the interface is critical. As an example, it could be used to generate evidence that there are no transactional impacts to support exclusion from the BES. Furthermore, the list of flowgates in the IDC is dynamic. The master list of IDC flowgates is updated monthly and IDC users can add temporary flowgates at anytime. While the "permanent" adjective applied to flowgates probably limits the applicability from the "temporary" flowgates, it is not clear which of the monthly flowgates would be included from the IDC since they might be added one month and removed another. Flowgates are created for many reasons that have nothing to do with them being necessary to operate the BES. First, flowgates are created to manage congestion. The IDC is more of a congestion management tool than a reliability tool. FERC recognized this in Order 693, when they directed NERC to make clear in IRO-006 that the IDC should not be relied upon to relieve IROs that have been violated. Rather, other actions such as re-dispatch must be used in conjunction. Second, flowgates are used as a convenient point to calculate flows to sell transmission service. The characteristics of the flowgate make it a good proxy for estimating how much contractual use has been sold not necessarily how much flow will actually occur. While some flowgates definitely are created for reliability issues such as IROs, many simply are not. The term "non-retail generation" used in Exclusion E1 (item c) and again in E3 (item a) should be clarified (see comments for question 8 below). The Note after item c should also be clarified to indicate that closing a normally open switch doesn't affect this exclusion.</p>

Voter	Entity	Segment	Vote	Comment
Noman Lee Williams	Sunflower Electric Power Corporation	1	Affirmative	<p>In general, we support the proposed definition of the BES. However, we have identified a few concerns that warrant the SDT's consideration.</p> <p>We'd prefer to see the language from the ERO Statement of Compliance Registry Criteria repeated within the BES Definition itself instead of referencing an outside document. As it stands right now, the Compliance Registry Criteria needs to stay intact for Phase I of this project. That makes the Compliance Registry Criteria reliant on the BES Definition and vice versa. We understand that the Statement of Compliance Registry Criteria may be reviewed/ revised at the same time Phase 2 of this project is being developed, therefore we agree with Inclusion I2 of this draft.</p> <p>Blackstart Resources can actually be on the distribution system. There is still the question of whether the distribution system would then be subjected to the enforceable standards. If so, there would most likely be a significant cost increase associated with tracking compliance for these distribution systems without a commensurate increase in reliability since Blackstart Resources are rarely used. This could very well cause entities to un-designate Blackstart Resources on distribution systems to avoid these distribution systems from becoming part of the BES. The same rationale that was used for eliminating cranking paths could also be applied to Blackstart Resources.</p> <p>A flowgate should not be used to limit applicability of E3. First, there is no definition for what constitutes a permanent flowgate. Second, flowgates are often created for a myriad of reasons that have nothing to do with them being necessary to operate the BES. While section c) in E3 attempts to limit the applicability to permanent flowgates, there is no definition for what constitutes a permanent flowgate particularly since no flowgate is truly permanent. The NERC Glossary of Terms definition of flowgate includes flowgates in the IDC. This is a problem because flowgates are included in the IDC for many reasons not just because reliability issues are identified. Flowgates could be included to simply study the impact of schedules on a particular interface as an example. It does not mean the interface is critical. As an example, it could be used to generate evidence that there are no transactional impacts to support exclusion from the BES. Furthermore, the list of flowgates in the IDC is dynamic. The master list of</p>

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				<p>IDC flowgates is updated monthly and IDC users can add temporary flowgates at anytime. While the “permanent” adjective applied to flowgates probably limits the applicability from the “temporary” flowgates, it is not clear which of the monthly flowgates would be included from the IDC since they might be added one month and removed another. Flowgates are created for many reasons that have nothing to do with them being necessary to operate the BES. First, flowgates are created to manage congestion. The IDC is more of a congestion management tool than a reliability tool. FERC recognized this in Order 693, when they directed NERC to make clear in IRO-006 that the IDC should not be relied upon to relieve IROs that have been violated. Rather, other actions such as re-dispatch must be used in conjunction. Second, flowgates are used as a convenient point to calculate flows to sell transmission service. The characteristics of the flowgate make it a good proxy for estimating how much contractual use has been sold not necessarily how much flow will actually occur. While some flowgates definitely are created for reliability issues such as IROs, many simply are not. The term “non-retail generation” used in Exclusion E1 (item c) and again in E3 (item a) should be clarified (see comments for question 8 below). The Note after item c should also be clarified to indicate that closing a normally open switch doesn't affect this exclusion.</p>
<p><b>Response:</b> The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I.</p> <p>The SDT disagrees that Blackstart Resources should not be included in the BES Definition. 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 associated resources of the electric system that can be isolated and then energized to deliver electric power during a restoration event are essential to enable the startup of one or more other generating units as defined in the Transmission Operator’s restoration plan. For these reasons, the SDT continues to include Blackstart Resources identified in the Transmission Operator’s restoration plan as BES</p>				

Voter	Entity	Segment	Vote	Comment
<p>elements. No change made.</p> <p>The SDT believes that the language in Exclusion E3.c prohibiting “Flowgates” from qualifying for definitional exclusion is appropriate and necessary. As a definitional exclusion characteristic, Exclusion E3.c must follow the principle of being a bright-line and easily identifiable, and as such, the SDT feels that the definition cannot allow some types of Flowgates and disallow others. Flowgates must continue to be a prohibiting characteristic under Exclusion E3, since these facilities are more likely to be used in the transfer of bulk power than not. An entity who wishes to make a case for exclusion of a unique type of Flowgate facility can do so through the exception process. The SDT believes that the continued qualifier of “permanent” associated with the term “Flowgate” addresses the majority of the concern in this comment. No change made.</p> <p>“Non-retail generation” means that generation which is on the system (supply) side of the retail meter.</p> <p>Radial systems should be assessed with all normally open (NO) switches in the open position and these NO switches will not prevent the owner or operator from using this exclusion. The note provides an example that can be used to indicate the switch is operated in the normally open position; however, it is the owner and operator’s responsibility to indicate how a switch is used in the normal operating environment.</p>				
Jerome Murray	Oregon Public Utility Commission	9	Affirmative	With the condition that reference is not made to the NERC Statement of Compliance Registry Criteria (SCRC) within the BES definition. This circularity must be eliminated. Recommended language should be: “I2 - Generating resource(s) with a gross individual nameplate rating greater than 20 MVA or with a gross aggregate nameplate rating greater than 75 MVA including the generator terminals through the high-side of the step-up transformer(s) connected at a voltage of 100 kV or above.”
<p><b>Response:</b> The SDT has reverted to specific numeric thresholds consistent with the ERO Statement of Compliance Registry Criteria for Phase I.</p>				
Gregory S Miller	Baltimore Gas & Electric Company	1	Affirmative	While BGE supports the proposed definition to satisfy the FERC Order, we also support continued work on the threshold questions slated for “Phase II”.
<p><b>Response:</b> Phase II will be starting up immediately following the filing of Phase I as the SDT resources get freed up.</p>				

Voter	Entity	Segment	Vote	Comment
Luther E. Fair	Gainesville Regional Utilities	1	Affirmative	GVL feels that the effort to improve this standard is heading in the right direction. We look forward to the phase 2 segment of the process where additional clarity can be offered. Thanks for all your hard work.
Mark B Thompson	Alberta Electric System Operator	2	Affirmative	The AESO agrees with the NERC BES definition. It should be noted however that when the AESO adopts a NERC definition in Alberta the AESO must consider the applicability of the NERC definition in Alberta which may result in revisions to such definition to align it with our current electric energy market framework.
Benjamin Friederichs	Big Bend Electric Cooperative, Inc.	3	Affirmative	I believe this definition would include those elements necessary to the reliable operation of the BES while excluding those elements that would not have a material impact. NERC's willingness to exclude radial 115kv transmission lines is especially beneficial to smaller utilities like us. Their inclusion would not improve the reliability of the BES, but would vastly increase our costs and regulatory/reporting burdens.
James L Layton	Blue Ridge Electric	3	Affirmative	The SDT has done a good job of clearly defining the BES and developing a clear inclusion and exculsion list.
Joe Noland	City of Cheney	3	Affirmative	The City of Cheney agrees with changes made to the BES definition
Jason Fortik	Lincoln Electric System	3	Affirmative	No comments.
Anthony Schacher	Salem Electric	3	Affirmative	Salem Electric is encouraged to see that the standard drafting team understands the reality that in many circumstances many small radially fed utilities have no effect on the bulk electric system. By permitting reasonable and prudent exceptions it will allow many of the small utilities to be able to spend our limited time and resources on the reliability of our systems for our end users, instead of undertaking unnecessary steps to protect a system upon which we have no effect. The exception process is thorough but still manageable for small utilities with limited resources. Salem Electric would like to thank the Standards Drafting Team for their hard work and dedication in defining the Bulk Electric System.
Bob C. Thomas	Illinois Municipal Electric Agency	4	Affirmative	Illinois Municipal Electric Agency (IMEA) appreciates the SDT's diligence in developing bright-line BES Definition language; particularly, language clarifying the exclusion of local distribution facilities, achieving more realistic/reasonable

Voter	Entity	Segment	Vote	Comment
				identification of radial systems, and recognizing the distinction of local networks. With its Affirmative vote, IMEA supports and recommends comments submitted by the Transmission Access Policy Study Group.
Frank R. McElvain	Siemens Energy, Inc.	7	Affirmative	I am not completely satisfied with the arbitrary nature of the 100 kV demarcation. I know of 60 kV systems that parallel 500 kV circuits. However, this draft captures my concept of the Bulk Electric System pretty well.
<b>Response:</b> Thank you for your support.				