

# **Consideration of Comments**

## Cost Effective Analysis Process

The Cost Effective Analysis Process (CEAP) team thanks all commenters who submitted comments on the draft CEAP. These comment questions were posted for a 60-day public comment period from May 7, 2012 through July 6, 2012. Stakeholders were asked to provide feedback through a special electronic comment form. There were 45 sets of comments, including comments from approximately 141 different people from approximately 103 companies representing all 10 of the Industry Segments as shown in the table on the following pages.

All comments submitted may be reviewed in their original format on the standard's project page:

http://www.nerc.com/filez/standards/Cost Effective Analysis Process.html

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President of Standards and Training, Herb Schrayshuen, at 404-446-2560 or at <a href="https://herb.schrayshuen@nerc.net">herb.schrayshuen@nerc.net</a>. In addition, there is a NERC Reliability Standards Appeals Process. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The appeals process is in the Standard Processes Manual: http://www.nerc.com/files/Appendix 3A StandardsProcessesManual 20120131.pdf



### **Index to Questions, Comments, and Responses**

1.	Do you agree there should be a formal process to determine the cost of developing reliability standards? If you disagree, please explain why11
2.	Do you agree with the approach in the proposed NERC Cost Effective Analysis Process (CEAP)? If you disagree, please explain your concerns and provide specific suggestions for addressing the concerns
3.	The NERC CEAP incorporates two separate phases of reviews: • The first phase is the Cost Impact Analysis (CIA) which is intended to be an assessment to determine the relative cost impacts of a particular proposed course of action. This is not intended to be a comprehensive cost benefit analysis but rather to identify potential cost magnitude and achievement of ALR and risk mitigation benefits • The second phase is the Cost Effectiveness Assessment (CEA) which may be considered a more detailed assessment whose purpose is to provide information about the relative effectiveness and cost impacts of different approaches to eliminating disparities, increasing life expectancy or of any program or initiative and to provide the industry to offer more cost efficient alternatives to achieve the same reliability objective of the standard. Do you agree with the 'two separate phases'? If you disagree, please provide suggested changes
4.	Appendix B is comprised of standard survey questions for Phase One and Phase Two. Additional questions may be added as appropriate. Do you agree with the survey questions in Appendix B? If you disagree, please suggest questions
5.	Do you have any other comments or suggestions to improve the proposed CEAP?93



### The Industry Segments are:

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

G	roup/Individual	Commenter		Organization					Regi	stered	l Ballo	t Bod	y Segr	nent		
							1	2	3	4	5	6	7	8	9	10
1.	Group	Ron Sporseen	PNGC Coi	mment	Group	)	Х		Х	Х				Х		
	Additional Member	r Additional Organiz	ation	Region	Segment Selection											
1.	Joe Jarvis	Blachly-Lane Electric Coop	erative	WECC	3											
2.	Dave Markham	Central Electric Cooperative	Э	WECC	3											
3.	Dave Hagen	Clearwater Power Compan	y	WECC	3											
4.	Roman Gillen	Consumers Power Inc.		WECC	1, 3											
5.	Roger Meader	Coos-Curry Electric Cooper	ative	WECC	3											
6.	Bryan Case	Fall River Electric Cooperat	ive	WECC	3											
7.	Rick Crinklaw	Lane Electric Cooperative		WECC	3											
8.	Annie Terracciano	Northern Lights Inc.		WECC	3											
9.	Aleka Scott	PNGC Power		WECC	4											



Gr	Group/Individual Commenter			Or	ganization			Regi	istere	d Ballo	ot Boo	ly Seg	ment		
						1	2	3	4	5	6	7	8	9	10
10.	Heber Carpenter	Raft River Rural Electric Co	operative	WECC	3	l .				ı					
11.	Steve Eldrige	Umatilla Electric Cooperativ	⁄e	WECC	1, 3										
12.	Marc Farmer	West Oregon Electric Coop	erative	WECC	4										
13.	Margaret Ryan	PNGC Power		WECC	8										
14.	Rick Paschall	PNGC Power		WECC	3										
2.	Group	John A. Anderson	ELCON a	nd Occio	lental Energy Ventures							Х			
	Additional Member	Additional Organia	zation	Region	Segment Selection										
1.	Michelle D'Antuono	Occidental Energy Venture	es		7										
3.		NAME OF ALTH	NADO NG	D.F.			,,				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
3.	Group	WILL SMITH	MRO NS			Х	Х	X	Х	X	Х				
	Additional Membe		zation	_	Segment Selection										
1.	MAHMOOD SAFI	OPPD		MRO	1, 3, 5, 6										
2.	CHUCK LAWRENCE	ATC		MRO	1										
3.	TOM WEBB	WPS		MRO	3, 4, 5, 6										
4.	JODI JENSON	WAPA		MRO	1, 6										
5.	KEN GOLDSMITH	ALTW		MRO	4										
6.	ALICE IRELAND	XCEL		MRO	1, 3, 5, 6										
7.	DAVE RUDOLPH	BEPC		MRO	1, 3, 5, 6										
8.	ERIC RUSKAMP	LES		MRO	1, 3, 5, 6										
9.	JOE DEPOORTER	MGE		MRO	3, 4, 5, 6										
	SCOTT NICKELS	RPU		MRO	4										
	TERRY HARBOUR			MRO	5, 6, 1, 3										
	MARIE KNOX	MISO		MRO	2										
	LEE KITTELSON	OTP		MRO	1, 3, 4, 5										
	SCOTT BOS	MPW		MRO	1, 3, 5, 6										
	TONY EDDLEMAN			MRO	1, 3, 5										
	MIKE BRYTOWSKI			MRO	1, 3, 5, 6										
17.	DAN INMAN	MPC		MRO	1, 3, 5, 6										



G	Group/Individual Commenter			Org	ganization			Regi	istere	d Ballo	ot Bod	y Segi	nent		
						1	2	3	4	5	6	7	8	9	10
4.	Group	Chris Higgins	Bonneville F	Powei	· Administration	Х		Х	Х		Х				
	Additional Member	r Additional Organi		_	Segment Selection										
1.	Hardev	Juj	W	/ECC	1										
2.	Don	Watkins		/ECC											
3.	Fran	Halpin		/ECC											
4.	Rita	Coppernoll		/ECC											
5.	Kristy	Humphrey	W	/ECC	1										
6.	Meg	Albright	W	/ECC	1										
7.	Mike	Miller	W	/ECC	1										
8.	Erika	Doot	W	/ECC	3, 5, 6										
9.	Mary	Willey	W	/ECC	1										
5.	Group	Robert Rhodes	SPP Standar	rds Re	view Group		Х								
	Additional Member	r Additional Organi	zation R	egion	Segment Selection										
1.	Stephen McGie	City of Coffeyville	SI	PP	NA										
2.	Fred Meyer	Empire District Electric	SI	PP	1										
3.	Valerie Pinamonti	AEP	SI	PP	1, 3, 5										
6.	Group	Mike Garton	Dominion			Х		X		X	Х				
	Additional Member	r Additional Organi	zation R	egion	Segment Selection										
1.	Louis Slade		R	FC	5, 6										
2.	Randi Heise		M	IRO	5, 6										
3.	Connie Lowe		N	PCC	5, 6										
4.	Michael Crowley		SI	ERC	1, 3, 5, 6										
7.	Group	Guy Zito	Northeast P	ower	Coordinating Council										Х
	Additional Membe	r Additional Organization	R	egion	Segment Selection		•								
1.	Alan Adamson	New York State Reliability	Council, LLC N	PCC	10										
2.	Carmen Agavriloai	Independent Electricity Sv	stem N	PCC	2										



Gr	oup/Individual	Commenter		Or	ganization			Regi	stere	d Ballo	t Bod	y Segi	ment		
						1	2	3	4	5	6	7	8	9	10
		Operator					•		•	•	•				•
3.	Greg Campoli	New York Independent Sys Operator	stem	NPCC	1										
4.	Sylvain Clermont	Hydro-Quebec TransEnerg	gie	NPCC	1										
5.	Chris de Graffenried	Consolidated Edison Co. o Inc.	f New York,	NPCC	1										
6.	Gerry Dunbar	Northeast Power Coordina	ting Council	NPCC	10										
7.	Mike Garton	Dominion Resources Servi	ces, Inc.	NPCC	5										
8.	Kathleen Goodman	ISO - New England		NPCC	2										
9.	Michael Jones	National Grid		NPCC	1										
10.	David Kiguel	hydro One Networks Inc.		NPCC	1										
11.	Michael R. Lombardi	Northeast Utilities		NPCC	1										
12.	Randy MacDonald	New Brunswick Power Tra	nsmission	NPCC	9										
13.	Bruce Metruck	New York Power Authority		NPCC	6										
14.	Silvia Parada Mitchell	NextEra Energy, LLC		NPCC	5										
15.	Lee Pedowicz	Northeast Power Coordina	ting Council	NPCC	10										
16.	Robert Pellegrini	The United Illuminating Co	mpany	NPCC	1										
17.	Si-Truc Phan	Hydro-Quebec TransEnerg	gie	NPCC	1										
18.	David Ramkalawan	Ontario Power Generation,	, Inc.	NPCC	5										
19.	Brian Robinson	Utility Services		NPCC	8										
20.	Michael Schiavone	National Grid		NPCC	1										
21.	Wayne Sipperly	New York Power Authority		NPCC	5										
22.	Donald Weaver	New Brunswick System Op	perator	NPCC	2										
23.	Ben Wu	Orange and Rockland Utilit	ties	NPCC	1										
24.	Peter Yost	Consolidated Edison Co. o	f New York,	NPCC	3										
8.	Group	Terry Bilke	ISOs' Star	ndards I	Review Committee		Х								
	Additional Member	Additional Organization		Region	Segment Selection			•	•						
1.	Al DiCaprio	PJM			2										



G	roup/Individual	Commenter	Organization				Regi	stere	d Ballo	t Bod	y Segr	nent			
						1	2	3	4	5	6	7	8	9	10
2.	Charles Yeung	SPP			2										
3.	Kathleen Goodman	ISONE			2										
4.	Ben Li	IESO			2										
5.	Don Weaver	NBISO			2										
6.	Steve Meyers	ERCOT			2										
7.	Gary DeShazo	CAISO			2										
9.	Group	Joel deJesus	G&T Coop	perative	es										
	Additional Member	<b>Additional Organization</b>		Region	Segment Selection										
1.	John Bussman	Associated Electric Coope	rative, Inc.	SERC	1, 3, 5, 6										
2.	Dan Klempel	Basin Electric Cooperative		MRO	1, 3, 5										
3.	Luis Zaragosa	Tri-State Generation and T Association Inc.	ransmission	WECC	1, 3, 5										
10	Group	Pat Huntley	SERC Star	ndards (	Committee										X
	<b>Additional Member</b>	<b>Additional Organization</b>		Region	Segment Selection										
1.	Neil Phinney	Georgia System Operation	s Corp.	SERC	1										
2.	Edwin Goff	Progress Energy Carolinas	3	SERC	1										
3.	Russ Schussler	Georgia Transmission Cor	poration	SERC	1										
4.	Gerry Beckerle	Ameren		SERC	1										
5.	Jim Case	Entergy		SERC	1										
6.	Don Reichenbach	<b>Duke Energy Carolinas</b>		SERC	1										
7.	John Sullivan	Ameren		SERC	1										
8.	Scott Miller	Municipal Electric Authority	of Georgia	SERC	1										
9.	John Troha	SERC Reliability Corp.		SERC	NA										
11	. Group	Stephen J. Berger	PPL Corpo	oration	NERC Registered	X		x		X	X				
	_ <b>.</b>	Additional Organization	Ailliates	Region	Segment Selection						_ ^				1
1.	Annette M. Bannon	PPL Generation, LLC on b Supply NERC Registered I		RFC	5										
2.		,		WECC	5										



Gro	oup/Individual	Commenter	Organization			Reg	istere	d Ball	ot Bod	y Seg	ment		
				1	2	3	4	5	6	7	8	9	10
3. E	Brent Ingebrigtson	LG&E and KU Services Co	ompany SERC 1, 3, 5, 6										
			ACES Power Marketing Standards										
12.	Group	Jason Marshall	Collaborators						Χ				
1	Additional Member		Region Segment Selection										
1. 8	Shari Heino	Brazos Electric Power Coolinc.	pperative, ERCOT 1, 5										
2. N	Megan Wagner	Sunflower Electric Power (	Corporation SPP 1										
3. 8	Scott Brame	North Carolina Electric Me Corporation	embership SERC 1, 3, 4, 5			•			_				•
13.	Individual	Emily Pennel	Southwest Power Pool Regional Entity										Х
14.	Individual	JANET SMITH	ARIZONA PUBLIC SERVICE COMPANY	Х		Х		Х	Х				
		Diane Barney, Chair -											
		Electric Reliability	National Association of Regulatory										
15.	Individual	Staff Subcommittee	Utility Commissioners (NARUC)									Х	
16.	Individual	Sandra Shaffer	PacifiCorp	Х		Х		Х	Х				
17.	Individual	Bob Steiger	Salt River Project	Х		Х		Х	Х				
18.	Individual	Antonio Grayson	Southern Company	Х		Х		Х	x				
19.	Individual	Barry Lawson	National Rural Electric Cooperative Association (NRECA)			Х	Х						
20.	Individual	Dan Roethemeyer	Dynegy					Х					
21.	Individual	Larry Rodriguez	Entegra Power Group LLC					Х	Х				
		Steve Alexanderson											
22.	Individual	P.E.	Central Lincoln			Χ	Χ					Χ	



Gro	oup/Individual	Commenter	Organization			Reg	istere	d Balle	ot Boo	ly Seg	ment		
				1	2	3	4	5	6	7	8	9	10
23.	Individual	Russell A. Noble	Cowlitz County PUD			Х	Х	Х					
24.	Individual	Steven Powell	Trans Bay Cable, LLC	Х									
25.	Individual	Thomas Gianneschi	Alcoa, Inc.							Х			
26.	Individual	Michael Shaw	LCRA Transmission Services Corporation	Х									
27.	Individual	Andrew Z. Pusztai	American Transmission Company, LLC	Х									
28.	Individual	Si Truc PHAN	Hydro-Quebec TransEnergie	Х									
29.	Individual	Kirit Shah	Ameren	Х		Х		Х	Х				
30.	Individual	Ed Davis	Entergy Services	Х		Х		Х	Х				
31.	Individual	Brian J Murphy	NextEra Energy Inc	Х		Х		Х	Х				
32.	Individual	John Seelke	Public Service Enterprise Group	Х		Х		Х	Х				
33.	Individual	Daniel Duff	Liberty Electric Power					Х					
34.	Individual	Andrew Gallo	City of Austin dba Austin Energy	Х		Х	Х	Х	Х				
35.	Individual	Patrick Brown	Essential Power, LLC					Х					
36.	Individual	John Pearson	ISO New England		х								



Gro	oup/Individual	Commenter	Organization			Regi	istere	d Ball	ot Bo	dy Seg	ment		
				1	2	3	4	5	6	7	8	9	10
37.	Individual	Maggy Powell	Exelon Corporation	Х		Х		Х	Х				
38.	Individual	Edwin D. Croft	Puget Sound Energy, Inc.	X		Х							
39.	Individual	John P. Hughes	Electricity Consumers Resource Council (ELCON)	Х		Х		Х	Х	Х			
40.	Individual	Rebecca Moore Darrah	MISO		Х								
41.	Individual	New England States Committee on Electricity	New England States Committee on Electricity										
42.	Individual	Massachusetts Department of Public Utilities	Massachusetts Department of Public Utilities									Х	
43.	Individual	Nathan Mitchell	American Public Power Association			Х							
44.	Individual	Douglas Webb	KCP&L	Х		Х		Х	Х				
45.		Janet Smith	APS										



1. Do you agree there should be a formal process to determine the cost of developing reliability standards? If you disagree, please explain why.

#### **Summary Consideration:**

The majority of the respondents agree with the need and the concepts associated with the CEAP.

A few respondents emphasized the need for the CEAP to be formally included as part of the Standard Development Process and not have a separate process competing for industry resources and participation. Incorporation of the CEAP into the Standards Process Manual will be considered in potential future revisions to the manual.

Organization	Yes or No	Question 1 Comment
PNGC Comment Group	Yes	Absolutely agree. As representatives of small rural cooperatives we especially hope you'll consider that even relatively modest costs for larger entities can be overly burdensome for small utilities.
information related to the cost of impleme	ntation, main aller entities	ne CEAP is to allow all impacted entities the opportunity to provide itenance, and ongoing compliance during the development of a may be specifically identified in the CEAP report that is produced after
ELCON and Occidental Energy Ventures	Yes	Comments: Occidental Energy Ventures Corp. (OEVC) and the Electricity Consumers Resource Council (ELCON) (herein: Industrial Consumers), the Sector 8 representatives of large end-use electricity consumers on the MRC, agree that cost/benefit analysis of a proposed standards development effort is a critical part of sensible regulation. If properly performed, the efforts with the highest return on reliability can be addressed as a top priority - with some measurable economic justification behind them. For the most part, the cost of NERC compliance must be absorbed by large industrials required to be compliant with NERC Standards. If those costs become too high - and there are no means to prove that they are serving a vital purpose - many



Organization	Yes or No	Question 1 Comment
		will choose not to sell excess energy capacity to the BES. In our view, the threat of over-regulation is in of itself a reliability risk. Along the same lines, public utilities must also be able to justify their costs to local Public Utility Commissions. Even if they are able to pass on their costs to consumers, this presents a societal risk - as rising electric costs affect the poorest segments of the population the most.
Response: Thank you for your comment.		T
MRO NSRF	Yes	Please note that the question should ask; Do you agree there should be a formal process to determine the cost of Implementing (to include maintenance and ongoing compliance resource requirements) reliability standards? This change comes directly from the second sentence of the CEAP Executive Summary. Cost is a key component in reasonably assuring that we have and maintain a reliable system (cost vs. benefit).
		the cost consideration and effectiveness assessment covers more than n is for the implementation, maintenance, and ongoing compliance
Bonneville Power Administration	Yes	
Response: Thank you for your support.		
SPP Standards Review Group	Yes	We concur with the inclusion of a process to consider the costs of implementing reliability standards. Some standards have a greater impact on the reliability of the BES than others and factoring in the costs of standards is one way that the industry can get the most bang for its buck. We can build an electric system that is very reliable and secure but would we be able to afford one that provides service 100% of the time; probably not, nor would our customers agree to incur the cost of such a system. Incorporating cost considerations provides a way to more effectively reach a balance.
Response: Thank you for your comment.		



Organization	Yes or No	Question 1 Comment
Dominion	Yes	
Response: Thank you for your support.		
Northeast Power Coordinating Council	Yes	The costs associated with implementation, maintenance, and on-going compliance as well as the incremental reliability impact need to be considered as part of the reliability standards development process. The CEAP should only come into play for a standard proposed in response to a government request when the existing standard requires updates. There is concern with balancing the operation and planning the electric system in accordance with existing standards with the workload of having to actively participate in the development of new standards. It may not be possible to provide input for cost estimates, and until a standard is actually in use it may be impossible to fully realize the cost impact and effectiveness. It should be noted that this is not a mandatory effort and that in some cases cost input may not be provided because of other priorities. While it is understood that extrapolation of data will occur in cases where data is not provided there is concern over resource balance and the importance of providing cost input.
assessment performed during the SAR stag	e and a more sioned that be	oposal includes a two phase process, an initial order of magnitude focused requirement by requirement assessment once the oth phases will be applied to all new proposed standards, but only the indards.
We agree that this is a voluntary process.		
ISOs' Standards Review Committee	Yes	
Response: Thank you for your support.		
G&T Cooperatives	Yes	Associated Electric Cooperative, Inc. ("Associated Electric"), Basin Electric Power Cooperative ("Basin Electric"), and Tri-State Generation



Organization	Yes or No	Question 1 Comment
		and Transmission Association, Inc. ("Tri-State") (collectively, the "G&T Cooperatives") jointly submit these comments in support of NERC's development of a formal process for assessing costs of developing and implementing reliability standards.  (1) Although cost considerations are implicitly addressed in voting by individual members of the ballot body, the lack of a formal process has contributed to a proliferation of standard requirements whose administrative costs appear to outweigh their benefit to reliability. In fact, among the most violated Reliability Standards are requirements that are largely administrative and procedural in nature, such as CIP-004 (providing for employee training, cyber security awareness, background checks, and procedures governing access authorizations) and CIP-001 (maintenance of procedures for identifying and reporting sabotage events, and associated training). Even many of the violations of the protection system maintenance and testing requirements under PRC-005 relate to documentation issues concerning failure to retain evidence that maintenance and testing has occurred. The G&T Cooperatives therefore strongly support the incorporation of a cost effectiveness analysis as a routine part of the standard development process.
		(2) One of the key drivers for the results-based standards initiative in 2010 was the need to focus the standards development process on standards expected to lead to the greatest increase in reliability, while converting "non-essential" requirements/standards to guidelines. See Results Based Standards Webinar: http://www.nerc.com/filez/webinars/rbstds102010/lib/playback.html. This goal can best be achieved through a formal process to assess the benefits and the costs of new standards under development. Accordingly, the implementation of a cost effectiveness analysis process (CEAP) is critical to NERC's long term initiative to move to results-based standards.

Organization	Yes or No	Question 1 Comment
		(3) FERC appears open to the idea of establishing a cost effectiveness analysis process. FERC noted early on in Order No. 672 that: "The proposed Reliability Standard does not necessarily have to reflect the optimal method, or 'best practice,' for achieving its reliability goal without regard to implementation cost or historical regional infrastructure design. It should however achieve its reliability goal effectively and efficiently." Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, FERC Stats. & Regs. ¶ 31,204 at P. 328 (2006). More recently, Commissioner Norris made remarks that underscored the need for the explicit assessment of the costs and benefits of standards as they are being developed: "As I have thought about this issue, it has become clear to me that in any discussion of a new or revised mandatory reliability standard, there is always a tradeoff between the level of reliability to be achieved by that standard and the costs that the standard will impose. However, that tradeoff is rarely discussed explicitly in the standards development process or during the Commission's review of standards. But, we know that it is an implicit consideration of entities participating in the standards development process. I believe it is more appropriate to make those considerations, where they are relevant, explicit. Therefore, I have advocated for an open dialogue between NERC, the industry, and the Commission to consider the connection between the mandatory standards we approve to maintain and improve the reliability of the Bulk Power System and the costs required to meet those standards." Transmission Planning Reliability Standards, 139 FERC ¶ 61,060 (2012).
		(4) While the G&T Cooperatives submit constructive criticism in the responses to the remaining questions on specific aspects of the CEAP,



Organization	Yes or No	Question 1 Comment
		they strongly support the idea conceptually. The constructive criticism is offered to assist NERC in ensuring that the CEAP can function appropriately and identify the costs and benefits of new standards accurately.
Response: Thank you for your comment.		
SERC Standards Committee	Yes	
Response: Thank you for your support.		
PPL Corporation NERC Registered Affiliates	Yes	
Response: Thank you for your support.		
ACES Power Marketing Standards Collaborators	Yes	(1) We feel this is a great starting point for considering costs in the development of reliability standards and we thank NERC for the opportunity to provide input.
Response: Thank you for your comment.	•	
Southwest Power Pool Regional Entity	Yes	We agree there should be a formal process for determining costs/benefits. However, as stated in the CEAP document, the costs aren't for "developing" the standard but for "implementation, maintenance, and ongoing compliance."
	_	the cost consideration and effectiveness assessment covers more than is for the implementation, maintenance, and ongoing compliance
ARIZONA PUBLIC SERVICE COMPANY	Yes	
Response: Thank you for your support.		
National Association of Regulatory Utility Commissioners (NARUC)	Yes	NERC should be applauded for initiating this long overdue effort. States routinely make decisions related to the local distribution system and generation that weigh benefits of a project against ratepayer impacts.



Yes or No	Question 1 Comment
	Bulk system standards are the only area where cost and benefits are not currently considered. Hundreds of millions to billions of dollars of investment can be caused by standards development. While states put a very high premium on reliability, it is not reasonable to attain it at any cost. Some measurement must be developed to provide decision makers input on the cost and benefits of their actions.
ent.	
Yes	PacifiCorp supports the development of a formal process as identified by this project. However, PacifiCorp cautions that the costs of developing and implementing reliability standards may be very difficult to quantify and, if compared against an amorphous benefit, cost determinations may become somewhat meaningless as a tool for NERC or registered entities.
e efforts for a stand velopment stage a al requirements are	that it may be difficult to determine the cost of implementation, dard that has not yet been drafted. The first phase of the proposed and is an order of magnitude assessment only. The second phase would be drafted. Results of the proposed CEAP would be taken into alone either confirm the need for a standard or be the sole reason for
Yes	
No	Instead of having a separate formalized process to determine the cost of developing reliability standards, we believe that the cost of developing
	ent.  Yes  ent. We recognize to efforts for a standy velopment stage and requirements are s, and would not a yes



develop a cost impact provision. NRECA agrees with the language in the draft CEAP that the cost impacts that need to be evaluated are those related to standard implementation, compliance maintenance and ongoing compliance resource requirements. However, NRECA believe that the CEAP should not look only at industry-wide impacts/cost, but should also ensure that there are not disproportionate impacts on any class of registered entities - including small entities in order to adher to the "not unduly discriminatory" provision of Section 215 of the Federal Power Act. While NRECA is supportive of this initiative and believes it is appropriate for the CEAP to rely on stakeholder input, we are also concerned that this could run counter to the current efforts to make the standards development process more efficient and effective by adding more assignments to the SDTs. Please provide an explanation	Organization	Yes or No	Question 1 Comment
responsibilities. The CEAP documents that were provided for review	•	Yes	included in the standards development process. Creating such a provision will be challenging and will take some time to complete. NRECA is committed to working with NERC, the REs and stakeholders to develop a cost impact provision. NRECA agrees with the language in the draft CEAP that the cost impacts that need to be evaluated are those related to standard implementation, compliance maintenance and ongoing compliance resource requirements. However, NRECA believes that the CEAP should not look only at industry-wide impacts/cost, but should also ensure that there are not disproportionate impacts on any class of registered entities - including small entities in order to adhere to the "not unduly discriminatory" provision of Section 215 of the Federal Power Act. While NRECA is supportive of this initiative and believes it is appropriate for the CEAP to rely on stakeholder input, we are also concerned that this could run counter to the current efforts to make the standards development process more efficient and effective by adding more assignments to the SDTs. Please provide an explanation of how the CEAP will impact the speed and volume of the SDT's work responsibilities. The CEAP documents that were provided for review indicated that this was an initial step or first phase of development of a cost impact provision. Please provide an explanation of any future plans/phases of this initiative so that we can better understand the needs of this initial phase and the potential future direction of this

Response: Thank you for your comment. The impact on the SDTs is expected to be minimal. The CEAP is envisioned as a two phase effort. The first phase, conducted in parallel with the SAR posting for comment is a high level cost impact analysis intended to identify cost impact in order of magnitude only. The second phase is envisioned to be a more comprehensive assessment, conducted on a requirement by requirement basis after the requirements have been drafted. Both phases will occur concurrently with the Standard Development Process. The SDT members will not be responsible for gathering and compiling the information from both sets of questionnaires. The CEAP report will be made available to the NERC Standards



Organization	Yes or No	Question 1 Comment
Committee and the SDTs for their informa	tion.	
Dynegy	Yes	I like the concept and feel it is a step in the right direction of something that needs to be considered in Standards.
Response: Thank you for your support.		
Entegra Power Group LLC	Yes	
Response: Thank you for your support.		
Central Lincoln	Yes	It is about time that compliance cost is factored in. For too long we have been proceeding in the reliability/compliance at any cost mode. Thank you for beginning to look at costs.
Response: Thank you for your support.		
Cowlitz County PUD	Yes	Not only should the cost of travel, room and board, and salaries required of the Standard Drafting Team and support personnel be considered, but also of the expected observers who actively participate with valuable input to the SDT.
	veloping (draf	st question in the comment form, the purpose of the proposed CEAP is ting) the standard, but rather on the cost of implementation, the standards.
Trans Bay Cable, LLC	Yes	
Response: Thank you for your support.		
Alcoa, Inc.	Yes	
Response: Thank you for your support.		
LCRA Transmission Services Corporation	Yes	We agree that costs associated with implementation, maintenance, and on-going compliance as well as the incremental reliability impact need to be considered as part of the reliability standards development process.



Organization	Yes or No	Question 1 Comment
Response: Thank you for your comment.		
American Transmission Company, LLC	Yes	
Response: Thank you for your support.		
Hydro-Quebec TransEnergie	Yes	Hydro Quebec TransEnergie agree, but we think that cost effectiveness may be even more important than cost impact. That is to say phase 2 of the CEAP is more important.
	ated, phase 1	is a more detailed assessment, because the individual requirements will is also important because it is a high level cost impact to help identify
Ameren	Yes	
Response: Thank you for your support.		
Entergy Services	Yes	
Response: Thank you for your support.		
NextEra Energy Inc	Yes	NextEra Energy, Inc. (NextEra) is supportive a formal process to determine the cost effectiveness Reliability Standards. The process itself should be as efficient as possible, thus not unnecessarily imposing new burdens on Registered Entities, and include consideration of potentially more efficient options for a given reliability need.
identifying cost impact and identifying alte	rnative option	ntended as an opportunity to provide feedback for consideration in ns for achieving the same reliability outcome through possible naires is voluntary and no entity will be required to respond.
Public Service Enterprise Group	No	We believe you mean the "to determine the cost of "IMPLEMENTING reliability standards" not "developing reliability standards." As modified, we agree.
Response: Thank you for your comment. Th	ne considerati	on is for the implementation, maintenance, and ongoing compliance



		•		
Organization	Yes or No	Question 1 Comment		
efforts not the cost of standard devel	efforts not the cost of standard development.			
Liberty Electric Power	Yes			
Response: Thank you for your suppor	t.			
City of Austin dba Austin Energy	Yes			
Response: Thank you for your suppor	t.			
Essential Power, LLC	Yes			
Response: Thank you for your suppo	rt.			
ISO New England	Yes	Though we agree with the formal process of determining cost, there is some concern with balancing the workload of planning and operating the electric system in accordance with existing standards along with the workload actively participating in the development of new standards. In some cases it may not be possible to provide input for the cost estimates and until a standard is actually in use it may be impossible to fully realize the cost impact. It should be noted that this is not a mandatory effort and that in some cases cost input may not be provided due to other priorities. While it is understood that extrapolation of data will occur in cases where data is not provided there is still some concern over resource balance and the importance of providing cost input.		
Response: Thank you for your comment. We agree that it may not be possible to provide exact cost estimates until a standard is implemented, the purpose of the proposed CEAP is to provide preliminary information regarding the cost of implementation relative to reliability benefits. This must be done prior to the approval and implementation of a new standard.				
We agree that this is a voluntary pro				
Exelon Corporation	Yes			
Response: Thank you for your support.				
Puget Sound Energy, Inc.	Yes			



Organization	Yes or No	Question 1 Comment
Response: Thank you for your support.		
Electricity Consumers Resource Council (ELCON)	Yes	
Response: Thank you for your support.		
MISO	Yes	The relative costs and benefits of a proposed reliability standard are two of the most important considerations in determining whether such a proposal should be adopted, rejected, or modified. Cost-benefit considerations should be utilized during both the development and enforcement of mandatory reliability standards; however, such considerations tend not to be clearly articulated or defined and, even when defined, are not given adequate, meaningful assessment. As a result, many standards and requirements that have been approved and are effective for compliance purposes do not provide significant benefits to reliability despite requiring considerable resource expenditures by Registered Entities. Having a formalized process for determining costs and benefits and meaningfully evaluating these prior to standard development and/or approval would clarify for the industry, NERC, and Regional Entities the considerations and analyses that are appropriate for determining high value/benefit reliability standards and result in the development, revision, or interpretation of the reliability standards that provide the most benefit to reliability. Accordingly, MISO agrees that there should be a formal cost determination as part of the process of developing reliability standards.
Response: Thank you for your comment.		
New England States Committee on Electricity	Yes	The New England States Committee on Electricity (NESCOE) strongly supports NERC's effort to identify and evaluate cost impacts as part of the process of developing reliability standards. NESCOE is New England's Regional State Committee and is governed by a Board



Organization	Yes or No	Question 1 Comment
		appointed by the six New England Governors. These comments reflect the collective view of the six New England states. NERC's Costs Effective Analysis Process (CEAP) largely tracks a Northeast Power Coordinating Council (NPCC) process implemented last year to integrate cost effectiveness into its standards development procedures. Last year, NESCOE expressed its support for NPCC's leadership in this critical area. At the same time, NESCOE communicated concerns to NERC in a September 2011 letter regarding the absence of a cost-benefit analysis as part of NERC's reliability standards development process. We appreciate NERC's responsiveness to concerns expressed by NESCOE and others, and we look forward to working with NERC to develop its process for considering costs. The New England states strive to ensure that the appropriate level of infrastructure is in place to achieve a robust and reliable bulk electric system. However, as NERC recognizes here, incremental reliability gains cannot be considered in a vacuum, separate from an understanding of the magnitude of risk and cost associated with federal reliability standards. NERC's concurrent consideration of costs, reliability risks and benefits-as captured in the proposed CEAP-should help tailor the most appropriate and cost effective approach to achieving a reliability objective.
Response: Thank you for your comment. As noted in the comment, the proposed NERC CEAP was developed from the Northeast Power Coordinating Council CEAP.		
Massachusetts Department of Public Utilities	Yes	The Massachusetts Department of Public Utilities ("Mass DPU") appreciates the opportunity to comment on NERC's draft Costs Effective Analysis Process ("CEAP"). The Commonwealth of Massachusetts is the largest state by population and load in New England. It comprises 46% of both the region's population and electricity consumption. Generating plants located in Massachusetts represent 41% of New England's capacity and our capital city, Boston, is the largest load center in the region. The Mass DPU strongly supports NERC's implementation of the



Organization	Yes or No	Question 1 Comment
		CEAP, which incorporates cost effectiveness into the standards development process. Our comments closely mirror those filed today by our regional state committee, the New England States Committee on Electricity ("NESCOE"). We worked closely with NESCOE to develop its comments, and we file separately here as a voting member of NERC to underscore their importance to us. The Mass DPU, along with its fellow New England states, strives to ensure that the appropriate level of infrastructure is in place to achieve a robust and reliable bulk electric system. However, as NERC recognizes here, incremental reliability gains cannot be considered in a vacuum, separate from an understanding of the magnitude of risk and cost associated with federal reliability standards. NERC's concurrent consideration of costs, reliability risks and benefits-as captured in the proposed CEAP-should help tailor the most appropriate and cost effective approach to achieving a reliability objective.
Response: Thank you for your commen		1
American Public Power Association	Yes	
Response: Thank you for your support.		
KCP&L	Yes	1. We agree a formal process to determine the costs of developing reliability standards is appropriate and has benefits; although, even with the process running in tandem with the reliability standard drafting process, there is concern of introducing complexity, as well as impeding and extending the drafting process by adding further elements and additional steps to the drafting process. We strongly disagree that the proposed Cost Effectiveness Analysis Process (CEAP) concept at a 50,000-foot level provides a simple mechanism for development of costs.
		2. As NERC Staff compile the Cost Impact Analyses (CIA), the global



Organization	Yes or No	Question 1 Comment
		nature of stakeholders across Regional Transmission Organizations (RTO) and within the RTOs makes it difficult to normalize the cost analysis at this early point in the drafting process. Recognizing NERC Staff will consider regional reliability impacts, this is not until Phase II is completed (Step 4) and we submit there is benefit earlier in the process to consider regional impacts. For example: the cost impact of a change in the vegetation requirements is different between urban and rural systems or, by further example, desert versus wooded locals. This illustrates normalization of costs, even at a high level, to be potentially complex.  3. Additionally, the spectrum of system design among NERC members adds further questions of how to normalize the high level view of costs. For example: the age, maintenance priorities, and system design is distinctive for each footprint. The determination of cost of implementing new requirements is unique to each system and, as proposed under the CEAP process, requires the relevant stakeholder to provide that information, which could be challenging without a fully vetted requirement and potentially burdensome. In the initial phase, there is little discussion of how normalization between regions will be captured.
		4. Finally, the posting of the Phase I CIA outcome could incent companies that disagree with the cost analysis to raise further objection in the Standard Development Process, which is burdensome. In the end, disagreement over the CIA could very well create situations that bog the comment process down as stakeholders duel over the CIA assumptions and conclusions. These situations raise the question of what will the weight of



Organization	Yes or No	Question 1 Comment
		CIAs be against a proposed requirement? On the other hand, if a high cost for a marginal return on reliability, or better stated, if the cost does not materially mitigate risk, isn't that the purpose of the CEAPattempting to preempt further development of such requirements? Such a preemption we enthusiastically embrace but with reservations as outlined. In terms of offering suggestions on how to address our concerns, it is unclear how the normalization issue is resolved without adding further complexity to creation of the CIA-complexity that we oppose.

Response: Thank you for your comment. Phase 1 of the proposed CEAP seeks "order of magnitude" type of information. It is not appropriate to seek feedback on more specific information at this time because the SAR has not been approved for development and no individual requirements have been drafted.

The reference to regional reliability impacts in the CEAP does not necessarily have to be interpreted as referring to NERC regions. If appropriate, and identified in the responses to the questionnaires, the CEAP Report could identify potential impacts based geographical and topological considerations.

As noted in response to your first question, Phase 1 of the proposed CEAP seeks "order of magnitude" type of information.

Phase 2, where more detailed information related to the cost of implementation, maintenance, and ongoing compliance efforts is sought, occurs after the individual requirements have been drafted and vetted. The process is not intended to be burdensome. It is not mandatory that entities respond to the CEAP questionnaires. It is an opportunity for the industry to comment on the cost of implementation, maintenance, and ongoing compliance efforts vs. reliability benefits. The results of the CEAP are not the sole basis for a decision as to whether a standard project should be pursued, but rather one additional piece of information to be considered.

It is NERC's intent to pilot the CEAP project to determine if any potential revisions need to be made.



2. Do you agree with the approach in the proposed NERC Cost Effective Analysis Process (CEAP)? If you disagree, please explain your concerns and provide specific suggestions for addressing the concerns.

#### **Summary Consideration:**

Many commentators expressed similar comments. Generic replies to those comments are provided below:

- 1. CEAP was developed by the industry representative CEAP drafting team based on an NPCC draft proposal.
- 2. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.
- 3. The purpose of CEAP is to solicit input from industry to identify more cost effective ways to achieve the same or better reliability outcomes at equal or lower cost. All sectors, including both large and small entities, will be encouraged to contribute their inputs to the CEAP process. Small Entities may choose to provide input through their trade organizations.
- 4. The Phase 1 (CIA) and Phase 2 (CEA) surveys will both solicit industry input concerning estimated costs and potential reliability benefits of the proposed standard. The Phase 1 SAR estimate is a scoping approximation. Applicable analysis will focus on the incremental costs and benefits for implementing any proposed new or revised reliability standard.
- 5. Industry will have the opportunity to submit suggestions for alternative approaches for achieving the same or greater level of reliability benefit at the same or lower cost. Alternative approaches adopted by the standard drafting team will also be evaluated using the CEAP process.

Organization	Yes or No	Question 2 Comment
PNGC Comment Group	Yes	
Response: Thank you for your support.		
ELCON and Occidental Energy Ventures	Yes	Comments: Industrial Consumers are comfortable with the approach. It is very important to get started at least attempting to estimate the additional costs and benefits of Reliability Standards. However we believe that this must be an iterative process. The intent is to conduct a rough-order Cost Impact Analysis (CIA) and later a more detailed Cost Effectiveness Assessment (CEA). To us, this means focusing on the expected changes in costs and BES benefits (or marginal costs and benefits - not total costs and benefits). If real life experience demonstrates that the job is much bigger



Organization	Yes or No	Question 2 Comment
		than originally anticipated, NERC should be ready to re-evaluate the approach. After the standard takes effect, the actual improvement in BES reliability must be measured against the projected numbers. These findings can be used to develop even better methods to estimate costs and benefits in future initiatives.
need to be made. We recognize that a provide value in determining whether	n evaluation of the Court of th	thent to pilot the CEAP project to determine if any potential revisions the actual implementation costs as compared to projected costs may CEAP process are necessary. However, at this time, NERC does not pidentified costs, although this may be considered in the future as the
MRO NSRF	Yes	This approach is needed within the development of a Standard, but should not slow down the time that will be allotted for developing a Standard. It may be difficult to get a true Cost Impact Analysis (CIA) based merely on a SAR. Usually each requirement will need to be reviewed for the CIA and Cost Effectiveness Assessment (CEA). The NERC SC may wish to "practice" this CEAP on the next newly form SAR which would provide real feedback from the SAR DT and SDT. One key issue is whether this CEAP will represent a cross section of all sectors plus consider the impact to small as well as the big entities. (How does the process adjust for this?)
believes that the field testing process to development process to accommodate	will provide insigle CEAP. After succ	of CEAP prior to full implementation is planned. The drafting team ht into what changes, if any, may be required in CEAP and the standard cessful field testing, the CEAP may be revised and ultimately will be I, as appropriate, for all proposed new and revised standard proposals.
Bonneville Power Administration		BPA believes that at the time the SAR is being submitted, the requester of the SAR should be required to identify the potential risks that would be mitigated, the potential cost to the industry, and the potential benefits to the industry. This puts the burden of doing some research back on the requester. BPA believes that 30 days may not be an adequate amount of time to review the SAR, given the suggested change. BPA believes that the current process for accepting a SAR only deals with whether or not there is a technical justification for the request and appreciates that the new process would



Organization	Yes or No	Question 2 Comment
		allow the NERC SC to reject the SAR if the cost outweighs the reliability benefits.
believes that the field testing process will development process to accommodate CE	provide insigh AP. After succ	f CEAP prior to full implementation is planned. The drafting team into what changes, if any, may be required in CEAP and the standard cessful field testing, the CEAP may be revised and ultimately will be a appropriate, for all proposed new and revised standard proposals.
SPP Standards Review Group	Yes	While we may concur with the process we do have concerns that incorporating such a process into the already very involved and complicated standards development process that seems to take forever to develop new or revised standards, that cost analysis could become burdensome and slow the standards process even more. We need to be sure that precautions are taken and efficiencies realized which allow for the inclusion of the cost analysis process without impeding the overall standards process.  At the top of page 4 the Standards Committee Process Subcommittee (SCPS), or some other Standards Committee (SC) designee, is assigned the task of working with NERC Staff in developing the Phase 1 CIA and Phase 2 CEA reports. Given the analytical, somewhat technical and definitely financial nature of these reports, we wonder if the SCPS is the proper place for this type of analysis. Perhaps another subcommittee under the SC should be created to fill this role or at least an ad hoc task force could be established to take on the task. The issue with an ad hoc task force would be continuity from one analysis to another since this will be a continuous process for all new/revised standards.  At the bottom of page 4, under 'The final CEAP Report' section, bullets iv. and v. seem to address technical merit of the proposed standard. Aren't these considerations more in the realm of the Reliability Issues Steering Committee (RISC) as currently being proposed in revisions to the Standards Processes Manual? If so, wouldn't this be a duplicated effort or will these items come from the RISC?  On page 5 under the first bullet of the 'NERC Procedure for Cost' the following phrase is used to describe the assignment of a project which has been turned down for consideration as a standard:'to the appropriate



Organization	Yes or No	Question 2 Comment
		NERC standing committee (OC, PC or CIPC) or working group for assignment.' The [SCPS?] subcommittee has been omitted in the phrase and should be included.
believes that the field testing process w	ill provide insig CEAP. After suc	f CEAP prior to full implementation is planned. The drafting team ht into what changes, if any, may be required in CEAP and the standard ccessful field testing, the CEAP may be revised. The CEAP Phases will revised standard proposals.
The CEAP is within the purview of the N	ERC Standards	Committee.
The RISC charter, membership and procresponsibilities and mandate of the RISC		yet been finalized and the CEAP may need to reflect the final
Technical considerations are outside the	e scope of the S	CPS.
Dominion	No	The CEAP appears to be very subjective and seems to rely heavily on NERC Staff to evaluate the industry responses. If NERC Staff views the industry data as insufficient, the document states that "efforts will be made to extrapolate without drawing conclusions." Additional clarity would be helpful in describing this process in the document.
is an "initial step". As there is no preced	dent for this eff n is also part of	nd and share your concern, as reflected in the CEAP description that this ort, we need to start somewhere, gain experience and then the basis for the result of this process being advisory and data gathered
Northeast Power Coordinating Council	No	As described the CEAP documentation and decision making process is complex. The actual methodology should be tested using field trials to identify areas of improvement. The field trials should be applied to a number of diverse standards to rate effectiveness. A simplified documentation package with an effective appeals process would promote effective use of the CEAP. Currently the Standards Committee is ultimately left with decision making authority over how to proceed with a Standard. The practice should be modified to include an appeals process so that if industry as a whole is opposed to a Standard there is decision making that is



Organization	Yes or No	Question 2 Comment
		beyond that of the Standards Committee alone. It must be emphasized that the CEAP and Adequate Level of Reliability are dependent on one another, and this cannot be overlooked.
Response: Thank you for your communder the terms of the NERC Standa	_	in the CEAP alters any entity's right to appeal any action or inaction al.
ISOs' Standards Review Committee	No	We agree with the need for such a process. What isn't clear is if this analysis is to be done for all new standards projects or just a subset. In general, we agree there should be a common simple triage done with all SARs to estimate their standard's respective cost and benefit. We also believe the phase 1 triage be done for NOPRs and FERC-directed standards to enable informed decisions on pursuing equally effective alternatives or requests for clarification or rehearing. Finally, with the developments in the SPIG, it isn't clear how this fits in with the steering committee.
intention to conduct an analysis on	all new standards peding and is outside	P is finalized and has been successfully piloted, it is NERC's current rojects. The appropriate forum to comment on the costs of a FERC of the scope of the CEAP. The drafting team believes that CEAP and the roceed in parallel.
G&T Cooperatives	No	The G&T Cooperatives believe the CEAP should be improved in several respects.  (1) As discussed in greater detail below in the G&T Cooperatives' response to Question 3, the first phase of the review does not appear workable during the SAR process, where specific requirements have not been fleshed out. Without knowing at the SAR stage what the specific requirements will be, the costs of implementing a Reliability Standard at that phase are not readily identifiable.
		(2) There appears to be substantial overlap between the CEAP and the decision making that already occurs in the standards development process. For example, Questions 3 & 6 under the CIA phase (in App. B. of the CEAP proposal) asks about benefits of a Reliability Standard, but these are the same questions that the NERC Staff and the Standards Committee must



Organization	Yes or No	Question 2 Comment
		evaluate when they approve a SAR for formal development of a standard. See Standards Process Manual at 12 ("A Standard Authorization Request (SAR) is the form used to document the scope and reliability benefit of a proposed project for one or more new or modified Reliability Standards or the benefit of retiring one or more approved Reliability Standards"). Similarly, Question 1 under the CEA phase (in App. B. of the CEAP proposal) asks about whether a proposed standard will achieve is reliability objective, but there are several steps in the standards development process that address that concern. See id. at 5 (requiring that standards be written to achieve their reliability objectives without undue restrictions or adverse impacts on competitive electricity markets); id. at 5-6 (recognizing that "performance-based" standards are one type of Reliability Standards that define and enforce specific reliability objectives) id. at 32 (requiring review of regional variances to see if such variances achieve the reliability objective of the underlying standard). While the G&T Cooperatives support the idea of assessing the costs and benefits of proposed standards, they would encourage NERC to structure the process to avoid duplication of those assessments that already exist in various phases of the standards development process. Such duplication could lead to wasted effort and/or contradictory assessments of the costs and benefits of proposed Reliability Standards. The CEAP should be better integrated with the existing standards development process to ensure that the assessment of cost effectiveness is itself an efficient process.
		(3) The CEAP proposal should be revised to allow stakeholders to comment on the CEA report before it is transmitted to the Standards Committee.  Under the CEAP proposal at 6, the NERC staff would have the responsibility to compile and aggregate the survey responses into a CEA report that is then transmitted to the Standards Committee for review to determine whether the Standards Committee will remand a proposed Reliability Standard back to the standards drafting team for more work, go ahead with the proposed Reliability Standard, or hold the proposed Reliability Standard in abeyance. Given that process, the CEA report prepared by the NERC staff could have a



Organization	Yes or No	Question 2 Comment
		significant impact on the standards development process. Since the CEA report will be based on individual survey submissions by stakeholders, it would be appropriate to ensure that stakeholders have an opportunity to review the report. This will enable stakeholders to verify that the NERC staff accurately interpreted the data submitted in the individual survey responses, to ensure that overall quality of the CEA report is the best possible, and to ensure that the Standards Committee's deliberations are as efficient as possible.

Response: Thank you for your comment.

- 1. The CIA is targeting egregious costs that may be associated with mitigating reliability risks and is not meant to be a detailed cost of implementation analysis.
- 2. The CEAP questions have been revised to address the issues identified. Further the questions contained in the CEAP are samples that can be revised to be specific to the SAR or standard under development. The CEAP is meant to be a guideline document and future revisions may be incorporated into the Standard Process Manual further minimizing the chance for duplication of effort.
- 3. The CEAP is not intended to add time to the Standard Development Process. The final CEAP report consists of a consolidation of the industry comments provided through the survey responses and should be considered as an informational report to be posted at the time of ballot. Industry review of the report prior to balloting will further task stakeholders and occupy resources resulting in additional delays to the development process.

SERC Standards Committee	No	(1) The approach appears to be good, but the lack of detail raises concerns
		and prevents full endorsement of the proposed process.
		(2) There is a concern that NERC will ask the industry to serve as a consultant
		to implement and maintain the CEAP.

Response: Thank you for your comment.

- 1. Further details will be added based on the results and success of the proposed field test.
- 2. Concern has been expressed that NERC should not implement and administer the CEAP. The CEAP has been revised to allow for the best use of resources for the implementation and administration of the process, allowing for flexibility in the assignment of responsibilities associated with the individual steps in the process.



Organization	Yes or No	Question 2 Comment
PPL Corporation NERC Registered Affiliates	No	a. In Step 1, the responsibility of providing a report and recommendation based upon the CIA questions in Appendix B should not rest with NERC Staff, but with industry SMEs. In Step 4, the report and recommendation should not be provided by NERC Staff, but by industry SMEs. However, NERC staff should be available to support the SMEs work.  b. Responses to the questions in Appendix B should be reported separately for each of the groups covered by the draft standard (GOs, TOs, TOPs, etc., as applicable), not as a single figure for all of industry, to help identify where standards that may be acceptable on an aggregate basis involve placing an excessive burden on one segment of the stakeholders. In addition, the cost/benefit analysis should consider different industry and organizational structures. For example, the burdens placed on a vertically-owned utility and an independent generator for a particular standard may be very different. Additionally, there are differences between ISO/RTO and non-ISO/RTO regions (e.g., black start compensation). Such differences should be considered in assessing the cost and benefits.

Response: Thank you for your comment.

- a. The CEAP has been revised to allow for the best use of resources for the implementation and administration of the process, allowing for flexibility in the assignment of responsibilities associated with the individual steps in the process.
- b. The proposed CEAP report will take into consideration the cost associated with the individual class of registered entity associated with the standard to provide the granularity needed for a meaningful assessment.

ACES Power Marketing Standards	Yes	
Collaborators		
Southwest Power Pool Regional Entity	Yes	
ARIZONA PUBLIC SERVICE COMPANY	Yes	
National Association of Regulatory Utility	Yes	The ideal is to have a fully quantified ratepayer impact analysis. However,
Commissioners (NARUC)		the proposal - as the introduction identifies - is a good "initial step" that puts
		the standards development process on the right road. We expect NERC to
		build on this process over time as experience is gained and stakeholders
		become use to calculating and providing the cost and benefit data.



Organization	Yes or No	Question 2 Comment
	g process will provide insigh	f CEAP prior to full implementation is planned. The drafting team at into what changes, if any, may be required in CEAP and the standard
PacifiCorp	No	PacifiCorp is uncomfortable that the proposed NERC CEAP is being developed in a silo and does not properly account for ongoing activities of NERC and other regulatory bodies, such as those activities associated with the Adequate Level of Reliability (ALR) development and other reliability cost and benefit assessments.  Another general concern is that a micro-level evaluation of any given proposed revised standard may not reflect the choices, value, or full impact that standard may have if another complementary standard were being considered. Draft standards are typically developed apart from other emerging standards; continuing to propose more inter-related standards that are not coordinated with other standard drafting efforts will only undermine the effectiveness of the process.  Finally, PacifiCorp is concerned about the costs incurred by individual entities for developing cost estimates and their value as part of the CEAP. Regulatory bodies continue to add to registered entities' administrative costs that add no appreciable value, but yet are solely developed and implemented for the purpose of proving a case for maintaining compliance. These efforts generally have substantial costs to the resource-strapped industry and its customers with no apparent reliability benefit. The CEAP should clearly outline significant benefits for the industry to encourage the voluntary participation needed among registered entities.

Response: Thank you for your comment. The CEAP is being developed in parallel with other reliability related activities and individuals of the CEAP Team are active participants in these efforts (such as: ALR Task Force, BES Definition SDT, etc.) and are coordinating these ongoing activities to ensure consistency in the final work products.

Coordinating individual standard projects is the responsibility of the NERC staff and the SC.

The CEAP is concerned with implementation and ongoing costs of new and revised Reliability Standards and is a voluntary process which places no formal obligation on stakeholders to participate. Evaluation of costs associated with participation in



Organization	Yes or No	Question 2 Comment
the CEAP process is beneficial to the developed in direct response to the	•	ost effective standards to address reliability concerns. The CEAP has been d SPIG recommendations.
Salt River Project	No	The first two paragraphs of the Executive Summary outline an excellent set of two assessments focused first on feasibility and then on cost. However the Phase 1 and Phase 2 definitions, questions, and information to be collected outlined in the proposed standard stray from the intent of the first two paragraphs of the Executive Summary. Therefore, we recommend the first assessment be re-titled "Feasibility Assessment" to reflect the intent of the CEA Process. See our answer to Question #3 below for more details.
		grees with the commenter. The CIA (Phase 1) of the process is to simply I reliability risk not to determine if a standard is feasible.
Southern Company	Yes	
National Rural Electric Cooperative Association (NRECA)	No	NRECA has the following questions that need to be answered in order for us to determine our support for the approach in the CEAP.  1. Which department at NERC developed/is responsible for the draft CEAP?  2. According to the documents provided for review NERC staff will approve the CEAP. Please identify the NERC staff that will have this role and provide the basis/measure that NERC staff will use for such approval?  3. According to the documents provided for review the CEAP would allow for
		the industry to propose a less costly and equally as effective/efficient
is within the purview of the NERC S reject a standard through the stand	Standards Committed dard development proportunity to comme	the industry to propose a less costly and equally as effective/efficient standard or requirement for consideration. However, there may be instances where stakeholders believe the standard is not needed regardless of the cost



Organization	Yes or No	Question 2 Comment
Response: Thank you for your commen	nt. See the summ	nary considerations.
Entegra Power Group LLC	Yes	All bureaucratic processes seem to always increase in size and cost.  Therefore, even the CEAP should continually be limited and assure cost effectiveness in its objectives.
Response: Thank you for your commen	t.	
Central Lincoln	Yes	
Cowlitz County PUD	Yes	
Trans Bay Cable, LLC	No	Very arbitrary in nature. A matrix type system needs to be developed so people are reporting on the same "aspects" of the standard. Getting an idea of where the costs lie should be an important aspect of this process. Due to the "legal" form most standards are written in, it takes a lot of technical, operational and legal review just to understand what the standard is asking, what it's trying to achieve and you've not address the VSLs or VRFs. Knowing how much each part of the approval process through implementation and upkeep need to be looked at to better ID where costs lie.
		the Reliability Standard being developed.
Alcoa, Inc.	Yes	
LCRA Transmission Services Corporation	Yes	
American Transmission Company, LLC	No	This approach is needed within the development of a Standard; however, timeframes need to be addressed. How long will or should it take to complete these analyses (both Phase 1 and 2)? Should time periods be assigned?  Furthermore, the process should not slow down the time that will be allotted for developing a Standard. It may be difficult to get a true Cost Impact Analysis (CIA) based merely on a SAR. Usually each requirement will need to be reviewed for the CIA and Cost Effectiveness Assessment (CEA). The NERC SC may wish to "practice" this CEAP on the next newly formed SAR which would provide real feedback from the SAR DT and SDT. Also, ATC is



Organization	Yes or No	Question 2 Comment
		concerned whether this CEAP will represent a cross section of all sectors plus consider the impact to small as well as the big entities. (How does the process adjust for this?)
planned. The CEAP Team believes t required in CEAP and the standard	hat the field testing development proces	process will provide insight into what potential changes, if any, may be so to accommodate CEAP. After successful field testing, the CEAP may be riate, for all proposed new and revised standard proposals.
Hydro-Quebec TransEnergie	Yes	Hydro-Quebec TransÉnergie agree, but we feel that this process is intimately tied to the ALR process. In other words, what can be done best to obtain an adequate level of reliability.
Response: Thank you for your comi	ment. The CEAP effo	rts are closely coordinated with the ALR Task Force efforts.
Ameren	Yes	We agree with need for the CEAP process, but have a concern that this may slow down the overall standards' development process. What would be the time line to complete Phase 1 and Phase 2? Would the CEAP process be used for all standards or some standards? We propose a field-testing of the CEAP process on next couple of SAR and/or Standards.
planned. The CEAP Team believes t required in CEAP and the standard	hat the field testing development proces	pary considerations. Piloting of CEAP prior to full implementation is process will provide insight into what potential changes, if any, may be so to accommodate CEAP. After successful field testing, the CEAP may be riate, for all proposed new and revised standard proposals.
Entergy Services	Yes	
NextEra Energy Inc	No	NextEra appreciates the effort the team has made to develop a NERC Cost Effective Analysis Process (CEAP) and field test of the approach in Northeast Power Coordinating Council region. NextEra however believes the current CEAP needs refinement to not be overly burdensome to Registered Entities, NERC staff, and be more efficient, practical and useful. Specifically, NextEra requests that the following refinements be implemented:  A. As currently drafted the CEAP relies on Registered Entities providing information and NERC staff analyzing information for every proposed or



Organization	Yes or No	Question 2 Comment
		revised Reliability Standard. Such an approach does not seem practical in light of the well known resource constraints in the industry and at NERC. As an alternative, as noted above, NextEra believes leveraging the expertise in the NERC Planning and Operating Committee to conduct an initial screen of all proposed or revised Reliability Standards can provide the same results the CEAP is seeking without further burdening registered entities and NERC staff. To the extent data from Registered Entities is needed, NextEra suggests that the data be solicited from a representative cross section of Registered Entities, perhaps 5% of all Registered Entities, and extrapolated to industry-wide level. Sampling could rotate among Registered Entities so that the burden is shared.  B. Implementation of a bright line, objective cost-benefit test. In terms of projected benefit, the appropriate criterion would the expected incremental reduction in lost load in MWh from adopting a proposed Reliability Standard times the value of lost load in \$/MWh. Without a stated benefit test, the CEAP appears only to be an evaluation of cost and inherently could not be a measure of "cost effectiveness. NextEra notes that the incremental value of a new Reliability Standard is likely to be very low. The totality of non-weather transmission-related load loss averages less that 10,000 MW per year (NERC 2012 State of Reliability, Figure 32). Using a ballpark average load loss of 3 hours, and the value of lost load of \$3,500/MWh accepted by FERC in a Midwest ISO order, 123 FERC Ŷ61,070, at P 26 (2008), the total cost of all transmission-related outages is about \$100 million. There are an estimated 3,800 requirements currently in effect, so there is about \$26,000 of lost load for every requirement. Even this dollar amount is too high because there is likely a diminishing marginal return from additional requirements, and some level of outages is presumably unavoidable no matter how comprehensive the inventory of requirements may become. The cost effec



Organization	Yes or No	Question 2 Comment
		C. The refinement of the number of questions asked and data requested of Registered Entities. Even with the implementation of an initial screening tool, as suggested above, the CEAP should be refined to focus on only a few essential questions and requests for data. If the questions and requests for data are not refined, the CEAP will likely not be successful, because Registered Entities do not possess the resources to respond to all the CEAP data and informational requests. In addition, as noted above, a sampling process should be used rather than surveying the entire universe of Registered Entities. (See response to question 4 for a specific proposal)D. NextEra notes that as part of the Adequate Level of Reliability there was a socioeconomic paper submitted that addresses similar issues to that set forth in the proposed CEAP. NextEra suggests that the CEAP team combine its efforts with the socioeconomic paper team so that there are not two similar efforts occurring at the same time.

A. The PC and OC currently do not have the resources to assist with implementation of the CEAP process. The CEAP Team agrees with the commenter in regards to available resources at NERC and has revised the document to emphasize the process rather than the responsibilities associated with the completion of various steps within the process.

B. The CEAP analysis is meant to identify the implementation costs, identify the mitigation of risks, and allow the industry to propose alternative methods of achieving the reliability objective of the proposed standard. It is not establishing a bight-line concept for decision making purposes and is designed to be purely informational in nature.

C. The survey questions provided in the CEAP are sample questions which will be revised on a case-specific basis. In addition, piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.

Public Service Enterprise Group	No	A cost analysis itself can be costly to perform. Each SAR does not necessarily
		need a cost assessment - for example, SARs that are a result of FERC
		directives. Second, we do not believe that SARs generally have sufficient
		detail to perform a cost analysis since the standard is yet to be written. A



Organization	Yes or No	Question 2 Comment
		decision to perform a cost analysis at the SAR phase should be delegated to the Operating Committee, Planning Committee, or Critical Infrastructure Protection Committee depending on the technical area impacted. Other cost analysis decisions could be deferred to stakeholders via comments when the standard (not the SAR) is first posted for comment. For example, if 2/3 of the commenters ask for a cost-impact analysis, then one should be performed. The Standards Process Manual should be revised to include criteria on when a cost analysis is warranted.

Response: Thank you for your comment. The CEAP process implementation plan in conjunction with the SC will determine when and what parts of the CEAP will be used. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. Future incorporation into the Standards Process Manual will be considered.

Liberty Electric Power	Yes	
City of Austin dba Austin Energy	Yes	
ISO New England	No	While we agree with parts of the approach, as described by the material provided, the CEAP documentation and decision making process appears complex. The actual methodology should be tested using field trials to identify areas of improvement. The field trials should be applied to a number of diverse standards to rate effectiveness. In the current process the Standards Committee is ultimately left with decision making authority over how to proceed with a Standard. The practice should be modified to include an appeals process so that if industry as a whole is opposed to a Standard there is decision making that is beyond that of the Standards Committee alone. In the end a simplified documentation package with an effective appeal process would promote effective use of the CEAP goals.

Response: Thank you for your comment. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will



Organization	Yes or No	Question 2 Comment
then be used, as appropriate, for all pr	oposed new and	revised standard proposals.
Exelon Corporation	No	Additional information is necessary to properly assess the CEAP proposal. Please see response to Q5.
Response: Thank you for your commer	nt.	
Puget Sound Energy, Inc.	Yes	Puget Sound Energy agrees in theory with the proposed NERC Cost Effective Analysis however, what appears to be missing from the draft CEAP is a weighted analysis of entity responses based on size of the entity or region in which they are located. Different regions have different risks to reliability, and those regional respondents' answers should be taken into consideration when determining the cost & impact of implementing a proposed standard or requirement. Perhaps this is part of the analysis performed by NERC when reviewing the entity responses, but the proposed CEAP does not clearly indicate what analysis will be performed or if that analysis will be shared with entities prior to forming a Standards Drafting Team. Potential timeframes for each phase of the CEAP have not been addressed. If entities are not given adequate time to formulate well developed responses, the likelihood of entities overestimating potential costs may increase.
the field testing process will provide in	sight into what p	AP prior to full implementation is planned. The CEAP Team believes that potential changes, if any, may be required in CEAP and the standard cessful field testing, the CEAP may be revised. The CEAP Phases will revised standard proposals.
Electricity Consumers Resource Council (ELCON)	Yes	We could have answered "yes" or "no." The overall approach seems to be very subjective, but it is not clear if a more rigorous approach is even feasible given the huge uncertainties associated with "benefits" and the fact that utility investments tend to be "lumpy" out of necessity. Nonetheless, ELCON appreciates the emphasis on cost determination and achieving the most cost effective solutions.
Response: Thank you for your commer	nt.	
MISO	Yes	MISO agrees with the need for such a process. What is not clear is whether



Organization	Yes or No	Question 2 Comment
		this analysis is to be done for all new standards projects or just a subset of those projects. To this end, MISO respectfully submits that there should be a basic cost assessment performed for all SARs to estimate the proposed standard's potential costs and benefits. This assessment would also be performed for all proposed standards revisions and additions, including those changes being proposed in response to Federal Energy Regulatory Commission (FERC) directives. The cost assessments provided at the commencement of a project should be coordinated with the activities of the Standards Process Input Group to ensure synergies, and avoid duplication, of effort.
when and what parts of the CEAP will be a believes that the field testing process will standard development process to accommend Phases will then be used, as appropriate, Standards Process Manual will be consider	used. Piloting provide insigh nodate CEAP. for all proposered. There is	dess implementation plan in conjunction with the SC will determine of CEAP prior to full implementation is planned. The CEAP Team not into what potential changes, if any, may be required in CEAP and the After successful field testing, the CEAP may be revised. The CEAP and new and revised standard proposals. Future incorporation into the no duplication of efforts with respect to the analysis of costs by the eing moved forward in response to the SPIG recommendations.
New England States Committee on Electricity	Yes	NESCOE believes that the CEAP presents a reasonable initial approach to incorporating cost considerations as part of the reliability standards development process. Because achieving the right balance of cost and reliability is a difficult task, NESCOE expects that the CEAP will be subject to continued reassessment and refinement following its implementation. We look forward to continuing to work with NERC on modifications to this critical decision-making tool, and we offer below some preliminary suggestions:  (1) With respect to Phase One, there is no information provided in the draft CEAP regarding the decisional standard that the Standards Committee will apply in determining whether the standard development process for a particular proposed standard should continue to be pursued into Phase Two. Clarity should be provided in this area.
		(2) Also regarding Phase One, because the CIA serves as an initial screen to



Organization	Yes or No	Question 2 Comment
		determine whether the standard development process should continue to be pursued or whether another approach is warranted, the survey questions for Phase One (reflected in Appendix B) should attempt to assess the probabilistic risk that an event will occur. One suggestion would be to ask Question #6 from the Phase Two survey at the Phase One stage.
		(3) On page 4 of the draft CEAP, various sources of information are listed that staff may rely on to develop a report or make a recommendation in connection with the CEAP. NESCOE believes that interested entities should have a full understanding of all assumptions and extrapolations used in such a report or relied on to make a recommendation. Accordingly, rather than listing only those assumptions or extrapolations "which may skew the results" of a report (see item vii. on the top of p. 5), the report should lay bare all non-protected information relied upon, either in the appendix or elsewhere. While we agree that it would be advantageous for NERC staff to identify such data they believe could "skew the results" of a report, providing access to all information used in the report allows interested entities an opportunity to evaluate whether other assumptions and inputs into the report might similarly warrant heightened scrutiny.
		(4) Rather than present findings solely in the form of broad national averaging, NERC staff should be diligent in ensuring that cost-benefit analyses take into account regional differences in existing infrastructure or other areas that could distort the costs and associated benefits of a proposed reliability standard. Disparities between regions should be identified and presented in an analysis or report.
		(5) The draft CEAP also states on the bottom of page 4 that the final CEAP report should consider, in part, the total number of respondents. In the interest of both transparency and clarity, such a CEAP report should provide greater detail in this area. At minimum, the report should include the number of responses received and a sector and regional breakdown of those responses. The credibility of the CEAP will be enhanced by allowing



Organization	Yes or No	Question 2 Comment
		interested entities to evaluate the breadth and diversity of responses received.
		(6) Similarly, to promote greater transparency and engagement, NERC should include on its website all CEAP reports issued, listed in chronological order.

- 1. The CEAP is not intended to establish bright-line decisional mechanism. The CEAP is intended to provide implementation costs, identify reliability risks, and provide stakeholders an opportunity to identify alternative methods of achieving the reliability objective of the proposed standard.
- 2. The CEAP Team agrees with the commenter and revised the question in the CIA as follows:

"What level of reliability related risk exposure of the interconnected transmission network is being addressed by this standard? (i.e. High, Medium, or Low)".

- 3. The CEAP Team agrees with the commenter and added the following to the process:
- "If the evaluation required extrapolation, estimation, or averaging of data to provide useful information, the methods will be documented in the CEAP report for reference."
- 4. The CEAP Team agrees with the commenter and has revised the process to include geographic and topological considerations.
- 5. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.
- 6. Preliminary and final CEAP reports will be posted on the standard project page and become a matter of record.

Massachusetts Department of Public Utilities	Yes	The Mass DPU believes that the CEAP presents a reasonable initial approach
		to incorporating cost considerations as part of the reliability standards
		development process. Because achieving the right balance of cost and
		reliability is a difficult task, the Mass DPU expects that the CEAP will be
		subject to continued reassessment and refinement following its



Organization	Yes or No	Question 2 Comment
		implementation. We look forward to continuing to work with NERC on modifications to this critical decision-making tool, and we offer below some preliminary suggestions:
		(1)With respect to Phase One, there is no information provided in the draft CEAP regarding the decisional standard that the Standards Committee will apply in determining whether the standard development process for a particular proposed standard should continue to be pursued into Phase Two. Clarity should be provided in this area.
		(2)Also regarding Phase One, because the CIA serves as an initial screen to determine whether the standard development process should continue to be pursued or whether another approach is warranted, the survey questions for Phase One (reflected in Appendix B) should attempt to assess the probabilistic risk that an event will occur. One suggestion would be to ask Question #6 from the Phase Two survey at the Phase One stage.
		(3)On page 4 of the draft CEAP, various sources of information are listed that staff may rely on to develop a report or make a recommendation in connection with the CEAP. The Mass DPU believes that interested entities should have a full understanding of all assumptions and extrapolations used in such a report or relied on to make a recommendation. Accordingly, rather than listing only those assumptions or extrapolations "which may skew the results" of a report (see item vii. on the top of p. 5), the report should lay bare all non-protected information relied upon, either in the appendix or elsewhere. While we agree that it would be advantageous for NERC staff to identify such data they believe could "skew the results" of a report, providing access to all information used in the report allows interested entities an opportunity to evaluate whether other assumptions and inputs into the report might similarly warrant heightened scrutiny.
		(4)Rather than present findings solely in the form of broad national averaging, NERC staff should be diligent in ensuring that cost-benefit



Organization	Yes or No	Question 2 Comment
		analyses take into account regional differences in existing infrastructure or other areas that could distort the costs and associated benefits of a proposed reliability standard. Disparities between regions should be identified and presented in an analysis or report.
		(5)The draft CEAP also states on the bottom of page 4 that the final CEAP report should consider, in part, the total number of respondents. In the interest of both transparency and clarity, such a CEAP report should provide greater detail in this area. At minimum, the report should include the number of responses received and a sector and regional breakdown of those responses. The credibility of the CEAP will be enhanced by allowing interested entities to evaluate the breadth and diversity of responses received.
		(6) Similarly, to promote greater transparency and engagement, NERC should include on its website all CEAP reports issued, listed in chronological order.

- 1. The CEAP is not intended to establish bright-line decisional mechanism. The CEAP is intended to provide implementation costs, identify reliability risks, and provide stakeholders an opportunity to identify alternative methods of achieving the reliability objective of the proposed standard.
- 2. The CEAP Team agrees with the commenter and revised the question in the CIA as follows:
- "What level of reliability related risk exposure of the interconnected transmission network is being addressed by this standard? (i.e., High, Medium, or Low)."
- 3. The CEAP Team agrees with the commenter and added the following to the process:
- "If the evaluation required extrapolation, estimation, or averaging of data to provide useful information, the methods will be documented in the CEAP report for reference."
- 4. The CEAP Team agrees with the commenter and has revised the process to include geographic and topological considerations.
- 5. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide



	Yes or No	Question 2 Comment
	the CEAP may be re	uired in CEAP and the standard development process to accommodate evised. The CEAP Phases will then be used, as appropriate, for all
6. Preliminary and final CEAP report	s will be posted on	the standard project page and become a matter of record.
American Public Power Association	Yes	APPA agrees with the approach, but the document needs further editing to clearly explain the process. APPA believes there needs to be a structure within the standards drafting process that oversees the consistent application/evaluation of the results of the CEAP. This structure could be an industry lead working group under the standards committee.
the field testing process will provide	e insight into what pate CEAP. After suc	AP prior to full implementation is planned. The CEAP Team believes that potential changes, if any, may be required in CEAP and the standard cessful field testing, the CEAP may be revised. The CEAP Phases will revised standard proposals.
KCP&L	Yes	1. In concept, we agree with the approach of the CEAP. However, there is a question of whether the Standard Authorization Request (SAR) will be



Organization	Yes or No	Question 2 Comment
		requirement for continuing in the drafting process; Two, from a purely statistical view, normalization will not be served by the extrapolation of data, basically providing a number of little value for purposes of decision-making.  We offer that NERC Staff not offer extrapolated data to the NERC Board of Trustees (NERC BOT). If there is insufficient data, let NERC Staff so state therefore decisions are not made with insufficient or incomplete data.  3. We believe the process would be well served if the position of stakeholders were clearly stated during the CEAP process. We suggest requiring during the comment period stakeholders affirmatively indicate they are opting out of completing a CEA and/or, do not believe the cost of implementation is material. In the event 65% of the voting members opt out or state the cost is immaterial, no CEAP document is presented to NERC B.O.T. in consideration of the requirement. Furthermore, we suggest NERC Staff may not present CEA data to the NERC B.O.T. in consideration of a requirement in the event fewer than 35% of the voting members provide a CEA.

- 1. The CIA (Phase 1) is intended to identify egregious costs, not to identify detailed costs associated with the implementation of a proposed standard.
- 2. If the evaluation required extrapolation, estimation or averaging of data to provide useful information, the methods will be documented in the CEAP report for reference.
- 3. The CEAP Team disagrees with the commenter and believes that any amount data/information provides some benefit to support the SDT efforts.



3. The NERC CEAP incorporates two separate phases of reviews: • The first phase is the Cost Impact Analysis (CIA) which is intended to be an assessment to determine the relative cost impacts of a particular proposed course of action. This is not intended to be a comprehensive cost benefit analysis but rather to identify potential cost magnitude and achievement of ALR and risk mitigation benefits • The second phase is the Cost Effectiveness Assessment (CEA) which may be considered a more detailed assessment whose purpose is to provide information about the relative effectiveness and cost impacts of different approaches to eliminating disparities, increasing life expectancy or of any program or initiative and to provide the industry to offer more cost efficient alternatives to achieve the same reliability objective of the standard. Do you agree with the 'two separate phases'? If you disagree, please provide suggested changes.

## **Summary Consideration:**

The majority of the commenters support the two phase approach of the CEAP.

Commenters expressed concerns related to the responsibilities identified in the process. The CEAP document has been revised to emphasize the process and not assign responsibilities for the individual steps. The pilot projects will provide the CEAP Team with guidance on how to best assign responsibilities in the future.

Organization	Yes or No	Question 3 Comment
PNGC Comment Group	Yes	
ELCON and Occidental Energy Ventures	Yes	Comments: Industrial Consumers are comfortable with the approach. During the first stage, the rough-order CIA approximation will be sufficient to determine whether the initiative is viable and that development should begin. When requirements have been proposed, the detailed CEA analysis can assure that the original estimates were viable and that the project should move ahead. In both cases, those conducting the CIAs and CEAs should focus on the marginal costs and benefits as the almost infinite "benefits" of avoiding a cascading outage could be used to "justify" nearly any cost.

Response: Thank you for your comment. The drafting team agrees that the goal of this effort is to improve the industries focus on reliability and to avoid the detrimental effects of instability, separation and cascading outages. The intent of the CEAP is to identify costs associated with implementation and the associated reliability risk mitigation; not to quantify benefits or justify costs. The CEAP report provides information for consideration by the SC and the SDTs.

We agree that the details in the CEA analysis will insure consistency with the original CIA estimate; however the CEA phase will



Organization	Yes or No	Question 3 Comment
include additional detail not included in the CIA phase.		
MRO NSRF	Yes	Please review the responses provide in question 2 of the comment form and another key issue is timeframes. How long will or should it take to complete these analyses (both Phase 1 and 2)? Should time periods be assigned?

The time involved to complete the CEAP is one factor that will be analyzed in the pilot process. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. The duration of the CEAP Process is solely dependent on the duration of the standard development project to which it is being applied.

Bonneville Power Administration	Yes	
SPP Standards Review Group	Yes	
Dominion	No	Dominion does not agree that the CEAP could be conducted in two separate phases. The First Phase questions are being posted during the Standard Authorization Request (SAR) stage of the standard project. Typically a SAR is more conceptual and has not been refined into requirements. Therefore, questions related to requirements (Appendix B CIA Questions 4 & 6) appear premature. For the same reasons, it would be difficult at this stage to determine if the standard (since it does not exist) would achieve an adequate level of reliability or estimate potential cost impacts (Appendix B CIA Questions 2 & 3), even at a high level. At best, Dominion believes that Appendix B CIA Questions 1 & 5 could be answered at this stage, although providing little if any estimated cost benefit. For these reasons, Dominion suggests that CIA at the SAR stage would be ineffective and recommends that the CIA and CEA question should be combined and conducted once the standard requirements are developed enough for industry to adequately gauge cost impact.

Response: Thank you for your comment. The CEAP project team believes there is sufficient merit and support for the two Phases. The CIA process is a very high level review meant to identify egregious costs and the CEA provides a more in depth cost



Organization	Yes or No	Question 3 Comment
evaluation as identified in the revised	CEAP draft.	
Northeast Power Coordinating Council	Yes	It appears to be appropriate to have two separate phases. As stated in the write- up, this would allow for changing the approach from developing a mandatory standard to instead providing a technical guideline or whitepaper if the cost/benefit of a standard is inadequate. In cases where a standard was deemed unnecessary the workload associated with cost development would be reduced.
Response: Thank you for your support	rtive comment.	
ISOs' Standards Review Committee	Yes	We agree with the two separate phases. In fact, we believe the initial phase should be done by a group of SMEs, under the direction of the SC or RISC prior to the assembly of a drafting team. The first-cut analysis should be posted along with the SAR. Comments on the SAR and the analysis would help determine the value and need for the proposed standard.
Response: Thank you for your comm	ent.	
considered at a later date. The use of contemplated due to concerns with e final scope of the RISC charter is one implementation is planned. The CEAP changes, if any, may be required in CI	FSMEs at this stace at this stace at the defactor that could ream believes EAP and the sta	use the best information possible and using SMEs as you describe may be tage of the current standard development process is not required or evelopment time of standards and additional administrative burdens. The d also influence this decision in the future. Piloting of CEAP prior to full that the field testing process will provide insight into what potential indard development process to accommodate CEAP. After successful field will then be used, as appropriate, for all proposed new and revised
G&T Cooperatives	No	The G&T Cooperatives believe that the two phases as they are outlined in the CEAP proposal do not appear to be workable.  (1) In particular, the CIA process which takes place at the SAR stage may occur too early in the standards development process to yield any useful cost information. It would be difficult, if not impossible, to assess the costs of a proposed Reliability Standard at the SAR approval stage of the standards development process, because at that time, specific requirements have not been written. Accordingly,



Organization	Yes or No	Question 3 Comment
Organization	Yes or No	there is no basis at that stage to estimate costs.  (2) The G&T Cooperatives support identification of costs at the earliest possible stage in the standard development process, the CIA stage seems better served to assess and quantify the benefits, such as reliability, financial or corporate security benefits, that are anticipated to result from the development of a Reliability Standard. The assessment of estimated costs should be moved to a later stage in the standards development process, when specific proposed requirements have been written and when there is a basis for making cost estimates. This
		assessment can occur at the CEA phase, or better yet, the assessment of costs should take place at a middle phase after the initial drafting of the requirements but before the proposed Reliability Standard is ready for ballot (and while there is still an opportunity to consider alternative requirements).
		(3) G&T Cooperatives would also note that the CEAP proposal seems only to provide for considerations of alternatives at the CEA phase, which may be too late in the process. See CEAP Proposal at Appendix A (Question 2 under Typical CEA Technical Survey Questions and Question 3 of "Typical" CEA Cost and Implementation Questions). As noted above, while the SAR approval process may be too early for consideration of specific requirements or their alternatives, that early stage in the process may be appropriate for consideration of the anticipated benefits of a possible Reliability Standard as well as alternatives to having a standard (such as the development of an industry advisory or recommendation as
		part of NERC's alert process). It would also be helpful during the drafting stage to consider the costs of alternative requirements. This would further support the idea, noted above, that there should be a middle phase of the CEAP to assess cost information about specific requirements and their alternatives sometime after the SAR has been approved but before the proposed Reliability Standard and the CEA Report are presented to the Standards Committee. In essence, the consideration of alternatives is important to ensuring that the Reliability Standards are as cost effective as possible and should occur throughout the standards development process (not just at the end).

Response: Thank you for your comment. The CEAP project team believes there is sufficient merit and support for the two



Organization	Yes or No	Question 3 Comment
revised CEAP draft. Piloting of CEAP pr process will provide insight into what pe	ior to full imp otential chang iccessful field	and the CEA provides a more in depth cost evaluation as identified in the lementation is planned. The CEAP Team believes that the field testing ges, if any, may be required in CEAP and the standard development testing, the CEAP may be revised. The CEAP Phases will then be used, as and proposals.
		questions associated with the CIA and CEA phases. Based on the content entify alternatives to meeting the proposed reliability objective.
SERC Standards Committee	No	(1)Additional detail is needed before we can endorse the proposed process. (2) As stated on the CEAP project web page, the proposed process does not include a Cost Impact Analysis (CIA) for current standards that are being revised. There may be cases where a CIA may be appropriate for update of some standards, especially for some of the Version 0 standards that have not been approved by FERC. This should be an option, subject to NERC SC approval on a case-by-case basis.
consideration. Piloting of CEAP prior to will provide insight into what potential	full implement changes, if an eld testing, the	nal details have been provided in the second draft of the CEAP for your ntation is planned. The CEAP Team believes that the field testing process y, may be required in CEAP and the standard development process to e CEAP may be revised. The CEAP Phases will then be used, as and proposals.
current projects that are in various stag the NERC SC to apply CEAP in cases whe	es of developere the inform	o apply CEAP to all standards projects. The intent is to pilot CEAP with ment. As we gain experience, a set of criteria may emerge that will allow ation would be most beneficial, while allowing for CEAP not to be applied es (for example, a minor revision to a standard).
PPL Corporation NERC Registered Affiliates	No	If there are significant differences in costs and benefits between phase one and two, a third phase consisting of a NERC-funded pilot at volunteer entities could be helpful in obtaining greater certainty on actual costs and benefits.
Response: Thank you for your comment. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard		

development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will



Organization	Yes or No	Question 3 Comment
then be used, as appropriate, for all pr	oposed new a	nd revised standard proposals.
ACES Power Marketing Standards Collaborators	Yes	
Southwest Power Pool Regional Entity	Yes	
ARIZONA PUBLIC SERVICE COMPANY	Yes	
National Association of Regulatory Utility Commissioners (NARUC)	Yes	Providing for a screening level analysis in the initial stages of standard development followed by a more detailed examination of benefits and costs once the standard starts to take shape is a good approach. It is suggested that in both analyses, NERC staff should be looking for areas where the costs and benefits might be disproportionate. Certain regions of the country might be incurring much higher costs; utilities with certain common equipment might be hit harder; etc. An example might be if a GeoMagneticDisturbance standard were to be developed. More northern areas have already made significant investment to mitigate GMDs where the southern areas may not have made much of an investment; benefits from the standard are likely to be disproportionate also. Broad averaging will mask these impacts. NERC staff needs to be looking for these disparities and identify them.
Response: Thank you for your comme when analyzing the responses and dev		has been revised to address geographic and topological considerations EAP reports.
PacifiCorp	Yes	PacifiCorp agrees with NERC that a "fly-over" estimate, the Cost Impact Analysis, followed by a more comprehensive estimate, is appropriate, assuming more than a de minimis percentage of the initial assessments results in a determination that individual projects should not move forward to the standard development and drafting stage. If every new proposed standard is approved for the second phase's Cost Effectiveness Assessment there will be extra costs and no apparent benefit for the industry by introducing the CIA (which is effectively the due diligence phase). NERC should be tasked with developing and periodically reporting on a metric identifying the number of projects that do not move to the second phase as part of the CEAP.

to pilot CEAP with current projects that are in various stages of development. As we gain experience, a set of criteria may



Organization	Yes or No	Question 3 Comment
		cases where the information would be most beneficial, while allowing for use of industry resources (for example, a minor revision to a standard).
Salt River Project	Yes	We like the concept of a two part assessment as described in the Executive Summary; however, the actual name and explanation of the "CIA" generate many concerns.
		First concern is the CIA would better be labeled FA (Feasibility Assessment) in keeping with the beginning of the 2nd paragraph of the Executive Summary and in keeping with the questions posed in the CIA. As stated on page 5, (paragraph 1) of the CEAP document, the FA (or CIA) report should support a Go/No-go decision on developing a Standard during the evaluation of a SAR.
		Second concern is it is a misnomer to call the first assessment a "Cost Impact Analysis" as it is not about cost because the requirements have not yet been developed. Rather it is an assessment of the feasibility of the proposed standard and a way to identify alternative methods to achieve the desired reliability benefits.
		In summary, the first assessment is better identified as a Feasibility Assessment (FA). On Page 5, paragraph 3), Appendix A is called a CEAP Guidance Procedure Document", but on page A, the title of Appendix just "CEAP Guidance Document". After reading through the content of Appendix A, it appears the purpose is more of a checklist with dates for some of the steps. We recommend Appendix A be titled "CEAP Process Checklist" and the items be formatted as a checklist.
		portion of the CEAP is meant to simply provide information and impact e feasibility. The CEAP team believes, therefore, that the term "CIA" is a
Southern Company	Yes	
National Rural Electric Cooperative Association (NRECA)	No	NRECA has the following questions/comments regarding the CEAP documents provided for review:



Organization	Yes or No	Question 3 Comment
		We are concerned that cost impacts cannot be accurately determined from language in the SAR which does not include a list of standard requirements.  Please explain it is envisioned that costs can be accurately developed from the SAR.
		2. We disagree with the treatment of existing standards and concluding that they are deemed to be cost effective already. All reliability standards and definitions - new, existing and revised - should be subjected to a cost impact analysis when any work is started on such standards/definitions.
		3. Under CIA who determines and what basis is used to determine "benefits?"
		4. The focus on "egregious costs" may be too limited a view of troublesome cost impacts. Please provide additional explanation of why this term was used and consider revising this term to a potentially lower standard of review.
		5. How will NERC staff compile CIA information? Who will do that? How will minority views be presented?
		6. What does the following language mean - "eliminating disparities, increasing life expectancy of or any program or initiative?"
		7. How will NERC staff evaluate CEA info and produce a CEAP report? Who will do that? How will minority views be presented?
		8. Cost data will need to be treated confidentially in order to receive useful cost information/data from stakeholders. Without proper protection, stakeholders will be reluctant to provide such information.
		9. We believe that cost impacts may at times be an obstacle to a standard and may not always point to a different equally effective route. Please consider this important issue as the next draft of the CEAP is developed.



Organization	Yes or No	Question 3 Comment
		10. A final CEAP report should indicate impacts on smaller entities along with the other issues identified.
		11. What does "in conjunction with NERC staff" mean? Which NERC staff? To what extent can NERC staff influence the process? Does this provide NERC staff with veto power? DISCUSS ROLES AND RESPONSIBILITIES OF NERC STAFF.
		12. NERC staff appears to have a very strong role in this process including the submission of their analysis and recommendations in a CEAP report among many roles in the draft process. NRECA is concerned that this substantive role for NERC staff needs to be transparent and representative of all views and comments provided by stakeholders, including minority opinions.

- 1. The role of the CIA or first phase is to filter the proposed standards by developing support to either accept or reject the SAR. It is intended to be at a high level and to determine if there is a gap in reliability that can be economically closed. [Thank you for your comment.
- 2. First, it is a new process that must be tested and developed using newly proposed standards. As, we gain experience this process will be applied to additional standards development projects as deemed appropriate.
- 3. Under the proposed CIA process, the Registered Entities identify the costs and reliability risks as part of the SAR process. The CIA is strictly process related and has not identified who will responsible for conducting the CIA. In future revisions of the CEAP process the responsibilities could be assigned to the CEAP Team, the RISC, or NERC staff.
- 4. The CEAP team will replace the word "egregious" with "excessive."
- 5. Comments will be compiled into a consolidated report for submission to the SC. The CEAP is strictly process related and has not identified who will responsible for conducting the CIA and the CEA. All views will be captured in the summaries and considered when making decisions on how to handle all SARs.
- 6. The CEAP document has been revised to eliminate the use of the identified terms.
- 7. The intent is to always be fair and balanced. NERC Staff compiles and presents the cost information and does not make a recommendation. The information is presented to the SC for the analysis and a decision.



Organization	Yes or No	Question 3 Comment
8. The CEAP provides language that su	pports maintai	ning confidentially and market sensitive information.
9. Thank you for your comment.		
10. This comment has been made by rentities will be considered.	nultiple entitie	s and will definitely be considered. The views and uniqueness of all
11. The potential allocation of resource	es by NERC Sta	ff is outside the scope of this document.
	fy the intent of	ze the process and not assign responsibilities for the individual steps. The f the CIA and CEA reports as being informational in nature to be used as
Entegra Power Group LLC	No	I suggest a focus on TOTAL ELIMINATION of Standards which are merely procedural and document collecting in nature. Get back to focusing only on standards providing needed reliability. America is approaching \$16 Trillion in debta and it's not rocket science where this behavior will lead. I suggest looking to Europe! Think YOUR children and grandchildren!
Response: Thank you for your comme Paragraph 81 initiative.	ent. There are o	ther venues for addressing your topics. Please look into the NERC
Central Lincoln	Yes	
Cowlitz County PUD	Yes	
Trans Bay Cable, LLC	Yes	Only if for the first step there is the ability to acknowledge the potential cost variation of the standard. If you say it will cost \$2,000, then do step 2 and find out it's \$20,000, how far down the road is the standard? What limit to you put on taxpayers for reliability?
Response: Thank you for your comme cost effectiveness and risk mitigation.		s a tool that will provide the decision makers with information regarding
Alcoa, Inc.	Yes	
LCRA Transmission Services Corporation	Yes	
American Transmission Company, LLC	Yes	
Hydro-Quebec TransEnergie	Yes	



Organization	Yes or No	Question 3 Comment
		Question's comment
Ameren	Yes	
Entergy Services	Yes	
NextEra Energy Inc	Yes	NextEra favors the two separate phases, provided that the first phase includes the initial screening tool proposed in response to question number 2, and the streamlining of questions and data requests as set forth in response to question number 4.
Response: Thank you for your comm	ents.	
insight into what potential changes, i	f any, may be re he CEAP may be	ned. The CEAP Team believes that the field testing process will provide equired in CEAP and the standard development process to accommodate e revised. The CEAP Phases will then be used, as appropriate, for all
Public Service Enterprise Group	No	We believe that a cost analysis, if done, should be thorough (the equivalent of the second phase of described in the CEAP). It should be undertaken by NERC staff with input from the SDT, but the SDT should be a contributor and not in the lead.
		document has been revised to emphasize the process and not assign ojects will provide the CEAP Team with guidance on how to best assign
Liberty Electric Power	Yes	
City of Austin dba Austin Energy	Yes	
Essential Power, LLC	Yes	
ISO New England	Yes	In general it appears appropriate to have two separate phases. As stated in the write-up, this would allow for changing the approach from developing a mandatory standard to instead providing a technical guideline or whitepaper if the cost/benefit of a standard is inadequate. In cases where a standard was deemed unnecessary workload associated with cost development would be reduced.
Response: Thank you for your comm	ent.	1
Exelon Corporation	No	Additional information is necessary to properly assess the CEAP proposal. Please
r		Traditional information is necessary to properly assess the CEAR proposal Fredse



Organization	Yes or No	Question 3 Comment
		see response to Q5.
Response: Thank you for your comm	ent. Please see	response to question 5.
uget Sound Energy, Inc.	Yes	
lectricity Consumers Resource Council ELCON)	Yes	As stated in the question, we support the purpose of each review.
Response: Thank you for your comm	ents. The CIP a	nd CEA review process is maintained in the new CEAP draft.
IISO	Yes	MISO agrees with the two separate phases proposed by the CEAP. In particular, MISO supports the two phase approach as it ensures that an assessment of benefit to reliability versus resources will occur prior to SDT members devoting significant time and resources to a low value/low benefit to reliability standard and will ensure that industry, NERC, and Regional Entities can focus efforts on high value/high benefit reliability standards. It further recommends that Subject Matter Experts (SMEs) from a representative group of Registered Entities be enlisted to participate in both phases of the analysis. The participation of SMEs is particularly important in identifying the types of practices and processes that are intended to be in scope for a particular proposal, the relative costs and benefits of those anticipated practices and processes, and any appropriate alternatives that would achieve the same reliability benefit. The identification of these practices and processes (as well as any alternatives) is important because many reliability standards tend to be imprecise and subject to interpretations adopted in the enforcement process that are inconsistent with how the requirements are commonly understood in the industry. Such interpretations tend to ignore costbenefit considerations, requiring significant expenditures by Registered Entities to achieve compliance, without regard to whether or not there are increased reliability benefits associated with the interpretation or associated expenditures. The participation of SMEs during both phases of the CEAP will help provide clarity regarding what the SDT intended to be required by a proposed standard or standard revision, and avoid after-the-fact enforcement interpretations that ignore cost-benefit issues.



Organization	Yes or No	Question 3 Comment
responsibilities for the individual steps. responsibilities and determine if SMEs		jects will provide the CEAP Team with guidance on how to best assign ed to assist with the CEAP in the future.
New England States Committee on Electricity	Yes	NESCOE believes that a successful implementation of the two-phased approach will provide needed efficiency in screening out projects at the beginning of the standard development process, while providing sufficient information to determine the parameters of a mandatory standard or alternative course of action (e.g., technical guideline or white paper). For example, NERC notes in its Technical Report Supporting Definition of Adequate Level of Reliability, dated April 24, 2012, that "less probable severe events" (e.g., loss of an entire right of way due to a tornado) may not be capable of "any economically justifiable or practical measures to prevent or mitigate" damage to the bulk electric system. In such extreme but low probability cases, Phase One of the CEAP should provide a threshold cost benefit analysis that will inform the continuation of the standards development process or whether other approaches should be pursued to minimize adverse reliability impacts or expedite restoration activities.
	andard; but m	intent of the CEAP to establish criteria or a threshold which would dictate nerely to provide information (i.e., costs and potential reliability risks) assist Ts.
Massachusetts Department of Public Utilities	Yes	The Mass DPU believes that a successful implementation of the two-phased approach will provide needed efficiency in screening out projects at the beginning of the standard development process, while providing sufficient information to determine the parameters of a mandatory standard or alternative course of action (e.g., technical guideline or white paper). For example, NERC notes in its Technical Report Supporting Definition of Adequate Level of Reliability, dated April 24, 2012, that "less probable severe events" (e.g., loss of an entire right of way due to a tornado) may not be capable of "any economically justifiable or practical measures to prevent or mitigate" damage to the bulk electric system. In such extreme but low probability cases, Phase One of the CEAP should provide a threshold cost benefit analysis that will inform the continuation of the standards development process or whether other approaches should be pursued to minimize adverse reliability impacts or expedite restoration activities.



Organization	Yes or No	Question 3 Comment
<b>Response:</b> Thank you for your comment. It is not the intent of the CEAP to establish criteria or a threshold which would dictate continued development of a potential standard; but merely to provide information (i.e., costs and potential reliability risks) assist with the decision making process of the SC and the SDTs.		
American Public Power Association	Yes	
KCP&L	Yes	Yes, with incorporation of concerns outlined in Questions 1 and 2.
Response: Thank you for your comment.		



4. Appendix B is comprised of standard survey questions for Phase One and Phase Two. Additional questions may be added as appropriate. Do you agree with the survey questions in Appendix B? If you disagree, please suggest questions.

## **Summary Consideration:**

Commenters provided suggested revisions to the questions contained in Appendix B. The CEAP Team found these suggestions to be beneficial in improving the clarity of the sample questions which will effectively solicit the desired responses from the participating stakeholders.

Organization	Yes or No	Question 4 Comment	
PNGC Comment Group	Yes		
ELCON and Occidental Energy Ventures	No	We believe this level of shared detail is necessary to allow an in-depth review by all parties. The expectation will be that industry resources will be assigned to those that show a net benefit to reliability - so all participants must be confident with the results.	
step towards addressing concerns regar requirements) associated with achieving opportunity to identify alternative requi as effective and efficient during the draft	ding cost impagreliability objurted in the contract of the contract of the contract of the cost of the	ur support. NERC Cost Effective Analysis Process (CEAP) represents an initial acts (implementation, maintenance, and ongoing compliance resource ectives identified in standards. The Process allows the industry the neeting a standard's reliability objective that may be less costly and equally to help all in making informed choices. The CEAP will assist in the neets and support the efficient use of ERO and industry resources.	
MRO NSRF  Yes  The NSRF would like to thank the CEAP Team for clearly stating that not every issue requires a Reliability Standard. The CIA questionnaire will fall in line with the yet to be improved Standards Process Improvement Group (SPIG) initiative.  The Survey Questions in Appendix B should probably be expanded and formalized and become a record once the analyses are completed. Add questions to identify any information that may be considered confidential of CIP related information.			
		ur support. The Cost Effective Analysis Process (CEAP) will be a formalized and approved data and tools used in the analysis, and the final reports will	



# Organization Yes or No Question 4 Comment

become part of the Reliability Standard Development Project record. The Survey Questions in Appendix B were developed with the expectation that as a specific SAR is developed (phase 1) and through the development of the individual requirements (phase 2), the survey questions, if necessary, would be tailored to the specific nature of the Reliability Standard and the individual requirements. The Draft NERC Cost Effective Analysis Process (CEAP) For NERC ERO Standards, dated May 4, 2012, states that a set of survey questions (Appendix B) in addition to any other questions that must be conducted to identify the impact (i.e. operational, implementation costs, resources, maintenance costs, ongoing compliance costs, etc.) of the proposed standard's requirements on a requirement by requirement basis will be approved by the NERC Standards Committee.

Additionally, the CEAP states that; "Necessary confidentialities will be maintained, and no market sensitive information will be revealed." To address the concerns related to confidentiality and CIP related information, Appendix B has been revised to require the responders to identify the confidential nature (i.e., CIP related or CEII) of the specific response.

Bonneville Power Administration	No	BPA believes that for question 3 for the typical CIA questions, NERC needs to
		develop a template for guidance on how to respond to this question with possible
		categories such as labor costs, equipment costs, testing costs, training costs and
		even a high/medium/low categorization (that could be pre-defined by NERC -
		similar to what is done with the standards prioritization process). BPA believes
		that without a template for guidance, industry responses will be very different
		and it will be difficult to compare apples to apples. BPA also suggests moving the
		last part of question 3 "and reliability benefits" to question 6, which is dealing
		with the benefits of the standard. Question 6 should be asking about reliability
		benefits and values quantify and qualify these. For question 6 for the typical
		CEA questions, BPA would like to see high, medium, and low pre defined with a
		dollar range to keep responses consistent and comparable. For the typical CEA
		Cost and Implementation Questions, question #2 is much like question #3 in the
		CIA phase - BPA believes that NERC needs to develop a template for guidance on
		responding to this question with pre defined dollar ranges for high/medium/low
		cost impacts as well as the appropriate categories for consideration. Having an
		"other" box would take care of the miscellaneous things.

### **Response:**

The first phase of the CEAP process is an estimated high level Cost Impact Analysis (CIA) based on the responses to an initial set of questions posed to the industry during the Standard Authorization Request (SAR) stage, as part of the SAR posting, to determine if



Organization Yes or No Question 4 Con	nment
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the standard project should be pursued. The CIA is intended to be an assessment to determine the relative cost impacts (in orders of magnitude) of a particular proposed course of action. A cost effective analysis will be conducted, and specific issues such as; labor costs, equipment costs, testing costs and training costs can be considered for the drafted requirements in the Reliability Standard. The focus of the CIA phase is to obtain the high-level information required to quantify the cost portion of the cost benefit equation. Questions posed during the SAR stage to the industry will focus on probability and potential cost impacts.

CIA Question 3 has been revised to remove the reference to the 'reliability benefits' and has been combined with question 1 as follows.

1) What approximate incremental one-time and ongoing estimated potential cost impacts are associated with the following: (Please be as specific as possible)

(a)Implementation costs

(b)Maintenance costs

(c)Ongoing Compliance Resource Requirements

CIA Question 6 has been revised to incorporate the language removed from Question 3 and is now Question 4

4) What level of reliability related risk exposure of the interconnected transmission network is being addressed by the standard (i.e., High, Medium, or Low)?

CEA Technical Survey Question 6 is seeking comments on the probabilistic risk for an event/issue to occur and resulting in an Adverse Reliability Impact to the interconnected transmission network. This question is referring to the risk exposure to the interconnected transmission network and is not seeking a monetary value associated with the risk exposure. Question 6 (CEA) has been revised as follows:

6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

The SCPS CEAP Team agrees that CEA Cost and Implementation Question 2 and CIA Question 3 similar in nature, however the



Organization	Yes or No	Question 4 Comment

context of the potential answer to the questions are different based on the process stage (CIA or CEA). CIA questions are directed at the high-level responses to the SAR and the CEA questions are directed at the specific responses associated with the draft Reliability Standard and the individual requirements. Both questions are applicable to the process stages and will solicit different responses in support of the process. The questions will be retained.

As applicable to the CIA and CEA stages, establishing predefined dollar ranges for high/medium/low categories is problematic due to the relative sizes of the applicable entities responding to the surveys and the potential costs realized. Larger Transmission Owners (for example) could have larger equipment costs (associated with installations) but smaller compliance obligation costs due the existence of a large compliance staff. Where a smaller Transmission Owner (for example) may have smaller equipment costs (associated with installations) and a large cost due the need to potentially expand compliance staffing to meet the compliance obligations associated with the Reliability Standard. The Compliance Guidance Document (Appendix A) has been modified to capture characteristics of the registered entity to provide context to the projected costs provided in response to the survey questions. Characteristics include:

- Transmission Owner/Transmission Operator Approximate miles of transmission lines. (Number of interconnections?)
- Generator Owner/Generator Operator Aggregate gross capacity of generation resources (MVA).
- Load Serving Entity/Distribution Provider Peak loading (MW).
- Reliability Coordinator/Balancing Authority/Planning Authority Approximate miles of transmission lines & aggregate gross capacity of generation resources (MVA).

The SCPS CEAP Subgroup does not feel that an 'other' box is necessary due the fact that the survey questions will be tailored to the specific SAR (phase 1) and the Reliability Standard and requirements (phase 2).

SPP Standards Review Group	Yes	
Dominion	No	As noted in the response to Question #3, the Phase One questions appear ineffective at the SAR phase. The Phase two questions will produce subjective cost information that may or may not produce implementation costs being sought by FERC.

**Response:** The first phase of the CEAP process is an estimated high level Cost Impact Analysis (CIA) based on the responses to an initial set of questions posed to the industry during the Standard Authorization Request (SAR) stage, as part of the SAR posting, to determine if the standard project should be pursued. The CIA is intended to be an assessment to determine the relative cost impacts (in orders of magnitude) of a particular proposed course of action. The focus of the CIA phase is to obtain the high-level



Organization	Yes or No	Question 4 Comment		
information required to quantify the cost portion of the cost benefit equation. Questions posed during the SAR stage to the industry will focus on probability and potential cost impacts. The SCPS CEAP Team recognizes that limited information is available at the SAR stage to accurately identify potential cost impacts; however the responses to these types of questions during the SAR stage have the ability to provide guidance with high-level cost information. The CEA (phase 2) portion of the process is a cost effective analysis, and specific issues such as; labor costs, equipment costs, testing costs and training costs can be considered for the drafted requirements in the Reliability Standard.				
The SCPS CEAP Team expects that individual responders to the survey will provide their entity specific overall cost impact in response to the CIA survey and their entity specific implementation costs in response to the CEA survey. The collective analysis of the CIA and CEA survey individual entity responses will provide the objective industry costs that is intended to address concerns raised by FERC, the ERO and industry stakeholders.				
Northeast Power Coordinating Council	No	The Appendix B survey questions need to be more focused and request the specific data needed to help ensure complete responses. This will also reduce the amount of response extrapolation required by NERC staff. For the CIA, CEA Typical Questions on page 10:  Regarding Question 2, reference is made to the Adequate Level of Reliability definition which is still under development. It is fruitless to comment on this when the ALR itself is still being defined. Revise Question 4 to read: Are there alternative requirement(s) or existing reliability standard requirement(s) other than the proposed requirement(s) to achieve the reliability objective of this proposed standard?  Regarding Question 6, sometimes a requirement is not a question of a benefit but rather a response to an order or implementation of a best practice way of working. Typical CEA Technical Survey Questions on page 11: Question 1: Need to further define/clarify the meaning of "effective" to provide direction for the responses to be more focused. Question 2: Same comment as Question 4 above.  Question 4: Need to further define/clarify the meaning of "efficiencies" to provide direction for the responses to be more focused.  Question 6: Need to further define/clarify the meaning of "probabilistic risk" to enable responses to be more focused. Define the different levels (High, Medium,		



Organization	Yes or No	Question 4 Comment
		and Low) and provide examples."Typical CEA Cost and Implementation Questions on page 12:Question 1: Need to replace "in broad general terms" with specific information to be provided in order to focus responses. Question 2 and 4: Provide cost impact ranges, implementation time ranges, and categories of areas that would affect the implementation to help focus responses. It should be made more definitive that the Appendix B CIA questions are to be provided to stakeholders for input. During the CIA portion of the evaluation cost estimates are based on the SAR. It is recognized that at this stage a broad-brushed approach is used but it should be noted that the SAR may not provide complete details for cost development even on an order of magnitude basis. Question 4 in the CIA is the same as Question 2 of the CEA and refers to requirements. The SAR used for the CIA evaluation will not have requirements.

#### Response:

Thank you for your comment. The Survey Questions in Appendix B were developed with the expectation that as a specific SAR is developed (phase 1) and through the development of the individual requirements (phase 2), the survey questions, if necessary, would be tailored to the specific nature of the Reliability Standard and the individual requirements. The Draft NERC Cost Effective Analysis Process (CEAP) For NERC ERO Standards, dated May 4, 2012, states that a set of survey questions (Appendix B) in addition to any other questions that must be conducted to identify the impact (i.e. operational, implementation costs, resources, maintenance costs, ongoing compliance costs, etc.) of the proposed standard's requirements on a requirement by requirement basis will be approved by the NERC Standards Committee.

CIA Question 2 refers to the Commission (FERC) approved definition of Adequate Level of Reliability (ALR). Although the ALR definition is currently under revision, the responses should be in reference the exiting definition and when approved the revised ALR definition.

CIA Question 4 has been revised as follows to address your expressed concerns and is now CIA Question 2:

2) Are there alternate requirement(s) other than the proposed requirement(s) alternative method(s) or existing reliability standard requirement(s) not identified in the SAR to-which may achieve the reliability objective of this proposed standard?

CIA Question 6 has been revised to incorporate the language removed from Question 3 and is now Question 4

4) What level of reliability related risk exposure of the interconnected transmission network is being addressed by the standard



Organization	Yes or No	Question 4 Comment
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(i.e., High, Medium, or Low)?

CEA Technical Survey Question 1 has been revised to address your concern and improve clarity as follows:

T1) On a requirement by requirement basis, are Do the requirements in the proposed Reliability Standard collectively effective in achieving achieve the reliability objective of the standard and if not, why?

CEA Technical Survey Question 2 has been revised as follows to address your expressed concerns:

T2) Are there alternative-requirement(s) method(s) or existing reliability standard requirement(s) not identified in the draft standard to-which may achieve the draft standard's reliability objective? If so, what alternatives are there and which requirements would they replace?

CEA Technical Survey Question 4 ...

T4) Are there additional "efficiencies" that could be realized for any requirement(s)? If so, which requirements, what "efficiencies", and how might they be realized?

Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.

CEA Technical Survey Question 6 has been revised to address your concerns and improve clarity as follows:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

As applicable to the CIA and CEA stages, establishing reliability related risk exposure criteria for high/medium/low categories is problematic due to the relative sizes of the applicable entities responding to the surveys and the potential localized impact for a potential violation. The Compliance Guidance Document (Appendix A) has been modified to capture characteristics of the registered entity to provide context to the identified reliability related risk exposure (high/medium/low) provided in response to the survey questions. Characteristics include:



0.000	Varantia				
Organization	Yes or No	Question 4 Comment			
<ul> <li>Transmission Owner/Transmission Operator – Approximate miles of transmission lines. (Number of interconnections?)</li> </ul>					
<ul> <li>Generator Owner/Generator Operator – Aggregate gross capacity of generation resources (MVA).</li> <li>Load Serving Entity/Distribution Provider – Peak loading (MW).</li> </ul>					
<ul> <li>Reliability Coordinator/Balancing Authority/Planning Authority – Approximate miles of transmission lines &amp; aggregate gross capacity of generation resources (MVA).</li> </ul>					
CEA Cost and Implementation Question 1 has been deleted based on the entity specific information provided in the Guidance Document (Appendix A) as noted above.					
equation. Questions posed during the S CEAP Team recognizes that limited information the responses to these types of question information. The CEA (phase 2) portion level of detail necessary to quantify the	SAR stage to th rmation is avail ns during the S of the process projected imp	information required to quantize the cost portion of the cost benefit the industry will focus on probability and potential cost impacts. The SCPS lable at the SAR stage to accurately identify potential cost impacts, however SAR stage have the ability to provide guidance with high-level cost is a comprehensive cost impact or benefit analysis that should provide the dementation costs where specific issues such as; labor costs, equipment to the drafted requirements in the Reliability Standard.			
The SCPS CEAP Team agrees that CEA Technical Survey Question 2 and CIA Question 4 are similar in nature, however the context of the potential answer to the questions are different based on the process stage (CIA or CEA). CIA questions are directed at the high-level responses to the SAR and the CEA questions are directed at the specific responses associated with the draft Reliability Standard and the individual requirements. Both questions are applicable to the process stages and will solicit different responses in support of the process. CEA Technical Survey Question 2 has been revised as follows to address your expressed concerns:					
T2) Are there alternative-requirement(s) method(s) or existing reliability standard requirement(s) not identified in the draft standard te-which may achieve the draft standard's reliability objective? If so, what alternatives are there and which requirements would they replace?					
CIA Question 4 has been revised as follows to address your expressed concerns:					
	•	ne proposed requirement(s) alternative method(s) or existing reliability objective of this proposed standard?			
ISOs' Standards Review Committee	No	While the data collection in the templates is probably needed, we suggest that the first template should be an "Executive Summary" report (what key			



Organization	Yes or No	Question 4 Comment		
		information would be provided to the industry and RISC or SC to make an initial determination on the need for the standard). The other templates should collect the necessary information for the Executive Summary template.		
<b>Response:</b> Thank you for your comment. It is unclear what is being referred to as a "template" because there are no "templates" contemplated in the CEAP. Appendix C describes the template for the CEAP report (CIA and CEA portions).				
G&T Cooperatives	No	The G&T Cooperatives believe that the survey questions in Appendix B should be revised to specify in detail the methodology for measuring costs to ensure that responses provide comparable information by entity. Although the process as framed seeks to identify "Industry wide cost impact," the process should recognize that cost impacts (and reliability benefits) may vary substantially by entity size, location, and function.  (1) Although the typical questions for the CIA and CEA phases in Appendix B address costs and benefits generally, it is not clear how benefits and costs will be priced out in a way that will allow for meaningful comparisons between the costs and benefits of a specific proposed Reliability Standard as well as meaningful comparisons across all Reliability Standards. To ensure a true evaluation of cost effectiveness, the G&T Cooperatives recommend that the questions incorporate a specific methodology for determining the value of reliability and security benefits and a comparable methodology for measuring costs.  (2) The questions appropriately differentiate between start-up and recurring costs. See Appendix B, Typical CIA Question 3 and "Typical" CEA Cost and Implementation Question 2 (differentiating between implementation, maintenance and ongoing compliance resource costs). Nevertheless, within each of these different cost categories, the analysis should also differentiate between those baseline costs that will be incurred by all entities regardless of size and those scalable costs that will vary by entity size, location or function. This additional level of granularity will ensure that those cost impacts that vary by entity size, location, or function are not inadvertently masked by looking at costs on an aggregate level.		



Organization	Yes or No	Question 4 Comment
		(3) The CEAP process should not just look at industry-wide impacts, but should also ensure that new standards do not impose unnecessary cost burdens on specific industry segments. NERC should not move forward on a standard that has disproportionate impacts on a class of registered entities because NERC and FERC are obligated under Section 215(d)(2) of the Federal Power Act (16 USC § 824o(d)(2)) to ensure that the Reliability Standards are "not unduly discriminatory." To carry out that statutory obligation, NERC should ensure that the imposition of a particular requirement is cost effective for all applicable entities, regardless of their size, voltage level or location. It is important to note that electric cooperatives raise unique concerns from a cost effectiveness analysis standpoint. Given their size, voltage level and location, the imposition of Reliability Standards requirements on electric cooperatives may have more limited reliability impacts than the imposition of those same requirements on larger utilities or utilities in more densely populated areas. Conversely, because of their smaller size and non-profit status, electric cooperatives are much more cost sensitive than larger, for-profit utilities. Accordingly, even if the benefits of new requirements outweigh the costs on an "industry-wide" basis, NERC should avoid imposing a Reliability Standard in a discriminatory manner, where the costs of that Reliability Standard outweigh the benefits for a particular function or type of entity, such as small entities or entities in rural locations.

- 1. The evaluation of "security benefits" is beyond the scope of the CEAP.
- 2. The CEAP Team agrees with the commenter and has incorporated these provisions in the template for the CEAP report (Appendix C).
- 3. The CEAP Team agrees with the commenter and the cost impact information will be presented in the CEAP report by class of entity and not aggregated on an industry wide basis. The purpose of the CIA is not a specific cost versus benefit analysis. The provision for providing alternate methods or requirements to achieve the reliability objective of a standard is included in the CEAP proposal and small entities and others are able to submit such alternatives for consideration by standard drafting teams.

One of the objectives of the CEAP is to allow drafting teams to consider more cost effective alternatives that will provide the same reliability benefits.



Organization	Yes or No	Question 4 Comment
SERC Standards Committee	No	(1)Appendix B should clarify that these are sample questions and that not all of the questions must be included in each comment posting.(2)Question 5 of Appendix B needs to be re-worded to address a continent-wide standard instead of a regional standard.
Response:		
are typical in nature and are not necessary of the Reliability Standard and the indivivation of Standards, dated May 4, 2012, states the conducted to identify the impact (i.e. op	arily applicable dual requirem at a set of surv erational, imp	grees with the commenter that the survey questions provided in Appendix B e to all surveys. The survey questions would be tailored to the specific nature lents. The Draft NERC Cost Effective Analysis Process (CEAP) For NERC ERO vey questions (Appendix B) in addition to any other questions that must be elementation costs, resources, maintenance costs, ongoing compliance costs, quirement by requirement basis will be approved by the NERC Standards
CIA Question 5 has been revised to addr	ess continent-	wide standard instead of a regional standard and is now CIA Question 3:
	•	whitepaper or a training program be effective in achieving a desired outcome on time of the continent-wide" standard or variance? If so, please explain why.
alternative measures that would demonstrate compliance we those presently proposed, or rephasings that would eliminate		The phase-1 and 2 inquires should have added to them the question, "Are there alternative measures that would demonstrate compliance with less burden than those presently proposed, or rephasings that would eliminate uncertainty?" This aspect of compliance is oftentimes not as well developed in draft standards as the technical requirements.
Response:		
		, this is outside of the scope of the CEAP process and is more appropriately ess through the submission of comments.
ACES Power Marketing Standards Collaborators	No	(1) Under Typical CIA Questions, question 2 is unclear. The first sentence in this question asks two things: "would it achieve an adequate level of reliability "ALR" or exceed this ALR?" It is not clear to which part, "If not why?" applies which is the second sentence. Is NERC asking why the standard doesn't achieve ALR? Or if the standard achieves ALR but also exceeds it, is NERC asking why it exceeds



Organization	Yes or No	Question 4 Comment
		ALR? (2) While we understand the purpose of question 3, we believe what is being asked could be quite time consuming to determine especially for smaller entities that have less resources assigned to compliance.(3) Under Typical CEA Cost and Implementation Questions, the second question regarding the gross anticipated one-time and ongoing cost impacts and reliability benefits could be extremely time consuming to determine for each draft standard. NERC should consider a longer comment period during this phase of the process.

Thank you for your comment.

- 1. The SCPS CEAP Team agrees and has deleted CIA Question 2.
- 2. The SCPS CEAP Team recognizes that smaller entities may have limited resources that can be dedicated to responding to the CIA survey, however the focus of the CIA phase is to obtain the high-level information required to quantify the cost portion of the cost benefit equation and should not pose a significant burden on available resources.

The survey posting periods would coincide with the standards development process posting periods. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.

Southwest Power Pool Regional Entity	Yes	
ARIZONA PUBLIC SERVICE COMPANY	Yes	
Salt River Project	No	As written, 5 out of 6 questions for the CIA (or Feasibility Assessment) provide information on the feasibility of the proposed standard and possible alternatives to the proposed standard. Question #3 of the CIA survey needs some work. We recommend Q #3 be eliminated for two reasons. First, the Feasibility Assessment is about feasibility and is issued prior to the development of any requirements, so attempting to approximate costs in advance of requirements is premature. Second, half of Q #3 concerns benefits and is a duplicate of Q #6. The "Typical CEA Technical Survey Questions" and "Typical CEA Cost/Implementation Questions" need to be modified. None of the six "CEA Survey" questions has anything to do with cost or benefits. This fact is in conflict with the Executive Summary (first



Organization	Yes or No	Question 4 Comment
		sentence of 2nd paragraph) which states the CEA is to "determine the estimated industry wide cost impacts and potential reliability benefit of requirements in a proposed draft standard". The questions in the "CEA Technical Survey" are significant but not appropriate for a Cost Effectiveness Assessment". These questions could be removed from the CEAP process and instead would be more effective to be included in the SDT postings for comments. From a functional perspective the questions found in the "CEA Cost & Implementation Questions" list should be those that help to develop a true estimate of costs. Estimate formats used for Construction Projects may serve as a guide to develop the questions along with a tabular or spreadsheet format. Otherwise, we have the following comments about the "CEA Cost & Implementation Questions". Q #1. We are unsure why this information is necessary. Some entities may balk about providing this in case it could be used to identify their organization. Replace Q#2 with the 3 following questions: Question A. "What are the life-cycle costs (one time, ongoing, implementation, maintenance) of complying with the requirements? Please provide an estimate in table form if possible." Question B. "What is the on-going impact (after implementation) of complying with the requirements in terms of equivalent full time employees (EFTE)? Question C. "What are the benefits (reliability, labor, materials, administrative) of implementing these requirements?Q #3. We suggest this is a duplicate of the question #2 in the CEA Technical Survey

The first phase of the CEAP process is an estimated high level Cost Impact Analysis (CIA) based on the responses to an initial set of questions posed to the industry during the Standard Authorization Request (SAR) stage, as part of the SAR posting, to determine if the standard project should be pursued. The CIA is intended to be an assessment to determine the relative cost impacts (in orders of magnitude) of a particular proposed course of action. A comprehensive cost impact or benefit analysis will be conducted during the CEA phase of the process, where specific issues such as; labor costs, equipment costs, testing costs and training costs can be applied to the drafted requirements in the Reliability Standard. The focus of the CIA phase is to obtain the high-level information required to quantize the cost portion of the cost benefit equation. Questions posed during the SAR stage to the industry will focus on probability and potential cost impacts.



Organization	Yes or No	Question 4 Commen

CIA Question 3 has been revised to remove the reference to the 'reliability benefits' and has been combined with question 1 as follows.

- 1) What approximate incremental one-time and ongoing estimated potential cost impacts are associated with the following: (Please be as specific as possible)
  - (a)Implementation costs
  - (b)Maintenance costs
  - (c)Ongoing Compliance Resource Requirements

CIA Question 6 has been deleted due to potential duplication with standard questions asked during the SAR comment periods.

The goal of the CEA is to "determine the estimated industry wide cost impacts and potential reliability benefit of requirements in a proposed draft standard" and this is accomplished by soliciting input on the "Sample CEA Technical Survey Questions" and "Typical CEA Cost/Implementation Questions." The "Typical CEA Technical Survey Questions" speak to the reliability benefits associated with the draft Reliability Standard and the "Typical CEA Cost/Implementation Questions" speak to the potential costs associated with the implementation of the Reliability Standard. As noted in Appendix B of the CEAP, the "Typical CEA Technical Survey Questions" and the "Typical CEA Technical Survey Questions" (phase 2) of CEAP may be included in SDT postings for comments or done separately as part of the CEAP.

The first phase of the CEAP process is an estimated high level Cost Impact Analysis (CIA) based on the responses to an initial set of questions posed to the industry during the Standard Authorization Request (SAR) stage, as part of the SAR posting, to determine if the standard project should be pursued. The CIA is intended to be an assessment to determine the relative cost impacts (in orders of magnitude) of a particular proposed course of action. A cost impact or benefit analysis will be conducted during the CEA phase of the process, where specific issues such as; labor costs, equipment costs, testing costs and training costs can be applied to the drafted requirements in the Reliability Standard. The focus of the CIA phase is to obtain the high-level information required to quantize the cost portion of the cost benefit equation. Questions posed during the SAR stage to the industry will focus on probability and potential cost impacts. A single 'guide' to the evaluation of potential costs is not feasible considering the variety of Reliability Standards being considered. The entities are encouraged to utilize the most efficient method of determining costs to limit the burden associated with responding to the surveys.

CEA Cost & Implementation Question 1: The SCPS CEAP Subgroup agrees with the commenter that CEA Cost & Implementation Question 1 should be deleted. However, the costs associated with the implementation of Reliability Standards are dependent on



# Organization Yes or No Question 4 Comment

the relative size of the entity. For example: Larger Transmission Owners could have larger equipment costs (associated with installations) but smaller compliance obligation costs due the existence of a large compliance staff. Where a smaller Transmission Owner (for example) may have smaller equipment costs (associated with installations) and a large cost due the need to potentially expand compliance staffing to meet the compliance obligations associated with the Reliability Standard. The CEAP Process Control document (Appendix A) has been modified to capture characteristics of the registered entity to provide context to the projected costs provided in response to the survey questions. Characteristics include:

- Transmission Owner/Transmission Operator Approximate miles of transmission lines. (Number of interconnections?)
- Generator Owner/Generator Operator Aggregate gross capacity of generation resources (MVA).
- Load Serving Entity/Distribution Provider Peak loading (MW).
- Reliability Coordinator/Balancing Authority/Planning Authority Approximate miles of transmission lines & aggregate gross capacity of generation resources (MVA).

To address the commenter's concern with entity reluctance to providing specific information, the CEAP states that; "Necessary confidentialities will be maintained, and no market sensitive information will be revealed." To address the concerns related to confidentiality and CIP related information, Appendix A and B has been revised to require the responders to identify the confidential nature (i.e., CIP related or CEII) of the specific response. [NOTE: Consistency with RoP must be maintained; Confidentiality provision will be added to CEAP and revisions will need to be made to the software]

The SCPS CEAP Team agrees with the commenter and has divided CEA Cost & Implementation Question 2 into its separate parts as follows:

- CI-2) Please answer the following regarding the estimated costs and benefits of each of the proposed requirements:
  - CI-2a) What are the initial one time, ongoing, implementation, and maintenance costs of complying with the requirements?
  - CI-2b) What is the on-going long term cost impact (after implementation) of complying with the requirements in terms of equivalent full time employees (EFTE)?
  - CI-2c) What are the resource benefits (labor, materials, administrative) of implementing these requirements?
  - CI-2d) What are the reliability benefits of implementing these requirements?

The SCPS CEAP Team believes that CEA Cost & Implementation Question 3 and CEA Technical Survey Question 2 are similar in nature; however CEA Cost & Implementation Question 3 is seeking input on a potential alternative method for achieving the reliability objective that would result in less cost impact. While CEA Technical Survey Question 2 is seeking alternative methods of



Organization	Yes or No	Question 4 Comment	
achieving the reliability objective from str	ictly a reliabil	ity perspective.	
CEA Technical Survey Question 2 has bee	en revised as f	follows to improve clarity:	
	. ,	or existing reliability standard requirement(s) not identified in the draft 's reliability objective? If so, what alternatives are there and which	
CEA Cost & Implementation Question 3 h	as been revise	ed as follows to improve clarity:	
which may <del>for</del> achieve the reliability	objective of the	ng reliability standard requirement(s) not identified in the draft standard ne standard with a different requirement that may result in less cost impact pliance resource requirements)? If so what? Please provide as much	
Southern Company	Yes We suggest adding the following question:1). Does the benefit (in terms of reliability) of the proposed standard outweighs the overall cost to the industry in terms of application, compliance, ongoing monitoring?		
<b>Response:</b> The goal of the CEAP process is to assess and determine the feasibility of implementing the draft Reliability Standard from a reliability benefit perspective and overall cost to the industry. The assessment is performed following the completion of the data collection (CIA and CEA surveys), at which time NERC staff analyzes the results and prepares a report of the findings (key information) which is provided the report to the Standards Committee for consideration. The SCPS CEAP Team feels that the proposed question will be answered as a result of implementing the CEAP process and analyzing the survey results. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.			
National Rural Electric Cooperative Association (NRECA)	No	NRECA requests that our name be added to the parenthetical that includes the names of other industry trade associations and forums. Please also list other trade association groups, including but not limited to EPSA, ELCON, TAPS, LPPC and CEA.	
Response: The SCPS CEAP Team will exp	and the scope	of the parenthetical contained in Appendix A to include the identified	



Organization	Yes or No	Question 4 Comment
industry trade associations and forums as appropriate.		•
Dynegy Yes		
Entegra Power Group LLC	No	Ask "how do we eliminate reliability 'nice to haves' and reduce the size and scope of NERC Compliance".

**Response:** NERC Cost Effective Analysis Process (CEAP) represents an initial step towards addressing concerns regarding cost impacts (implementation, maintenance, and ongoing compliance resource requirements) associated with achieving reliability objectives identified in standards. The Process allows the industry the opportunity to identify alternative requirements for meeting a standard's reliability objective that may be less costly and equally as effective and efficient during the drafting process to help all in making informed choices. The CEAP will assist in the prioritization of Reliability Standard Development Projects and support the efficient use of ERO and industry resources. The elimination of Reliability Standards or individual requirements is beyond the scope of the CEAP.

Central Lincoln	Yes	
Cowlitz County PUD	Yes	
Trans Bay Cable, LLC	No	I think you need to ask if another standard could be modified to include the "reliability" issue identified. Incorporating into another may be faster, cheaper, and less impacting than a new one. Several of the CEA questions are beyond the scope of small utilities. Asking small utilities to perform analysis could be above them, and cause them to shy away from responding allowing large utilities with endless resources to drive standard development.

### Response:

The SCPS CEAP Subgroup agrees with the commenter and has revised CIA Question 4, now Question 2 as follows:

2) Are there alternate requirement(s) other than the proposed requirement(s) alternative method(s) or existing reliability standard requirement(s) not identified in the SAR to-which may achieve the reliability objective of this proposed standard?

The goal of the CEA Technical Survey Questions and the CEA Cost and Implementation Questions are not intended to drive extensive research or studies that may be beyond the capabilities of smaller entities. Appendix A has been modified to capture the relative size of the responding entity and the final results of the surveys will be analyzed to take into account these differences to provide an overall cost and reliability risk impact of the draft Reliability Standard.

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Organization	Yes or No	Question 4 Comment
LCRA Transmission Services Corporation	No	For Phase I Under Appendix B CIA questions, question 4 should read like question 5 on CEA question survey which says "For any other existing NERC standard, regional standard, Regional criteria, or in-process project draft standard(s), of which your organization is aware?"On CEA survey question 2, it should read like Question 5 of CEA Survey for consistency.On CEA survey question 4, define efficencies or provide more clarity on efficiencies. On CEA survey question 6, what are you really asking? The intent is ambiguous.For Phase IIDescribe the type of your organization ie, Transmission Owner, Generation Owner, etcQuestion 2, & 4, provide cost impact and implementation time ranges.

Thank you for your comment. The SCPS CEAP Team disagrees with the commenter. CIA Question 4 seeks input on alternative methods to meeting the reliability objective, while CEA Technical Survey Question 5 seeks input on potential adverse reliability impacts of implementing the draft Reliability Standard or other impacts on existing or revised NERC Reliability Standards, Regional Reliability Standards, or Regional Criteria.

The SCPS CEAP Team disagrees with the commenter. CEA Technical Survey Question 2 seeks input on alternative methods to meeting the reliability objective, while CEA Technical Survey Question 5 seeks input on potential adverse reliability impacts of implementing the draft Reliability Standard or other impacts on existing or revised NERC Reliability Standards, Regional Reliability Standards, or Regional Criteria.

The term "efficiencies" covers both cost effectiveness and efficient use of resources. [See above response, for similarities] CEA Technical Survey Question 4 ...

T4) Are there additional "efficiencies" that could be realized for any requirement(s)? If so, which requirements, what "efficiencies", and how realized?

CEA Technical Survey Question 6 is seeking comments on the probabilistic risk for an event/issue to occur and resulting in an Adverse Reliability Impact to the interconnected transmission network. This question is referring to the risk exposure to the interconnected transmission network and is not seeking a monetary value associated with the risk exposure. The SCPS CEAP Team agrees with the commenter and has revised Question 6 (CEA Technical Survey) to improve clarity and intent:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)



Organization	Yes or No	Question 4 Comment
American Transmission Company, LLC	Yes	However, ATC recommends the responses to the Survey Questions in Appendix B be expanded and formalized and become a record once the analyses are completed. Adding questions to identify any information that may be considered confidential of CIP related information should be considered.

The Cost Effective Analysis Process (CEAP) will be a formalized process and the survey responses, the use of available and approved data and tools used in the analysis, and the final reports will become part of the Reliability Standard Development Project record. The Survey Questions in Appendix B were developed with the expectation that as a specific SAR is developed (phase 1) and through the development of the individual requirements (phase 2), the survey questions, if necessary, would be tailored to the specific nature of the Reliability Standard and the individual requirements. The Draft NERC Cost Effective Analysis Process (CEAP) For NERC ERO Standards, dated May 4, 2012, states that a set of survey questions (Appendix B) in addition to any other questions that must be conducted to identify the impact (i.e. operational, implementation costs, resources, maintenance costs, ongoing compliance costs, etc.) of the proposed standard's requirements on a requirement by requirement basis will be approved by the NERC Standards Committee.

Additionally, the CEAP states that; "Necessary confidentialities will be maintained, and no market sensitive information will be revealed." To address the concerns related to confidentiality and CIP related information, Appendix B has been revised to require the responders to identify the confidential nature (i.e., CIP related or CEII) of the specific response.

Hydro-Quebec TransEnergie	Yes	
Ameren	No	(1) To provide even an "order of magnitude" response to potential cost impact question in Appendix B for CIA, an entity would have to make several assumptions as the SAR provides limited information. Our concern is that these assumptions would be different for different entities based on entity type, size, practices, etc. For example, if a SAR is proposing "testing of equipment", a larger entity and a smaller entity would have different population, and unless a testing interval is defined in the SAR, entities may assume different testing periods. We suggest, Appendix B (CIA) to include additional questions or guidance to provide consistency and obtain meaningful information to make decision on. (2) A Webinar may be useful in the first week after issuance of the SAR to get consistency in responses. We recommend that a Webinar be included as an additional step in the CEAP process. (3) While we believe that there is a need for



Organization	Yes or No	Question 4 Comment
		CEAP process and support it completely, we are concern that a quality of the answers would depend on how many other NERC drafts and documents also due for comments and balloting during the same time period. (4) In case of revision of the existing standard, for example going from CIP version 3 to version 4 or version 5, would the CIA step be skipped? (5) We assume that the reasons for the reliability concern are already included in the SAR. If not, they should be added to Appendix B.

- 1. The CEAP Team agrees with the commenter. The CIA is intended to identify egregious cost and reliability risks and is based on assumptions.
- 2. The CEAP Team will consider presenting the CEAP in a webinar format in the future.
- 3. The NERC standards staff currently evaluates the scope of projects open for comment and strives to limit the expenditure of industry resources to the extent possible.
- 4. The CEAP does not require the application of the CIA for existing Reliability Standards.
- 5. The CEAP Team agrees with the commenter and the related questions have been removed from the process document.

Entergy Services	Yes	
NextEra Energy Inc	No	Without a refinement of the questions and data requests submitted to Registered Entities, and further consideration of leveraging the NERC Planning and Operating Committees, it is unlikely that the CEAP will be successful. NextEra proposes, therefore, that the following changes be made to the process used to implement Appendix B. On page 10 of the CEAP, questions 1, 2 and 5 (reliability need/technical paper) should part of the initial screening process conducted by the NERC Planning or Operating Committees, and not asked of the entire industry. For proposed or revised Reliability Standards that pass the initial screen of the NERC Planning or Operating Committees, it seems reasonable and useful to seek input from a sample of Registered Entities on questions 3 and 4 (costs and alternative approaches). Conversely, question 6 (possible benefits) is too open ended to likely produce useable results, and thus should be eliminated. On page 11 of the CEAP favors these questions being folded into the initial comment and



Organization	Yes or No	Question 4 Comment
		balloting process, rather than establishing a separate process to seek input on the proposed or revised requirements. Including these questions in the initial comment process is more efficient, and provides stakeholders with ample opportunity to provide the Standards Drafting Teams (SDT) with input on alternative approaches that may be more cost effective. The questions on page 12 of the CEAP should only be asked of the industry after the following conditions have been met: (a) after the SDT has considered the input from the answers to the questions on page 11 and issued a new draft Reliability Standard and (b) only after the Standards Committee (after consulting with the Planning and Operating Committees) votes in favor of requesting a sample of industry to answer the questions on page 12, because it is concerned that the current draft of the proposed or revised Reliability Standard may result in the expenditure of significant level incremental costs that are not cost effective relative to the anticipated reliability benefit.

The NERC Cost Effective Analysis Process (CEAP) represents an initial step towards addressing concerns regarding cost impacts (implementation, maintenance, and ongoing compliance resource requirements) associated with achieving reliability objectives identified in standards. This open and inclusive process allows the industry the opportunity to identify alternative requirements for meeting a standard's reliability objective that may be less costly and equally as effective and efficient during the drafting process to help all in making informed choices. Having the NERC Planning and Operating Committees providing input to the process will deny the industry the opportunity to fully participate in the CEAP and the Standard Development Process.

The SCPS CEAP team believes that the best way to fully vet the CEAP (CIA and CEA portions) and determine the potential impact (cost and reliability benefit) of a new or revised Reliability Standard and requirements is by seeking input from the entire industry on cost analysis and reliability benefits.

Public Service Enterprise Group	No	See question #2 that relates to ALR. It states "If the standard meets a "reliability
		related" need would it achieve an adequate level of reliability "ALR" or exceed
		this ALR as defined by NERC's ALR approved metrics? If not, why?" First, NERC's
		ALR approved metrics have not set minimum levels of performance - they are just
		showing trends. Second, ALR is not an absolute concept - it is standards-driven.
		The actual ALR metrics are the result of such standards.



Organization	Yes or No	Question 4 Comment	
Response: CIA Question 2 has been removed from the process document.			
Liberty Electric Power	Yes		
City of Austin dba Austin Energy	Yes	Although we generally agree with the questions set forth, we believe additional more detailed questions will probably also be needed. We also offer the following suggestions:(1) In Question 4 of the "Typical Questions," you should add "or existing reliability standard requirements" between the words "requirement(s)" and "to achieve."(2) The same comment applies to Question 2 of the "Technical Survey Questions." (3) Question 6 of the "Technical Survey Questions" is virtually impossible to answer. It may be better to ask stakeholders to quantify the risk as "high, medium or low."	

The SCPS CEAP Subgroup agrees with the commenter and has revised CIA Question 4, now Question 2 as follows:

2) Are there alternate requirement(s) other than the proposed requirement(s) alternative method(s) or existing reliability standard requirement(s) not identified in the SAR to-which may achieve the reliability objective of this proposed standard?

The SCPS CEAP Subgroup agrees with the commenter and has revised CEA Technical Survey Question 2 as follows:

T2) Are there alternative-requirement(s) method(s) or existing reliability standard requirement(s) not identified in the draft standard to-which may achieve the draft standard's reliability objective? If so, what alternatives are there and which requirements would they replace?

The SCPS CEAP Subgroup is empathetic with the commenter and has revised Question 6 (CEA Technical Survey) to improve clarity and intent:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.



Organization	Yes or No	Question 4 Comment
ISO New England	No	The CEAP Appendix B makes reference to the Adequate Level of Reliability definition which is still under development. It is difficult to comment on this when the ALR itself is still being defined. It should also be made more definitive that the Appendix B CIA questions are to be provided to stakeholders for input. During the CIA portion of the evaluation cost estimates are based on the SAR. It is recognized that at this stage a broad-brushed approach is used but it should be noted that the SAR may not provide complete details for cost development even on an order of magnitude basis. Question 4 in the CIA is the same as Question 2 of the CEA and refers to requirements - the SAR used for the CIA evaluation will not have requirements.

**Response:** Thank you for your comment. The CEAP Appendix B use of the term 'Adequate Level of Reliability' (ALR) refers to the Commission (FERC) approved definition. Although the ALR definition is currently under revision, the responses should be in reference the exiting definition and when approved the revised ALR definition.

The SCPS CEAP team feels that the process as written is definitive in that the industry (stakeholders) will be provided the opportunity to respond to the CIA and CEA survey questions as a parallel posting with the Standard Development Process (i.e., CIA survey will be posted with the draft SAR for comment and the CEA surveys will be posted with the draft Reliability Standard for comment.)

The SCPS CEAP Subgroup agrees that CEA Technical Survey Question 2 and CIA Question 4 are similar in nature, however the context of the potential answer to the questions are different based on the process stage (CIA or CEA). CIA questions are directed at the high-level responses to the SAR and the CEA questions are directed at the specific responses associated with the draft Reliability Standard and the individual requirements. Both questions are applicable to the process stages and will solicit different responses in support of the process. CEA Technical Survey Question 2 has been revised as follows to address your expressed concerns:

T2) Are there alternative-requirement(s) method(s) or existing reliability standard requirement(s) not identified in the draft standard to-which may achieve the draft standard's reliability objective? If so, what alternatives are there and which requirements would they replace?

CIA Question 4, now Question 2 has been revised as follows to address your expressed concerns:

2) Are there alternate requirement(s) other than the proposed requirement(s) alternative method(s) or existing reliability



Organization	Yes or No	Question 4 Comment
standard requirement(s) not i	dentified in the SAR ŧ	e-which may achieve the reliability objective of this proposed standard?
Exelon Corporation	No	Additional information is necessary to properly assess the CEAP proposal. Please see response to Q5.
Response: See NERC SCPS CEAP S	subgroup response to	comments provided in Question 5.
Puget Sound Energy, Inc.	No	While the questions do a good job of establishing a high level assessment of a proposed standard, there is not currently a question associated with an entity's assessment of risk for a reliability concern. For example, question #1 is asking a "yes" or "no" question about whether the proposed standard addresses a reliability concern. This question provides no ability for a utility to rank their assessment of the risk (Probability x Impact) associated with the concern and it could be difficult for an entity to respond "no" to that question if there is a small risk associated with the reliability concern, but where an entity doesn't necessarily feel that the low probability warrants the proposed standard. Question #6 asks what the benefits of the proposed standard/requirement would be. It seems that there should also be a question to identify potential risks of implementing the proposed standard/requirement so that the Standards Drafting Team can consider those risks in the refinement of the language of the proposed standard/requirement. Puget Sound Energy also suggests including a question in this section similar to the following:"Is the scope of the proposed standard clear? Are the measures of compliance clear? If not, which requirements or measures are unclear, and why?" Before an entity can assess risk, reliability impacts, and cost, the standard must be clearly defined. A lack of clarity may cause an entity to not respond to the survey and there is not currently a question in the draft CEAP to gauge an entity's understanding of the proposed standard.

The SCPS CEAP team agrees with the commenter and has revised CEA Technical Survey Question 6 as follows:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

CIA Question 6 has been deleted from the process.



Organization	Yes or No	Question 4 Comment
_	scope and dra	aft requirement measures are directly related to the Standard Development appropriate posting periods.
Electricity Consumers Resource Council (ELCON)	No	Some of these questions (CIA #1 and #2) should be addressed during the SAR drafting process. On questions specific to costs, it might be better to identify more specific, standardized cost components (e.g., Incremental Man-Hours, FTEs, Training, CAPX, Software, Hardward, O&M, Legal, Consultants, Travel, etc.).
	he SAR in the i	EAP team believes that the concepts presented in CIA Questions 1 & 2 initial development of the SAR and then further considered by the industry
through the development of the individ specific nature of the Reliability Standar	ual requireme d and the indi	with the expectation that as a specific SAR is developed (phase 1) and nts (phase 2), the survey questions, if necessary, would be tailored to the vidual requirements. Individual 'cost components' identified in the the survey based on the specific nature of the SAR or Reliability Standard.
MISO	Yes	MISO suggests that NERC add questions to the Phase Two inquiry intended to elicit more detail on the types of practices and processes that would be necessary to comply with the proposed requirements up for review. The questions in the existing Appendix B that address cost focus on aggregate cost and aggregate burden, without attempting to inquire about the specific details of compliance. MISO respectfully submits that NERC will need to have that additional detail in order to adequately and accurately assess the costs of complying with a proposed reliability standard or standard revision.
and through the development of the inc the specific nature of the Reliability Sta	dividual requir	developed with the expectation that as a specific SAR is developed (phase 1) ements (phase 2), the survey questions, if necessary, would be tailored to individual requirements. Included in this customization would be more ary for implementation of the proposed requirements.
New England States Committee on Electricity	No	As a general comment, we note that Appendix B is almost identical to the same materials proposed by NPCC relative to its procedures to evaluate the cost effectiveness of proposed reliability measures. Like the NPCC questions, the



Organization	Yes or No	Question 4 Comment
		surveys here provide a reasonable framework for evaluating the costs and benefits of a proposed mandatory standard and we look forward to how these materials may be further refined. However, as we state in our comments above in response to Question 2, because the CIA serves as an initial screen to determine whether the standard development process should continue to be pursued or whether another approach is warranted, the survey questions for Phase One (reflected in Appendix B) should attempt to assess the probabilistic risk that an event will occur (i.e., it should ask question #6 from the Phase Two survey). Additionally, in light of the proposed revisions to the definition of Adequate Level of Reliability (ALR) presently being considered by NERC, questions related to the ALR in both surveys should be revisited following any changes to the ALR.

The SCPS CEAP team agrees with the commenter and has revised CEA Technical Survey Question 6 as follows:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

The CEAP Appendix B use of the term 'Adequate Level of Reliability' (ALR) refers to the Commission (FERC) approved definition. Although the ALR definition is currently under revision, the responses should be in reference the exiting definition and when approved the revised ALR definition.

Massachusetts Department of Public Utilities	No	In general, the surveys provide a reasonable framework for evaluating the costs and benefits of a proposed mandatory standard and we look forward to how these materials may be further refined. However, as we state in our comments above in response to Question 2, because the CIA serves as an initial screen to determine whether the standard development process should continue to be pursued or whether another approach is warranted, the survey questions for Phase One (reflected in Appendix B) should attempt to assess the probabilistic risk that an event will occur (i.e., it should ask question #6 from the Phase Two survey). Additionally, in light of the proposed revisions to the definition of Adequate Level of Reliability (ALR) presently being considered by NERC, questions related to the ALR in both surveys should be revisited following any changes to



Organization	Yes or No	Question 4 Comment
		the ALR.

The SCPS CEAP team agrees with the commenter and has revised CEA Technical Survey Question 6 as follows:

T6) What level of reliability related risk exposure of the interconnected transmission network exposed to would the probabilistic risk be for an event/issue to occur which that would otherwise is being addressed by this standard? (i.e. High, Medium, or Low)

The CEAP Appendix B use of the term 'Adequate Level of Reliability' (ALR) refers to the Commission (FERC) approved definition. Although the ALR definition is currently under revision, the responses should be in reference the exiting definition and when approved the revised ALR definition.

	1	
American Public Power Association	Yes	APPA recommends that the NERC Cost Effectiveness Analysis Process explicitly
		address the potential cost impacts of proposed NERC Reliability Standards on
		small registered entities, by (1) assessing the number of small entities that are
		potentially subject to each proposed standard, (2) seeking information from small
		entities concerning the potential costs impacts of the standard, and (3)
		requesting proposed methods of mitigating or reducing these cost impacts, while
		ensuring that the reliability objective is achieved. The CEA Technical Survey and
		Cost and Implementation Questions on pages 12 and 13 of the draft CEAP should
		be supplemented with additional questions addressing these points. For example,
		draft question 3 on page 12 could be edited to add the capitalized text below, to
		become new question 5):"5) Is there an alternative for achieving the reliability
		objective of the standard with a different requirement OR CHANGES TO THE
		APPLICABILITY OF THE REQUIREMENT that may result in less cost impact
		(implementation, maintenance, and ongoing compliance resource requirements)
		ON SMALL REGISTERED ENTITIES? If so what? Please provide as much additional
		supporting evidence as possible."The Regulatory Flexibility Act (RFA), as amended
		by the Small Business Regulatory Enforcement Fairness Act (SBREFA), obligates
		the Federal Energy Regulatory Commission to look at all costs of compliance with
		a proposed rule or regulation to the extent that such costs are imposed on a
		"small entity." The SBA Office of Advocacy publishes a guide for agencies entitled
		"A Guide for Government Agencies: How to Comply with the Regulatory Flexibility
		Act" ("RFA Compliance Guide"). The most recent version of the RFA Compliance
·		The transfer datase j. The most recent version of the tital compliance



Organization	Yes or No	Question 4 Comment
		Guide, dated June 2010, can be found on internet at: http://archive.sba.gov/advo/laws/rfaguide.pdf. At page 85, the RFA Compliance Guide June 2010 explains: [a]gencies regulating activities of small entities are required, under section 223 of SBREFA, to establish a policy or program to provide for the reduction (and, under appropriate circumstances, the waiver) of civil penalties for violations of a statutory or regulatory requirement by a small entity. That guide is clear that federal regulatory agencies (including FERC) are responsible for performing an assessment of economic impact that evaluates the regulation's entire effect on small entities, generally defined by the SBA as including all electric utilities with annual sales of less that 4 million MWhs. See Mid-Tex Electric Coop., Inc. v. FERC, 773 F.2d 327 (D.C. Cir. 1985). NERC is not required by law to collect this data, but if the Commission is required to prepare a RFA analysis in its Final Rule on a NERC reliability standard, because the proposed standard has a substantial effect on a number of small entities, a more accurate assessment of the number of affected small entities and the steps that NERC has taken to mitigate such impacts will assist FERC in meeting its obligations on a timely basis. To the extent such analysis or the inputs for such analyses are developed by NERC through its stakeholder processes, it will facilitate efforts to ensure that FERC is confident that NERC has met its obligations as the certified Electric Reliability Organization and that the proposed standard will be supported by stakeholders.

**Response:** The CEAP document has been revised to address the concerns raised by APPA by incorporating in the CEAP report identification of the type or group of entities responding to the surveys. Based on the available information the SDT can determine the appropriate applicability for the individual requirements with the standard. Furthermore, Commission directed criteria for the development of Reliability Standards contained Order 672 states that costs are to be considered for smaller entities but not at the consequence of less than excellence in operating system reliability:

"330. A proposed Reliability Standard may take into account the size of the entity that must comply with the Reliability Standard and the cost to those entities of implementing the proposed Reliability Standard. However, the ERO should not propose a "lowest common denominator" Reliability Standard that would achieve less than excellence in operating system reliability solely to protect against reasonable expenses for supporting this vital national infrastructure. For example, a small owner or operator of the Bulk-Power System must bear the cost of complying with each Reliability Standard that applies to



Organization	Yes or No	Question 4 Comment
it."		
This exists today and it is provi	ded to the SDTs in exi	sting criteria associated with the Quality Attributes of a Reliability Standard.
KCP&L	Yes	We are comfortable with the questions as long as additional questions more specific to the proposed standard can be appended to the questionnaire.
•	of the individual requ	e developed with the expectation that as a specific SAR is developed (phase 1) irements (phase 2), the survey questions, if necessary, would be tailored to e individual requirements.
APS	Yes	There should be questions related to quantifying reliability benefits such as

The Survey Questions in Appendix B were developed with the expectation that as a specific SAR is developed (phase 1) and through the development of the individual requirements (phase 2), the survey questions, if necessary, would be tailored to the specific nature of the Reliability Standard and the individual requirements.

The reliability benefits associated with Reliability Standards vary in nature, therefore the initial questions posed in the surveys are generic, and if appropriate, would be tailored to provide the specificity to address the applicable reliability benefits associated with compliance to the draft Reliability Standard.



## 5. Do you have any other comments or suggestions to improve the proposed CEAP?

## **Summary Consideration:**

Commenters suggested a limited amount of clarifying revisions to the process document such as:

- Expanding acronyms
- Further revisions to Appendix B (Survey Questions) not captured in the responses to question 4

Commenters demonstrated further emphasis on the need to conduct a pilot assessment of the process. Commenters overall expressed support of the process.

Organization	Yes or No	Question 5 Comment
PNGC Comment Group		We note the survey questions are targeted to the registered entities that must implement the requirements. The true cost of compliance is not fully covered by these questions to the registered entities, since there are costs to assess compliance, enforce the requirements, process violations, etc. There should be survey questions directed toward the regional entities and the ERO to capture these costs as well.

**Response:** The CEAP team thanks PNGC for their comment.

The cost of compliance is addressed in Appendix B's CIA question 3, now question 1:

- "1) What approximate incremental one-time and ongoing estimated potential cost impacts are associated with the following: (Please be as specific as possible)
  - (a) Implementation costs
  - (b) Maintenance costs
  - (c) Ongoing Compliance Resource Requirements

Although the costs for the ERO, the Regions and even FERC are real costs borne ultimately by ratepayers, these additional costs are outside the scope of this proposal. The objective of this proposal is to identify costs and to afford the industry the opportunity to propose alternative requirements that may achieve a similar and potentially less costly solution to achieving a reliability objective. The Regions and NERC have statutory responsibilities to perform these functions and therefore, only costs to the entities are subject for consideration.



Organization Yes	s or No	Question 5 Comment
		accurate cost numbers. The industry's experience with the existing costs of compliance are tangible and well understood. Conversely, we believe the benefit figures will be far more difficult to capture. These are far more difficult to assess - but not impossible. The NERC Events Analysis and Performance Analysis results will be essential to this process, and ultimately to its acceptance by the industry. Secondly, the CEAP process should begin to consider introducing incentives in the Standards Development Process for improvements in automation. Most requirements make no assumption about "how" compliance is achieved - but are often interpreted by Compliance in the most conservative manner. For example, a change in status of BES facilities is instantly provided to neighboring entities via telemetry; but some Regions require a phone call as well. With so many important issues to address, Industrial Consumers believe that automated solutions must be encouraged as much as is possible. Finally, while we believe this is a very important and potentially valuable process, it should be treated as a pilot or trial process until real-life experience demonstrates if value to consumers.
because of the variables that must be considered quality of the Cost data is going to be dependent. The team agrees that benefits are difficult to standard will be useful and considered in the automation, because when deriving the costs entities will be afforded the opportunity to so	ered duri dent on in measure overall C s and ben uggest the	ment and agrees that benefits of a requirement are difficult to quantify and ng system operation, the benefits will be difficult to precisely ascertain. The idustry support of this effort and responses to the requests for these costs. and any benefit information received or already known for a particular CEAP. The CEAP is a mechanism for encouraging improvements in refits for the CEAP, entities should implement the latest technologies and ese technologies and promote them more effectively during the CEA Phase 2 lementation is planned. The CEAP Team believes that the field testing

MRO NSRF	Has the CEAP Team looked at applying these questions to currently enforced
	NERC Standards. Commissioner Moeller has asked the question of cost verse
	benefit concerning Reliability Standards. This, with section 81 of the
	Commission's order of 15 March, 2012 concerning FFTs should allow NERC to look

process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate,

for all proposed new and revised standard proposals.



Organization	Yes or No	Question 5 Comment
		at currently enforceable Reliability Standards. What is the EIA411 Report which is referenced several times in this CEAP. Please define when first referenced in the CEAP as this will assist the industry. One of the driving forces behind these analyses should be the revised ALR Definition and reliability of the BES. (Pg.4) The final CEAP Report should include a section on addressing ALR. Does it fill a "reliability gap"? Formalize the document by organizing the CEAP into Sections. Recommend to add a Table of Contents to make it easier to find the applicable sections. Consider adding a section on disagreement with the SC recommendations and filing appeals. Specify an appeal process and how an entity can submit an appeal for either results of Phase 1 and/or 2. The NSRF reinforces that this is more of a "concept paper" and recommends a detailed implementation at a later date.
Response: The CEAP team thanks MRO for their comments. The EIA-411 Report is the U.S. Department of EnergyEnergy Information Administration for the Coordinated Bulk Power Supply Program Report,. It will be defined as a reference in the CEAP document. The analyses must include how the proposal affects reliability, filling a reliability gap, providing an adequate level of reliability. Adding a Table of Contents and sectionalizing the CEAP will be done for the next draft. As stated in the CEAP, the NERC standards development process will be followed, and that process addresses appeals. The information in the CEAP explains the concept as well as identifies the Process. The reports of a CEAP are compilations of industry responses and appeals should not ever be necessary however appeal processes currently exist at NERC for standards related activities. Regarding the concern of this as a concept paper, it is necessary to understand that NERC is rolling out this proposal as an initiative to meet a MRC Standards Process Input Group Recommendation SPIG. The CEAP, as any other Standards Process, is subject to improvement over time and revision based on proposed pilots which will be conducted subsequent to the second posting and approval by the NERC Standards Committee.		
Bonneville Power Administration		Overall, BPA is in support of this concept and believes it is a necessary step in the right direction. BPA also recognizes that this approach will take considerable time and resources within each entity to respond accurately enough to give a ballpark range of the costs associated with implementation of the standard as well as identifying other possible solutions. An outreach effort (perhaps a webinar) for the industry to collectively participate in and have the opportunity to hear concerns from others might be time well spent during the beginning phase of the process to allow industry leveraging of resources. The standard's impacts on a



Organization	Yes or No	Question 5 Comment
		smaller entity may be vastly different from the impacts to a larger entity. In addition, the amount of staff available to do the analysis will vary greatly between entities as well.BPA believes that a minimum response threshold for path operators and transmission providers should be set/met prior to moving forward with the standard.BPA would also like to see NERC associate the NERC Cost Effective Assessment Process Diagram with the steps outlined in the summary version of the process to make it easier to follow.

**Response:** The CEAP team thanks BPA for their comment. The use of a webinar is a resource that can be used if deemed necessary, and does not need to be specified in the CEAP and it is envisioned there will be significant industry outreach and education. The CEAP considers the differences between entities and the weighing of these differences is described in the Considerations for CIA and CEA Reports of the CEAP. The Diagram will be reviewed and revised as necessary to make it easier to follow once the process is solidified.

SPP Standards Review Group	The way the CEAP is proposed a SAR is developed and then fed into the CEAP.
	Turning the crank of the CEAP provides an analysis that determines what happens
	with the SAR. How would CEAP, or could CEAP, be used to support the retirement
	of standards that do not appreciably support the reliability of the BES? Would
	someone submit a SAR proposing that a standard be deleted and this in turn be
	fed into CEAP to support such an action? Has the CEAP subgroup considered such
	an occurrence?

Response: The CEAP team thanks SPP for their comment. The current SAR process allows the entities to propose the retirement of requirements that have little reliability benefit irrespective of cost. Potential retirement candidates will be reviewed when the standard is up for revision. The CEAP is not currently designed to be used when considering whether or not a standard should be retired but rather was intended to only be utilized for new standards or standards being actively revised and is process oriented and simply informational and not used a decisional mechanism. The CEAP team will be developing an implementation plan. The CEAP is intended to address the addition of requirements or standards to improve reliability and the incremental costs associated with that improvement. From page 2 of the CEAP, "The NERC Cost Effective Analysis Process (CEAP) represents an initial step towards addressing concerns regarding cost impacts (implementation, maintenance, and ongoing compliance resource requirements) associated with achieving reliability objectives identified in standards. The Process allows the industry the opportunity to identify alternative requirements for meeting a standard's reliability objective that may be less costly and equally as effective and efficient during the drafting process to help all in making informed choices." Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP



Organization	Yes or No	Question 5 Comment
		re CEAP. After successful field testing, the CEAP may be revised. The CEAP
Dominion		1. On page 4 in the first paragraph, please spell-out the acronym SCPS (i.e., Standards Committee Process Subcommittee).2. It would be helpful to explain how this NERC Cost Effective Analysis Process (CEAP) For NERC ERO Standards document will be incorporated into the current NERC Rules of Procedure. What is the timeframe of this document being implemented?3. On page 13; NERC Cost Effective Assessment Process: The second box under Step 3 "CEA survey & draft Standard posted for a comment period for stakeholder review and response" should have a periodicity specified for the review and response.4. This entire 9 Step process relies heavily on NERC Staff and NERC Committees, yet there is no timeline in which they have to complete each step in this process, in order to Streamline this process Dominion suggests a timeline also be established for NERC to adhere to.
CEAP Team believes that the field testing and the standard development process. Phases will then be used, as appropriate addressed. As the CEAP approval process, known. Periodicity is not specified for contracting the standard process.	g process will to accommoda e, for all propo ss continues, h omments and me limit it is n	comment. Piloting of CEAP prior to full implementation is planned. The provide insight into what potential changes, if any, may be required in CEAP ate CEAP. After successful field testing, the CEAP may be revised. The CEAP sed new and revised standard proposals. Expanding acronyms will be now the CEAP fits into other NERC procedures and processes will be made NERC involvement because it will vary depending on the magnitude and not required as part of the existing SAR recommendation given by NERC Staff orization for standards development.
Northeast Power Coordinating Council		The CEAP process will require industry to dedicate additional resources and/or time to provide complete information for the Appendix B survey. This could place additional burden on limited resources. Phase 1 high level Cost Impact Analysis (CIA): Need to further clarify the decision process that the Standards Committee (SC) will use to warrant authorization for or reject moving forward for a standard's development. Phase 2 Cost Effectiveness Impact (CEA): Need to further clarify the basis for determining whether there is or is not sufficient stakeholder response to survey questions in Appendix B. The NERC Procedure for the CEAP of Proposed NERC Reliability Standards (NERC CEAP for NERC ERO Standards -Draft,

Organization	Yes or No	Question 5 Comment
O. Barrization	103 01 110	
		page 6, section 6, item c) needs to incorporate a time limit for how long a standard can be held in abeyance. Reliability Measures -We have several concerns
		about developing a BES reliability measure.(1) No specific examples, preferred or
		alternative method(s), guidelines or supporting discussion were provided in the
		CEAP draft to allow an entity to determine how it might determine BES reliability
		impact, effectiveness or cost impact. Please provide at least one example.(2) A
		methodology for determining BES reliability impact and effectiveness, and for
		determining cost, would be preferred. The measures LOLE and LOLP are retail
		service outage measures. They include distribution system performance measures
		not applicable to BES reliability, and which are non-jurisdictional to FERC and
		NERC. (3) Retail outage measures, like LOLE/LOLP, are also not suitable as
		generator outage rate measures. Reliability Impact/Effectiveness - Please provide
		a reasonably detailed application of a PRA to the BES for both transmission and
		generation.Consistency - Without a reliability impact/effectiveness framework,
		without standardized assumptions, without generally accepted methods and
		practices, entities may use a range of different, even ad hoc approaches to
		estimate reliability impacts. Cost Impacts - We appreciate the opportunity to
		incorporate cost effectiveness into the standards development process. Cost is
		not defined for CEAP purposes. Does cost include first cost (e.g., capital costs),
		operating cost, overheads, regulatory cost, rate-base and financing costs, tax effects (e.g., depreciation), cash flow, etc.? We recommend that NERC provide
		general guidance through a Guidance Document that provides instructions and
		examples and seeks an 'all-in' cost divided into two parts: (1) an initial (e.g.,
		capital) cost, and (2) an annual (e.g., operating) cost.Confidentiality - We
		understand the need to protect individual entity cost and impact information
		from potential competitors and from inappropriate financial disclosure. However,
		the asset owning entities providing the inputs are also those closest to the costs
		and reliability impacts. Reservedly, we support the desire of the CEAP procedure
		to have NERC Staff perform the cost/impact aggregation studies. Yet, we are
		concerned that uneven costs/impacts may not be reflected in any averaging
		process. Costs/impact may be regional, e.g., WECC only, or may be limited to one
		segment, e.g., generators. Additional thought needs to go into how these
		costs/impacts will be reported out, i.e., in whole, by region, by segment,

Organization	Yes or No	Question 5 Comment
		etc.Trading Cost for Reliability - The cost effectiveness analysis process (CEAP) implicitly proposes that there is some optimal and obvious trade-off between the cost and reliability impacts of proposed reliability standards. Clearly, when costs are exceeding high for a small or rare benefit, then a proposed standard or requirement is not cost-effective. Alternatively, if there is little or no cost associated with a large reliability benefit, then the propose standard or requirement is highly cost-effective. However, often the devil is in the details, and between these two obvious extremes there lies a (perhaps not so) "bright line" which divides the more highly cost-effective from the less cost-effective, the more reliability impactful from the less (or negatively) impactful. Presumably, the purpose of CEAP is to identify and promote the more highly cost-effective and reliability-impactful, while avoiding, changing or replacing the less cost-effective and less-reliability impactful with improved reliability proposals. While we may agree with the CEAP concept and approach "in theory," we have concerns about its application "in practice." A number of important questions remain unanswered, such as "How will these "Cost for Reliability" trade-offs be evaluated and effectuated?" "What happens when most of the cost is incurred by one segment, while most of the reliability benefits are captured by another segment (e.g., GO's vs. LSE's and PSE's)?" [Also, substitute "Region" for "segment" in this question.] While we generally agree with the CEAP concept it should be subjected to field trial for a number of diverse standards to access actual performance. It is also important that decision making responsibility with regard to proceeding with development based on cost/benefit be subjected to stakeholder review using an industry appeal process. Simplification of the documentation should be considered as it could also prove worthwhile for actual use of the CEAP principles.NERC should remain mindful of the balance of resou



Organization	Yes or No	Question 5 Comment

Response: Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. It is recognized that more time and resources will be needed to devote to the CEAP, but the end result of implementing the CEAP justifies the means. Determining specific criteria for the CIA phase of the CEAP is not the intent but the desired result will be an identification of egregious costs that may be associated with a new standard and the potential risk being mitigated as stated in the Introductory section of the CEAP. Drilling down in the CEAP to clarify processes used, how decisions are made, is not the current intent of the pilot program and this document which will initially be a guideline document. The reviewers will be subject matter experts, and be able to make whatever decisions or determinations are necessary. The adequacy, handling, and consideration of data submitted is described in the Considerations for CIA and CEA Reports of the CEAP. Based on the first round of comments evaluated, and the after the pilot program is conducted, the direction and final version of the CEAP will be better defined. It will be suggested to have an informational webinar for the industry, and address the issues raised. A guidance document may have to be developed for the CEAP implementation that may include examples of its use. Potentially insufficient responses to the Phase 2 CEA and whether extrapolation of results was needed will be noted in the report. The CEAP is not intended to add unreasonable delay to the existing process whereby the NERC Staff presents a recommendation to authorize the SAR and there is currently no time limit in the existing process. The CEAP is to conform and be conducted as part of and in parallel with the existing standards development process. The CEAP team will revise the CEAP to recognize that it applies only to facilities subject to the NERC standards.

ISOs' Standards Review Committee	We believe the summary reports created through this process should attempt to
	quantify the costs (startup and ongoing of the entire "NERC community") and the
	expected benefits. If the cost to benefit ratio is high, alternatives to a standard or
	an alternative approach should be pursued. Costs should include implementation
	and ongoing outlays, to include compliance administration. We also believe there
	should be a field test done as soon as possible followed by another opportunity
	for comment. We would also suggest NERC use the phase one process when it
	pursues other major initiatives (such as the facility ratings alert).

**Response:** The CEAP team thanks ISO/SRC for their comment. The CEAP as drafted is a high level process that is meant to provide guidance to the SDT and not a quantitative analysis of the "benefit" of a project. If the ISO SRC has specific suggestions in mind please re-submit during subsequent CEAP comment periods. There be a pilot of the CEAP and depending on the results of that



Organization	Yes or No	Question 5 Comment
pilot, and if significant revisions to the	CEAP are neces	sary, another posting for comments will be performed.
G&T Cooperatives		The reference to the trade associations in Appendix A inadvertently fails to reference the National Rural Electric Cooperative Association ("NRECA") as another entity for "Additional Outreach." The G&T Cooperatives recognize that the listing of trade associations was not intended to be an all-inclusive list, but merely a list of examples. Nevertheless, to avoid confusion as to whether the trade association that represents their interests was intentionally excluded, the G&T Cooperatives suggest that the listing be updated to include explicit reference to NRECA.
Response: NRECA will be added to App	pendix A.	
SERC Standards Committee		(1)With the large number of standards and the wide variation in the reliability benefit achieved compared to the extensive variation in the cost to implement and maintain compliance to the requirements, we suggest that a meaningful cost effectiveness analysis is extremely difficult. Perhaps a cost benefit screen could be used to review current requirements for potential elimination.(2)The comments expressed herein represent a consensus of the views of the above-named members of the SERC Standards Committee only and should not be construed as the position of SERC Reliability Corporation, its board, or its officers.

Response: The current SAR process allows the entities to propose the retirement of requirements that have little reliability benefit irrespective of cost. Potential retirement candidates will be reviewed when the standard is up for revision. The CEAP is not currently designed to be used when considering whether or not a standard should be retired but rather was intended to only be utilized for new standards or standards being actively revised. The CEAP is intended to address the addition of requirements or standards to improve reliability and the incremental costs associated with that improvement. From page 2 of the CEAP, "The NERC Cost Effective Analysis Process (CEAP) represents an initial step towards addressing concerns regarding cost impacts (implementation, maintenance, and ongoing compliance resource requirements) associated with achieving reliability objectives identified in standards. The Process allows the industry the opportunity to identify alternative requirements for meeting a standard's reliability objective that may be less costly and equally as effective and efficient during the drafting process to help all in making informed choices." The CEAP is currently not intended for use in every project but will be rolled out as a pilot program. Further phases of the CEAP could consider other attributes and elements as well as what it is applied to.



Organization	Yes or No	Question 5 Comment
PPL Corporation NERC Registered Affiliates		a. NERC Staff should not be writing the reports and recommendations in either the CIA phase or the CEA phase. These reports and recommendations should be written by industry SMEs.b. CEAP should be applied to existing as well as proposed new standards. There are many requirements that can be improved on.
resources required to generate those remarket sensitive information will also be requirements that have little reliability be standard is up for revision. The CEAP is retired but rather was intended to only address the addition of requirements or improvement. From page 2 of the CEAP addressing concerns regarding cost important associated with achieving reliability objectives.	ports and reco e maintained. Denefit irrespe not currently of De utilized for standards to it , "The NERC Co acts (implement ectives identifications	reports and recommendations because they are impartial, and with the ommendations a more timely issuance will be achieved confidentiality of The current SAR process allows the entities to propose the retirement of ctive of cost. Potential retirement candidates will be reviewed when the designed to be used when considering whether or not a standard should be new standards or standards being actively revised. The CEAP is intended to improve reliability and the incremental costs associated with that ost Effective Analysis Process (CEAP) represents an initial step towards intation, maintenance, and ongoing compliance resource requirements) ed in standards. The Process allows the industry the opportunity to identify ability objective that may be less costly and equally as effective and efficient med choices." [PASTE PILOT]
PacifiCorp		PacifiCorp recommends an approach with a more holistic cost effectiveness initiative, which seems appropriate for the reasons outlined above and would be a valuable tool for the industry and its regulators.
		pportunity for all entities to provide input to whatever is ultimately the regarding how the CEAP may be improved please submit them during the
Southern Company		We agree with the implementation of new NERC Reliability Standards. However, we believe that this evaluation should be part of a more holistic approach to Standards development. Based on the recent efforts of the P.81 Team and the Standards Process Input Group (SPIG), there are other criteria that, along with cost-benefit and ALR considerations, should be considered in the Standards Development Process. Rather than compartmentalize the evaluation of potential cost impacts, I suggest that these could be considered as part of a broader



Organization	Yes or No	Question 5 Comment
		evaluation of SARs and proposed standards to ensure that new requirements: o Meet the Adequate Level of Reliability criteria o Are cost-effective in meeting the reliability objectives, considering both implementation costs and on-going costs o Are not unduly burdensome or administrative in nature o Are not duplicative of other standard requirements or other regulations
<b>Response:</b> The CEAP as proposed comp approach and will be conducted as part		existing standards development process and does not preclude a holistic ds development process.
Dynegy		I think it may be helpful early on to have a webinar to further summarize and explain this process. I agree with the concept but it looks complicated. Webinar could help explain how much time this is expected to add to an already lengthy process.
suggested to have an informational web Team believes that the field testing proof the standard development process to ac	inar for the incress will provide commodate Commodate Controls, for all proposes.	eted the direction that the CEAP is taking will be better defined. It will be dustry. Piloting of CEAP prior to full implementation is planned. The CEAP is insight into what potential changes, if any, may be required in CEAP and EAP. After successful field testing, the CEAP may be revised. The CEAP is deed new and revised standard proposals. The CEAP team will develop an income and revised standard proposals.
Entegra Power Group LLC		Reduce, eliminate, reduce the growth, cut costs EVERYWHERE, etc, etc! We all are in this together. We will all feel the pain someday. Let's get down to business and stop thinking that our debt will be inflated away someday. History tells us the end of this story; it's happened to many great nations before!!
<b>Response:</b> The CEAP is intended to real the electric system.	istically and pr	actically aid in determining what needs to done to preserve the integrity of
Central Lincoln		We note the survey questions are targeted to the registered entities that must implement the requirements. The true cost of compliance is not fully covered by these questions to the registered entities, since there are costs to assess compliance, enforce the requirements, process violations, etc. There should be survey questions directed toward the regional entities and the ERO to capture these costs as well.



Organization		Yes or No	Question 5 Comment		
Response: The cos	Response: The cost of compliance is addressed in Appendix B's question 1:				
, , , , , , , , , , , , , , , , , , , ,	roximate incremental specific as possible)	one-time and	ongoing estimated potential cost impacts are associated with the following:		
(a)	Implementation cos	ts			
(b)	Maintenance costs				
(c)	Ongoing Compliance	e Resource Re	equirements		
Although the costs for the ERO, the Regions and even FERC are real costs borne ultimately by ratepayers, these additional costs are outside the scope of this proposal. The objective of this proposal is to identify costs to afford the industry the opportunity to propose alternative requirements that may achieve a similar and potentially less costly solution to achieving a reliability objective.					
Cowlitz County PUD			The total cost of compliance not only includes the efforts of registered entities, but also the cost of compliance enforcement. Cowlitz PUD suggests that survey questions directed at the RE's and the ERO to assess costs associated with audits, and processing of violations. Proposed standards may pose particular challenges to audit and enforce. Cowlitz PUD also believes in assessing the applicability scope of a proposed standard, and whether it is best to address a reliability gap to a restricted subset of the BES. Where BES wide application may not be feasible, it may be possible to implement on a small scale and yet yield great benefits.		
Response: The cost	Response: The cost of compliance is addressed in Appendix B's question 1:				
, , , , , , , , , , , , , , , , , , , ,	oximate incremental specific as possible)	one-time and	ongoing estimated potential cost impacts are associated with the following:		
(a)	Implementation cos	ts			
(b)	Maintenance costs				
(c)	Ongoing Compliance	e Resource Re	equirements		



Organization	Yes or No	Question 5 Comment
are outside the scope of this proposal.	The objective	FERC are real costs borne ultimately by ratepayers, these additional costs of this proposal is to identify costs to afford the industry the opportunity to similar and potentially less costly solution to achieving a reliability objective.
Trans Bay Cable, LLC		Include the evaluation of existing standards. It's great we are looking at new standards, but there are several current standards that have run their course, but yet cost thousands of dollars a year to maintain the program.
intended to address the addition of req	uirements or s	considering whether or not a requirement should be retired. The CEAP is tandards to improve reliability. The Paragraph 81 Project is looking at the re, that could lead to standards retirement.
LCRA Transmission Services Corporation		The CEAP process will tie up entitie's time and resources. So in order for all entities to buy into this process there has to be parameters, more specifically delegate to certain committees, ie. CCC, SDT, etc The methodology is not concise-there needs to be a cost benefit analysis where all entities can agree upon.
provide guidance to the SDT and not a complementation is planned. The CEAP T if any, may be required in CEAP and the CEAP may be revised. The CEAP Phases There can be no delegation to the complementary of the complement	quantitative an eam believes t standard deve will then be u mittees at NER s. The survey i	comment. The CEAP as drafted is a high level process that is meant to alysis of the "benefit" of a project. Piloting of CEAP prior to full hat the field testing process will provide insight into what potential changes, elopment process to accommodate CEAP. After successful field testing, the sed, as appropriate, for all proposed new and revised standard proposals. C due to potential market sensitivities of the issues and the possible s intentionally high level to encourage entity participation without being
American Transmission Company, LLC		1) What is the EIA411 Report which is referenced several times in this CEAP? Please define when first referenced in the CEAP as this will assist the industry.2) Integration of the proposed ALR Definition and reliability of the BES should be considered in the CEAP.3)(Pg.4)The final CEAP Report should include a section on addressing ALR. Does it fill a "reliability gap"? 4) Administrative Comment: Formalize the document by organizing the CEAP into Sections. Recommend to add a Table of Contents to make it easier to find the applicable sections.5) The CEAP Team should consider adding a section on disagreement with the SC recommendations and allow for filing appeals. Specify an appeal process and



Organization	Yes or No	Question 5 Comment
		how an entity can submit an appeal for either results of Phase 1 and/or 2.6) Finally, ATC reinforces that this is more or less a "concept paper" and recommends adding detailed information prior to implementation at a later date.

**Response:** The EIA-411 Report is the U.S. Department of Energy--Energy Information Administration for the <u>Coordinated Bulk Power Supply Program Report</u>. It will be defined as a reference in the CEAP document. The analyses must include how the proposal affects reliability, filling a reliability gap, providing an adequate level of reliability. Adding a Table of Contents and sectionalizing the CEAP will be considered. As stated in the CEAP, the NERC standards development process will be followed, and that process addresses appeals. The information in the CEAP explains the concept as well as identifies the Process; a concept paper is not necessary.

Ameren	(1) We agree this is a move in the right direction by NERC; but, need to be careful
	that addition of these steps do not significantly extended what seems to be an
	elongated process already. (2) Integration CEAP with the proposed ALR Definition
	should be considered. (3) Would there be an appeal process in case there is a
	disagreement with SC's decision? (4) Would the entity survey responses be
	confidential? (5) When finalized, would the CEAP process included in NERC RoP?
	(6) We have received a comment form our Security personnel that the term
	"Standard Authorization Request" (SAR) needs to be changed. Department of
	Homeland Security uses the same acronym (SAR) which has stood for "Suspicious
	Activity Report" for a long time. With the same acronym for two different items,
	the process could easily be confused.

Response: The CEAP team thanks Ameren for their comment. The CEAP is not intended to add unreasonable delay to the existing process whereby the NERC Staff presents a recommendation to authorize the SAR and there is currently no time limit in the existing process. The CEAP is to conform and be conducted as part of and in parallel with the existing standards development process. The ALR will be considered as part of the CEAP because all standards must achieve an Adequate Level of Reliability irrespective of Costs. The analyses specified by the CEAP must include how the proposal affects reliability, filling a reliability gap, providing an adequate level of reliability. The CEAP is a guidance document that complements the standards development process. The responses to the CEAP would remain confidential and the CEAP document will be revised to more clearly state this. The NERC Standards Process Manual permits for appeal of any standards action or inaction related to the development of a standard. [PASTE PILOT] The CEAP will initially be only a guidance document subject to a pilot and at some point in the future may be an addition to the ROP or change to the standards process manual. As stated in the CEAP, the NERC standards development



Organization	Yes or No	Question 5 Comment
remain confidential. The meaning of SA Security SAR, that must be brought to the CEAP fits into other NERC procedures are	R as used in the Standards Cond processes w	appeals. Any information submitted that demands confidentiality would ne CEAP is evident. If there is confusion with the Department of Homeland Committee's attention. As the CEAP approval process continues, how the will be made known. Changing the designation of the standards in NERC and is outside of the scope of the CEAP project.
Public Service Enterprise Group		We recommend that the procedure be renamed to "Cost Analysis Procedure" and that the term "Effective" be dropped because the procedure will not weigh a standard's incremental implementation cost with incremental reliability benefits. Per the ALRTF document "Discussion Paper: Risk Tolerance for Widespread BES Outages with Significant Socio-Economic Impacts" such an analysis is not yet feasible. Furthermore, we believe that the process of surveying stakeholders is subject to non-response bias. The SC needs to address this issue in the procedure so that the input of a few voluntary respondents does not outweigh the silence of non-respondents for whom the cost impact may be negligible. Finally, an example would be a great benefit.
of the program would be counterproduct to the title. The data called for in the CE made. The CEAP also takes into account	tive. Depend AP is not related the number of PReport shou	olic outreach on the CEAP development and believes that changing the title ing on the outcome of that meeting the CEAP group may propose a change ted to the ALRTF Discussion paper, the data can be provided, and judgments of respondents; refer to the sections "Considerations for CIA and CEA ald be provided in consideration of the following:" on page 4. [Appendix C]
Liberty Electric Power		The CEAP should take note of the potential cost differences in different sized entities. A small merchant plant typically does not have an engineering staff, and would need to incur the project costs, and expend the time to develop a project. A larger integrated generator would have staff available, and would report a lower cost for the same project due to having staff in-house. Further, the larger entity would likely be capable of developing potential cost information from staff, while smaller merchants would have to use contractors to simply respond to the cost questions. This potentially could lead to an underestimation of the costs to smaller firms as the integrated generators drive the cost analysis. Further, there should be some recognition of the different affects on rate-based entities versus



Organization	Yes or No	Question 5 Comment
		merchant entities. Some respondents will have a cost recovery built into their business model, while merchant plants will not. Finally, there should be some coordination of projects which includes the costs of compliance. Having multiple revisions or new standards which require expenditures in the same fiscal year can strain the resources of smaller entities.
Considerations for CIA and CEA Reports industry outreach numerous education importance of collaboration and pooling	s of the CEAP. ( activities such g resources to	en entities and the weighing of these differences is described in the Costs are addressed in the Appendix B questions. Also as part of the as webinars and presentations to industry groups will emphasize the answer the CEAP questions during the postings. The CEAP will be revised to and its representation in the final report.
City of Austin dba Austin Energy		The CEAP process will require industry to dedicate additional resources and time to provide complete information for the Appendix B survey. Many of us are already stretched quite thin and this process will place additional burden on limited resources. (Nonetheless, it is a good idea)
CEAP, but the end result of implementi	ng the CEAP just ations to indust	recognized that more time and resources will be needed to devote to the stifies the means. Also as part of the industry outreach numerous education try groups will emphasize the importance of collaboration and pooling stings.
Essential Power, LLC		Essential Power, LLC agrees with the need to conduct a Cost Benefit Analysis as part of the Standards Development Process. However, as a relatively small entity, we have a number of concerns regarding the gathering and effective analysis of the cost impact data;
		1. In many cases, smaller entities may not have the in-house expertise to conduct an initial Cost Impact Analysis, and will need to bring in outside assistance to conduct this analysis. This will present significant challenges in providing a useful analysis within 30 days. We suggest that the initial posting period be more flexible, allowing for a period of up to 60 days, dependent upon the specific Standard in question. This will allow smaller entities the time needed to better analyze the impact of the recommended requirements and provide more accurate data to the SDT.



Organization	Yes or No	Question 5 Comment
		2. We are concerned with the composition of the group or team that will review the information gathered through the CEAP process. Although the SDT and NERC Staff are technical Subject Matter Experts on the content of a Standard, they may not have the necessary skill-set to conduct an analysis of the cost information. We recommend that the review team include industry experienced economists or financial analysts to ensure that a complete and effective analysis is conducted.  3. The CEAP process needs better defined metrics for determining whether or not a project is cost effective. Some of these metrics may vary from project to project, but there should be a base set of hard metrics that is common to all projects. The metrics included in the current proposal are too vague and high-level to be
		4. The review team should review the cost impact on different industry groups based on a number of criteria, one of which should be the size of the organization. Smaller entities invest a higher percentage of their resources to implement and maintain compliance to the NERC Reliability Standards; this fact needs to be taken into consideration when implementing the CEAP. We need to ensure that the proposed requirements do not impose an unreasonable burden on smaller organizations.By addressing these concerns, Essential Power, LLC believes that the CEAP process will be much more effective and will be more inclusive of smaller entities.

Response: The intent of the CEAP implementation is not to disrupt the schedule of a standard's development, and the 30 day comment period will be kept to coincide with the NERC standards process manual for the SAR posting. This CEAP is meant to be a complement to the standards development process. NERC staff is currently reviewing and recommending SAR authorization to the NERC Standards Committee without technical comment or analysis. Because this is a high level guidance document and not a detailed quantitative Cost Benefit Analysis, this type of expertise is not needed and specific metrics are not warranted. If in the future the process evolves and matures into something more, then this type of expertise and/or metrics may be warranted. The CEAP considers the size of respondents in its analyses, and the impacts on the power system. Also as part of the industry outreach numerous education activities such as webinars and presentations to industry groups will emphasize the importance of collaboration and pooling resources to answer the CEAP questions during the postings to ensure entities of all sizes have the



Organization	Yes or No	Question 5 Comment
opportunity to participate.		
		While we generally agree with the CEAP concept it should be subjected to field trial for a number of diverse standards to access actual performance. It is also important that decision making responsibility with regard to proceeding with development based on cost/benefit be subjected to stakeholder review using an industry appeal process. Simplification of the documentation should also prove worthwhile for actual use of the CEAP principles. Again NERC should remain mindful of the balance of resources required to plan and operate the electric system along with participation development of new standards which now will also require detailed cost estimates. There is likely to be a good deal of second guessing if the actual costs associated with meeting standards requirements far exceeds the initial cost estimates. One approach that might lessen the burden on staff and prove effective might be to have NERC or drafting teams provide industry with cost estimates and allow industry to approve those cost estimates.
the field testing process will provide ins development process to accommodate be used, as appropriate, for all propose	ight into what CEAP. After su d new and rev ata required fo	of CEAP prior to full implementation is planned. The CEAP Team believes that potential changes, if any, may be required in CEAP and the standard ccessful field testing, the CEAP may be revised. The CEAP Phases will then ised standard proposals. Having NERC or drafting teams provide cost or the CEAP and is outside of the existing development process and may add
Exelon Corporation		Thank you for the effort to develop a process that incorporates cost impact into the assessment of Reliability Standard development. Exelon appreciates this initial effort and offers the feedback and questions below. Proposed CEAP Process: o Analysis judgment - Within the process, greater clarity on who will judge the analysis results and by what measure/basis is needed. Who and how will NERC staff compile CIA information? How will minority views be presented? o Available resources - the proposal relies on stakeholder input. Operational reality and hands on experience are valuable to inform the assessment; however, resources within the industry are already spread thin on NERC matters. How will this process avoid further stressing resources? o Quality assessments - input is



Organization	Yes or No	Question 5 Comment
		not and should not be mandatory. How will data sufficiency or quality be measured? How will NERC guarantee quantity or quality of input? What backstop measures will be available should the input fall short. Can costs be accurately determined at the SAR level prior to requirements development? o Cost components and perspectives - It is appropriate that cost assessments include implementation, maintenance and ongoing compliance resource requirements. However, the CEAP should look at and consider both industry-wide impacts and functional entity segment impacts to avoid disproportionate (unduly discriminatory) impacts. o Protection of proprietary and market information - the proposal comments on protecting market information; however, the process must discuss how it will protect market information, entity proprietary information and sensitive cost data. If sharing such information raises concerns for entities, they will be unable to provide input. o Impacts on standard development - As an added part of the standards development process, how will the CEAP be incorporated into the standards development revision project underway and how will CEAP support the goal of a more efficient and effective standards process? Process to Develop the CEAP o Additional background on the development of the CEAP would be useful. Who developed the draft CEAP and which NERC department is representing NERC in the effort? o While the announcement email indicates some steps forward, further detail would be useful. Will stakeholders have additional opportunity to provide input on the process? What is the target timeline to develop and roll out the CEAP? A pilot project approach as suggested in the announcement is desirable, though further detail on how the program will be rolled out is needed. Thank you for the opportunity to comment.

**Response:** It is recognized that more time and resources will be needed to devote to the CEAP, but the end result of implementing the CEAP justifies the means. Determining specific criteria for the CIA phase of the CEAP is not the intent but the desired result will be an identification of egregious costs that may be associated with a new standard and the potential risk being mitigated as stated in the Introductory section of the CEAP. Drilling down in the CEAP to clarify processes used, how decisions are made, is not the current intent of the pilot program, expected to be conducted in the third quarter of 2012, and this document which will initially be a guideline document. The reviewers will be subject matter experts, and be able to make whatever decisions or determinations are necessary. The adequacy, handling, and consideration of data submitted is described in the



Organization	Yes or No	Question 5 Comment
believes that the field testing process wi standard development process to accomwill then be used, as appropriate, for all informational webinar for the industry. the Phase 2 CEA and whether extrapolat unreasonable delay to the existing procedurently no time limit in the existing processisting or future revised standards development.	Il provide insignmodate CEAP proposed new The CEAP tear ion of results ess whereby the CEAP CEAP tear the CEAP tear ion of results ess whereby the CEAP tear in the CEAP tear in the CEAP ion of results elopment process.	Piloting of CEAP prior to full implementation is planned. The CEAP Team ght into what potential changes, if any, may be required in CEAP and the P. After successful field testing, the CEAP may be revised. The CEAP Phases wand revised standard proposals. It will be suggested to have an mill develop an implementation plan. Potentially insufficient responses to was needed will be noted in the report. The CEAP is not intended to add ne NERC Staff presents a recommendation to authorize the SAR and there is AP is to conform and be conducted as part of and in parallel with the cess and will not violate either. The proprietary data and any confidential or the final report. The CEAP will be revised to ensure that this information is
Puget Sound Energy, Inc.		The flow chart on page 13 of the proposed CEAP indicates in step 1 that "NERC SC publishes the findings of NERC Staff, the SC and the CIA report", but only appears to do this if the NERC SC does not authorize the SAR. Puget Sound Energy recommends that, in the spirit of transparency, the findings of the NERC Staff, the SC and the CIA report be published even if the NERC SC authorizes the SAR.Puget Sound Energy suggests question 4 of Phase I be reworded. Puget Sound Energy believes the goal of this question is to discover if any existing Standards can be modified to include the new requirements being proposed rather than creating a whole new standard. As written it seems to ask for any new future standards that could possibly be thought of to solve the reliability issue.
		to correctly depict the CEAP process. The CEAP reports (CIA and CEA) will  CIA Question 4, now Question 2 has been revised to address the concerns
Electricity Consumers Resource Council (ELCON)		NERC might consider retaining the services of the Power Systems Engineering Research Center (PSERC)to help frame a longer term model for CEAP. http://www.pserc.wisc.edu/home/index.aspx
Response: Thank you for the suggestion	. If needed, it	t is resource that can be turned to.
MISO		The reports created through this process should attempt to quantify as accurately as possible the costs (startup and ongoing of the entire "NERC community") and



Organization	Yes or No	Question 5 Comment
		the expected benefits of a proposed reliability standard or standard revision. If the cost to benefit ratio is high, alternatives to the proposal should be pursued. Summary of MISO Comments: o Having a formalized process for determining costs and benefits and meaningfully evaluating these prior to standard development and/or approval would clarify for the industry, NERC, and Regional Entities the considerations and analyses that are appropriate for determining high value/benefit reliability standards and result in the development, revision, or interpretation of the reliability standards that provide the most benefit to reliability. o There should be a basic cost assessment performed for all SARs to estimate the proposed standard's potential costs and benefits, including any changes being proposed in response to Federal Energy Regulatory Commission (FERC) directives. o The cost assessments provided at the commencement of a project should be coordinated with the activities of the Standards Process Input Group to ensure synergies, and avoid duplication, of effort. o SMEs from a representative group of Registered Entities should be enlisted to participate in both phases of the cost analysis proposed by NERC.o The SMEs should focus, in particular, on identifying the types of practices and processes that are intended to be in scope for a particular proposal, the relative costs and benefits of those anticipated practices and processes, and any appropriate alternatives that would achieve the same reliability benefit. o NERC should add questions to the Phase Two inquiry intended to elicit more detail on the types of practices and processes that would be necessary to comply with the proposed requirements up for review.

**Response:** The CEAP as drafted is a high level process that is meant to provide guidance to the SDT and not a quantitative analysis of the "benefit" of a project. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. The concerns in the comments are addressed in the CEAP. Regarding adding questions to the Phase Two inquiry, the questions in the CEAP are foundation questions, and additional questions can be presented. That is indicated in the title block to the questionnaires. The CEAP is not intended to add unreasonable delay to the existing process whereby the NERC Staff presents a recommendation to authorize the SAR and there is currently no time limit in the existing process. The CEAP is to conform and be conducted as part of and in parallel with the



Organization	Yes or No	Question 5 Comment
existing or future revised standards development process and will not violate either. Because the CEAP is intended to fit within the current and proposed standards development process there is no need beyond the drafting teams to solicit additional subject matter experts for the CEAP. As noted in the draft CEAP, additional draft questions will be added to the Phase 2 CEA as deemed appropriate by the drafting teams conducting the CEAP and consider them on a standard by standard basis.		
New England States Committee on Electricity		(1) In our comments to NPCC on its CEAP proposal, we stated that NPCC should consider establishing an after-the-fact review process as part of its procedures. We repeat this suggestion here. A collaborative and transparent review of the actual costs and benefits of standards after they are implemented would both bolster the credibility of the process and allow NERC to enhance and improve its CEAP.(2) We understand that some transmission providers supportive of the CEAP have expressed concern regarding their ability to provide detailed cost impact data given resource constraints within their organizations. As one possible approach, ISO New England has proposed shifting the responsibility of providing an initial cost estimate to NERC staff or SDTs, with industry stakeholders then reviewing and approving the estimates. Such an approach may promote a greater level of participation by industry in the voluntary CEAP process. However, it would layer additional obligations and resource challenges onto NERC and/or SDTs. NESCOE suggests that additional discussion among stakeholders is warranted regarding the most efficient process to obtain accurate cost estimates. Irrespective of the process that is ultimately implemented, we repeat our comment in number 2 above that cost estimates should take into account regional differences and not simply be presented as a broad national average.

Response: An after-the-fact review is not contemplated as part of this CEAP but your suggestion is noted for further consideration in future revisions to the CEAP, depending on available resources to conduct such review. It is understood that not all entities may be able to respond to each and every CEAP request and it is critical to the success of the CEAP that these entities pool their resources and collaborate through industry trade groups to effectively and efficiently provide as much input as possible. The CEAP is not seeking a detailed cost analysis that is quantitative or regional in nature but rather, remains at a high level. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals.



Organization	Yes or No	Question 5 Comment
Massachusetts Department of Public Utilities		(1)We agree with NESCOE that NERC should establish an after-the-fact review process as part of its procedures. A collaborative and transparent review of the actual costs and benefits of standards after they are implemented would both bolster the credibility of the process and allow NERC to enhance and improve its CEAP.(2)We understand that some transmission providers supportive of the CEAP have expressed concern regarding their ability to provide detailed cost impact data given resource constraints within their organizations. As one possible approach, ISO New England has proposed shifting the responsibility of providing an initial cost estimate to NERC staff or SDTs, with industry stakeholders then reviewing and approving the estimates. Such an approach may promote a greater level of participation by industry in the voluntary CEAP process. However, it would layer additional obligations and resource challenges onto NERC and/or SDTs. The Mass DPU joins NESCOE in suggesting that additional discussion among stakeholders is warranted regarding the most efficient process to obtain accurate cost estimates. Irrespective of the process that is ultimately implemented, we repeat our comment in number 2 above that cost estimates should take into account regional differences and not simply be presented as a broad national average.
noted for further consideration in future understood that not all entities may be that these entities pool their resources much input as possible. The CEAP is not remains at a high level. Piloting of CEAP process will provide insight into what po	e revisions to table to respondend collaborate seeking a detential change eld testing, the	e-fact review is not contemplated as part of this CEAP but your suggestion is the CEAP, depending on available resources to conduct such review. It is not to each and every CEAP request and it is critical to the success of the CEAP e through industry trade groups to effectively and efficiently provide as ailed cost analysis that is quantitative or regional in nature but rather, implementation is planned. The CEAP Team believes that the field testing les, if any, may be required in CEAP and the standard development process to CEAP may be revised. The CEAP Phases will then be used, as appropriate,
KCP&L		1. There is a concern that "Adequate Level of Reliability (ALR)" is undefined. It is not helpful to take this concept before formal regulator and industry acceptance for use to define or explain another draft concept. 2. On page 3, the statement, "[T]he purpose of the CEAP isto inform stakeholders of proposed industry cost impact" While we concur with the examples provided on page 4, i., we question



Organization	Yes or No	Question 5 Comment
		whether an industry-wide cost impact is relevant when the costs by region and to unique entities will vary greatly. As stated in the example, we agree averaging costs would not necessarily be representative of the costs. As previously stated in response to Question No. 1, we wonder how normalization across the industry will be made, previously providing examples of the spectrum of operations that would need to be incorporated into an industry-wide analysis. We add to the example on page 4, i., and suggest costs that are provided to the B.O.T. be a range with costs by region and by entity: if relevant, costs divided by customers served; costs, if relevant, divided by transmission system transmission miles; if relevant, costs divided by number of substations affected by the standard; and/or whatever metrics would seem appropriate to the standard, including CIP standards.

**Response:** Thank you for your comment. The CEAP is not seeking a detailed cost analysis that is quantitative or regional in nature but rather, remains at a high level. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. There is currently a NERC BOT approved ALR definition that was filed for informational purposes with the FERC and that is currently used as a guidance document by NERC standards drafting teams. CIA Question 4 pertaining to ALR has been removed from the CEAP process.

APS	There does not appear to be enough emphasis on quantifying reliability benefits.
	Without quantifying benefits, costs will only help in prioritizing the standards but
	one would not know if the standard is even needed. The reliability benefits should
	be quantified in terms of avoiding loss of power to the customer or avoiding
	cascading.

**Response:** Thank you for your comment. The CEAP as drafted is a high level process that is meant to provide guidance to the SDT and not a quantitative analysis of the "benefit" of a project. Piloting of CEAP prior to full implementation is planned. The CEAP Team believes that the field testing process will provide insight into what potential changes, if any, may be required in CEAP and the standard development process to accommodate CEAP. After successful field testing, the CEAP may be revised. The CEAP Phases will then be used, as appropriate, for all proposed new and revised standard proposals. In addition NERC is developing reliability risk metrics which, in the future will help with determining benefit.



**END OF REPORT**