

Consideration of Comments

Project Name:	2016-02 Modifications to CIP Standards CIP-002-6
Comment Period Start Date:	9/14/2017
Comment Period End Date:	10/30/2017
Associated Ballot:	2016-02 Modifications to CIP Standards CIP-002-6 IN 1 ST

There were 76 sets of responses, including comments from approximately 192 different people from approximately 129 companies representing the 10 Industry Segments as shown in the table on the following pages.

All comments submitted can be reviewed in their original format on the [project page](#).

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 Director of Standards Development, [Howard Gugel](#) (via email) or at (404) 446-9693.

Questions

1. Criterion 2.12: In the V5TAG Transfer Document, the V5TAG requested the SDT to “clarify the applicability of requirements on a TO Control Center that perform the functional obligations of a TOP, particularly if the TO has the capability to operate switches, breakers, and relays in the BES.” The SDT modified CIP-002-5.1a Attachment 1, Criterion 2.12 to make this clarification. Do you agree that the revision clarifies the applicability of Criterion 2.12? If not, please provide your rationale and an alternate proposal.
2. Criterion 2.12: The SDT modified CIP-002-5.1a Attachment 1, Criterion 2.12 to be similar to the construct used in Criterion 2.5. Do you agree with the SDT’s approach in the modified criterion to evaluate a BES Cyber System’s span of control by summing the weighted value of each BES Transmission Line that the BES Cyber System monitors and controls? If not, please provide your rationale and an alternate proposal.
3. Criterion 2.12: Do you agree with the 6000 aggregate weighted value that is used in Criterion 2.12 to establish the minimum threshold for medium impact BES Cyber Systems associated with Control Centers that monitor and control Transmission? If not, please provide your rationale and an alternate proposal.
4. Criterion 2.12: The SDT modified Criterion 2.12 to categorize BES Cyber Systems associated with Control Centers that monitor and control Transmission regardless of a Responsible Entity’s functional registration. Do you agree with this approach? If not, please provide your rationale and an alternate proposal.
5. Criterion 2.12: Do you agree with the proposed modifications to Criterion 2.12? If not, please provide your rationale and an alternate proposal.
6. Implementation Plan: Do you agree with the SDT’s proposed Implementation Plan? If you agree with the proposed implementation time period, please note the actions you will take that require this amount of time to complete. If you think an alternate implementation time period is needed – shorter or longer - please propose an alternate implementation plan and provide a detailed explanation of actions and time needed to meet the implementation deadline.
7. The SDT considered a number of approaches and determined that proposed CIP-002-6 provides entities with flexibility to meet the reliability objectives in a cost effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for a more cost

effective approach that addresses the reliability objective, please provide your recommendation and, if appropriate, technical justification.

8. If you have additional comments on proposed CIP-002-6, Attachment 1, Criterion 2.12 that you have not provided in response to the questions above, please provide them here.

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

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
FirstEnergy - FirstEnergy Corporation	Aaron Ghodooshim	3	RF	FirstEnergy Corporation	Aaron Ghodooshim	FirstEnergy - FirstEnergy Corporation	4	RF
					Aubrey Short	FirstEnergy - FirstEnergy Corporation	1	RF
					Theresa Ciancio	FirstEnergy - FirstEnergy Corporation	3	RF
					Robert Loy	FirstEnergy - FirstEnergy Solutions	5	RF
					Ann Ivanc	FirstEnergy - FirstEnergy Solutions	6	RF
Southern Company - Southern Company Services, Inc.	Brandon Cain	1,3,5,6	FRCC,MRO,NPCC,SERC,SPP RE,Texas RE,WECC	Southern Company	Katherine Prewitt	Southern Company - Southern Company Services, Inc.	1	SERC
					R. Scott Moore	Southern Company - Alabama Power Company	3	SERC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					William D. Shultz	Southern Company - Southern Company Generation	5	SERC
					Jennifer Sykes	Southern Company - Southern Company Generation and Energy Marketing	6	SERC
Brandon McCormick	Brandon McCormick		FRCC	FMPA	Tim Beyrle	City of New Smyrna Beach Utilities Commission	4	FRCC
					Jim Howard	Lakeland Electric	5	FRCC
					Lynne Mila	City of Clewiston	4	FRCC
					Javier Cisneros	Fort Pierce Utilities Authority	3	FRCC
					Randy Hahn	Ocala Utility Services	3	FRCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Don Cuevas	Beaches Energy Services	1	FRCC
					Jeffrey Partington	Keys Energy Services	4	FRCC
					Tom Reedy	Florida Municipal Power Pool	6	FRCC
					Steven Lancaster	Beaches Energy Services	3	FRCC
					Mike Blough	Kissimmee Utility Authority	5	FRCC
					Chris Adkins	City of Leesburg	3	FRCC
					Ginny Beigel	City of Vero Beach	3	FRCC
Colby Bellville	Colby Bellville		FRCC,RF,SERC	Duke Energy	Doug Hils	Duke Energy	1	RF
					Lee Schuster	Duke Energy	3	FRCC
					Dale Goodwine	Duke Energy	5	SERC
					Greg Cecil	Duke Energy	6	RF
MRO	Dana Klem	1,2,3,4,5,6	MRO	MRO NSRF	Joseph DePoorter	Madison Gas & Electric	3,4,5,6	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Larry Heckert	Alliant Energy	4	MRO
					Amy Casucelli	Xcel Energy	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jodi Jensen	Western Area Power Administration	1,6	MRO
					Kayleigh Wilkerson	Lincoln Electric System	1,3,5,6	MRO
					Mahmood Safi	Omaha Public Power District	1,3,5,6	MRO
					Brad Parret	Minnesota Power	1,5	MRO
					Terry Harbour	MidAmerican Energy Company	1,3	MRO
					Tom Breene	Wisconsin Public Service Corporation	3,5,6	MRO
					Jeremy Voll	Basin Electric Power Cooperative	1	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Mike Morrow	Midcontinent ISO	2	MRO
SRC	David Francis	2,3	FRCC,MRO,NPCC, RF,SERC,SPP RE,Texas RE,WECC	SRC + SWG	Gregory Campoli	New York Independent System Operator	2	NPCC
					Mark Holman	PJM Interconnection, L.L.C.	2	RF
					Charles Yeung	Southwest Power Pool, Inc. (RTO)	2	SPP RE
					Terry Bilke	Midcontinent ISO, Inc.	2	RF
					Elizabeth Axson	Electric Reliability Council of Texas, Inc.	2,3	Texas RE
					Ben Li	IESO	1	MRO
					Drew Bonser	SWG	NA - Not Applicable	NA - Not Applicable

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Darrem Lamb	CAISO	2	WECC
					Matt Goldberg	ISONE	2	NPCC
Associated Electric Cooperative, Inc.	Mark Riley	1		AECI & Member G&Ts	Mark Riley	Associated Electric Cooperative, Inc.	1	SERC
					Brian Ackermann	Associated Electric Cooperative, Inc.	6	SERC
					Brad Haralson	Associated Electric Cooperative, Inc.	5	SERC
					Todd Bennett	Associated Electric Cooperative, Inc.	3	SERC
					Michael Bax	Central Electric Power Cooperative (Missouri)	1	SERC
					Adam Weber	Central Electric Power	3	SERC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
						Cooperative (Missouri)		
					Ted Hilmes	KAMO Electric Cooperative	3	SERC
					Walter Kenyon	KAMO Electric Cooperative	1	SERC
					Stephen Pogue	M and A Electric Power Cooperative	3	SERC
					William Price	M and A Electric Power Cooperative	1	SERC
					Mark Ramsey	N.W. Electric Power Cooperative, Inc.	1	SERC
					Kevin White	Northeast Missouri Electric Power Cooperative	1	SERC
					Skyler Wiegmann	Northeast Missouri Electric Power Cooperative	3	SERC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					John Stickley	NW Electric Power Cooperative, Inc.	3	SERC
					Jeff Neas	Sho-Me Power Electric Cooperative	3	SERC
					Peter Dawson	Sho-Me Power Electric Cooperative	1	SERC
Manitoba Hydro	Mike Smith	1		Manitoba Hydro	Yuguang Xiao	Manitoba Hydro	5	MRO
					Karim Abdel-Hadi	Manitoba Hydro	3	MRO
					Blair Mukanik	Manitoba Hydro	6	MRO
					Mike Smith	Manitoba Hydro	1	MRO
Seattle City Light	Paul Haase	1,3,4,5,6	WECC	Seattle City Light	Pawel Krupa	Seattle City Light	1	WECC
					Dana Wheelock	Seattle City Light	3	WECC
					Hao Li	Seattle City Light	4	WECC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Mike Haynes	Seattle City Light	5	WECC
					Bud Freeman	Seattle City Light	6	WECC
					Paul Haase	Seattle City Light	1,3,4,5,6	WECC
					Ginette Lacasse	Seattle City Light	1,3,4,5,6	WECC
Eversource Energy	Quintin Lee	1		Eversource Group	Timothy Reyher	Eversource Energy	5	NPCC
					Mark Kenny	Eversource Energy	3	NPCC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	RSC no Dominion and ISO-NE	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Wayne Sipperly	New York Power Authority	4	NPCC
					Glen Smith	Entergy Services	4	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Brian Robinson	Utility Services	5	NPCC
					Bruce Metruck	New York Power Authority	6	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					Edward Bedder	Orange & Rockland Utilities	1	NPCC
					David Burke	Orange & Rockland Utilities	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Laura Mcleod	NB Power	1	NPCC
					Michael Schiavone	National Grid	1	NPCC
					Michael Jones	National Grid	3	NPCC
					David Ramkalawan	Ontario Power	5	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
						Generation Inc.		
					Quintin Lee	Eversource Energy	1	NPCC
					Greg Campoli	NYISO	2	NPCC
					Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	6	NPCC
					Paul Malozewski	Hydro One Networks, Inc.	3	NPCC
					Sylvain Clermont	Hydro Quebec	1	NPCC
					Helen Lainis	IESO	2	NPCC
					Chantal Mazza	Hydro Quebec	2	NPCC
					Michael Forte	Con Ed	1	NPCC
					Daniel Grinkevich	Con Ed - Consolidated Edison Co. of New York	1	NPCC
					Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Brian O'Boyle	Con Ed	5	NPCC
Dominion - Dominion Resources, Inc.	Sean Bodkin	6		Dominion	Connie Lowe	Dominion - Dominion Resources, Inc.	3	NA - Not Applicable
					Lou Oberski	Dominion - Dominion Resources, Inc.	5	NA - Not Applicable
					Larry Nash	Dominion - Dominion Virginia Power	1	NA - Not Applicable
Colorado Springs Utilities	Shannon Fair	6		Colorado Springs Utilities	Kaleb Brimhall	Colorado Springs Utilities	5	WECC
					Charlie Morgan	Colorado Springs Utilities	3	WECC
					Shawna Speer	Colorado Springs Utilities	1	WECC
					Shannon Fair	Colorado Springs Utilities	6	WECC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
Southwest Power Pool, Inc. (RTO)	Shannon Mickens	2	SPP RE	SPP Standards Review Group	Shannon Mickens	Southwest Power Pool Inc.	2	SPP RE
					Louis Guidry	Cleco Corporation	1,3,5,6	SPP RE
					Megan Wagner	Westar Energy	6	SPP RE
					Deborah McEndaffer	Midwest Energy, Inc	NA - Not Applicable	SPP RE
PPL - Louisville Gas and Electric Co.	Shelby Wade	3,5,6	RF,SERC	Louisville Gas and Electric Company and Kentucky Utilities Company	Charles Freibert	PPL - Louisville Gas and Electric Co.	3	SERC
					Dan Wilson	PPL - Louisville Gas and Electric Co.	5	SERC
					Linn Oelker	PPL - Louisville Gas and Electric Co.	6	SERC
PSEG	Sheranee Nedd	1,3,5,6	NPCC,RF	PSEG REs	Tim Kucey	PSEG - PSEG Fossil LLC	5	RF

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Karla Jara	PSEG Energy Resources and Trade LLC	6	RF
					Jeffrey Mueller	PSEG - Public Service Electric and Gas Co	3	RF
					Joseph Smith	PSEG - Public Service Electric and Gas Co	1	RF

1. Criterion 2.12: In the V5TAG Transfer Document, the V5TAG requested the SDT to “clarify the applicability of requirements on a TO Control Center that perform the functional obligations of a TOP, particularly if the TO has the capability to operate switches, breakers, and relays in the BES.” The SDT modified CIP-002-5.1a Attachment 1, Criterion 2.12 to make this clarification. Do you agree that the revision clarifies the applicability of Criterion 2.12? If not, please provide your rationale and an alternate proposal.

Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer No

Document Name

Comment

We believe further language is specifically required in Criterion 2.12 to clarify that the functional registration of Transmission Owner and Transmission Operator apply. Per the registration criteria, Transmission Operators are “responsible for the reliability of its local transmission system and operates or directs the operations of the transmission Facilities.” As a result, this responsibility falls on directly on Transmission Operators. Further expansion of the criterion places responsibilities on Transmission Owners for activities they are not registered for.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments. CIP-002-5.1a is a Critical Infrastructure Protection standard that requires Responsible Entities to perform a categorization of their BES Cyber System(s). BES Cyber System categorization is based on the span of control of BES Cyber System(s), not functional registration. Transmission Owners are currently required to determine if they perform the functional obligation of a Transmission Operator under Criterion 2.12. Any Transmission Owner that operates BES Cyber System(s), associated with a Control Center, that can functionally control BES Transmission Facilities at one or more locations should be identified as medium impact in accordance with Criterion 2.12. The proposed Criterion 2.12 attempts to provide further clarity to TOs through a bright line approach and does not expand beyond the current scope of Criterion 2.12.

Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion

Answer	No
Document Name	
Comment	
<p>The proposed revisions improve upon the clarity of the applicability of Criterion 2.12; however, the proposed criterion raises a number of issues, many of which are discussed in our response to question 2.</p> <p>In addition, page 33 of the GTB states that “[i]n accordance with Criterion 2.12, the BES Cyber System(s) associated with the Control Center should be categorized as medium impact BES Cyber System(s). This statement could be interpreted by an auditor as requiring that all systems controlled and monitored by a medium impact Control Center should also be rated as medium impact as well. For this reason, Dominion Energy suggests that the language be changed to “In accordance with Criterion 2.12, all BES Cyber Systems contained within four walls of a medium impact Control Center should be categorized as medium impact BES Cyber System(s).” Such a change would more clearly categorize the applicable assets while limiting an interpretation of the language to mean something outside or beyond the four walls of the medium impact Control Center.</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT thanks you for your comment and asserts that the language in the GTB is consistent with the language in Attachment 1, Section 2. While the SDT agrees that the “associated with” language could be more precise, this language exists in the currently approved version of CIP-002, and addressing the “associated with” language is not related to the SDT’s currently proposed modifications to CIP-002.</p>	
Jeanne Kurzynowski - Consumers Energy Company - 1 - RF	
Answer	No
Document Name	
Comment	

No. For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Wendy Center - U.S. Bureau of Reclamation - 5

Answer

No

Document Name

Comment

Although the operation of breakers and switches is discussed in the Supplemental Material, it is not clear how Criterion 2.12 addresses whether “the TO has the capability to operate switches, breakers, and relays in the BES.”

CIP-002 is fundamental to determining which Cyber Assets are within scope. Reclamation recommends the impact rating of a BES Cyber System be determined by its possible impact on the Bulk Electric System, not where it resides (Control Center or any other location), how it is identified (virtual, non-virtual, hardware, software, etc.), and regardless of a Responsible Entity’s functional registration. Following this principle, phrases such as “performing the functional obligations of” are unnecessary.

Reclamation also recommends simplifying the Impact Rating Criteria using the methodology described below.

BES Cyber Systems are to be rated as high, medium, or low impact as follows:

A high impact BES Cyber System has one or more of the following characteristics:

- Is used to operate transmission lines of 500kV or above
- Supports a sum greater than 2500kV of transmission lines above 230kV
- Supports generation with an aggregate capacity greater than 3000MW
- Is identified as supporting an IROL or is necessary to avoid an Adverse Reliability Impact

A medium impact BES Cyber System has one or more of the following characteristics:

- Supports generation with the aggregate capacity between 1500 – 3000MW
- Supports a sum between 1500 – 2500kV of transmission lines above 230kV
- Supports a RAS that could negatively affect an IROL or that can perform automatic Load shedding of 300MW or more

A low impact BES Cyber System has one or more of the following characteristics:

- Supports a sum less than 1500kV of transmission lines above 230kV
- Supports transmission only between 110 – 230kV
- Supports generation with an aggregate capacity between 75 – 1500MW
- Supports any single generator greater than 20MW not already identified as a Medium Impact BES Cyber System
- Supports any Facilities that are designated a blackstart resource
- Supports any other RAS not already identified as a medium impact BES Cyber System

Likes 0

Dislikes 0

Response

The SDT appreciates your comments. The SDT is only authorized to address the TOCC issues as identified in the Standards Authorization Request for Project 2016-02. The SDT has revised criteria 2.12 to address the risk to the BES presented by the BES Cyber Systems that are capable of operating transmission.

Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1

Answer

No

Document Name	
Comment	
<p>NIPSCO is in support of the comment provided by EEI below.</p> <p>"The proposed revisions improve upon the clarity of the applicability of Criterion 2.12; however, the proposed criterion raises a number of issues, many of which are discussed in our response to question 2.</p> <p>In addition, page 33 of the GTB states that "[i]n accordance with Criterion 2.12, the BES Cyber System(s) associated with the Control Center should be categorized as medium impact BES Cyber System(s). This statement could be interpreted by an auditor as requiring that all systems controlled and monitored by a medium impact Control Center should also be rated as medium impact as well. For this reason, EEI suggests that the language be changed to "In accordance with Criterion 2.12, all BES Cyber Systems contained within four walls of a medium impact Control Center should be categorized as medium impact BES Cyber System(s)." Such a change would more clearly categorize the applicable assets while limiting an interpretation of the language to mean something outside or beyond the four walls of the medium impact Control Center."</p>	
Likes	0
Dislikes	0
Response	
Please see response to EEI comments.	
James Anderson - CMS Energy - Consumers Energy Company - 1	
Answer	No
Document Name	
Comment	
<p>For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.</p>	

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3

Answer

No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1

Answer	No
Document Name	

Comment

The proposed revisions improve upon the clarity of the applicability of Criterion 2.12; however, the proposed criterion raises a number of issues, many of which are discussed in our response to question 2.

In addition, page 33 of the GTB states that “[i]n accordance with Criterion 2.12, the BES Cyber System(s) associated with the Control Center should be categorized as medium impact BES Cyber System(s). This statement could be interpreted by an auditor as requiring that all systems controlled and monitored by a medium impact Control Center should also be rated as medium impact as well. For this reason, EEI suggests that the language be changed to “In accordance with Criterion 2.12, all BES Cyber Systems contained within four walls of a medium impact Control Center should be categorized as medium impact BES Cyber System(s).” Such a change would more clearly categorize the applicable assets while limiting an interpretation of the language to mean something outside or beyond the four walls of the medium impact Control Center.

Likes 0	
Dislikes 0	

Response

Please see response to EEI comment.

David Rivera - New York Power Authority - 3

Answer	No
Document Name	

Comment

The removal of the term “functional obligation” from 2.12 still does not clarify the requirement applies to TO because the capitalized term Control Center is used and that term implies functional registry (RC/BA/TOP/GOP). Clarification could be improved by using the non-capitalized term “control center” and defined as used in CIP-014. In addition, the use of the term “control” is also a source of confusion as it can be interpreted as having operational control (ie. Direct the switching operation) or physical control (perform the switching operation).

Likes 0

Dislikes 0

Response

The SDT asserts that using a weighting function based on the Transmission lines that a Control Center monitors and controls clarifies a Control Center that performs the reliability tasks of a TOP. Once this method was established, the SDT did not see a reason to modify the definition of Control Center to address the TOCC issue. The proposed weighting methodology adds clarity to the difference between medium impact BES Cyber Systems associated with a Control Center and low impact BES Cyber Systems associated with a Control Center.

Criterion 2.12 does not need to reference “functional obligation” to apply to TO’s, as the definition of Control Center encompasses all functional entities that perform the reliability tasks of RC/BA/TOP/GOP. It is not limited to functional entities registered as RC/BA/TOP/GOP.

Criterion 2.12 encompasses both the ability to direct actions and the capability to physically operate BES elements per the Control Center definition. The “monitoring” capability is the part that enables the direction of actions. The “control” capability is the part that enables the actual physical change to the BES element.

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy

Answer

No

Document Name

Comment

Duke Energy requests further clarification on the removal of the phrase “perform functional obligations of a TOP”. Was it the drafting team’s intent that all Control Centers, and not just Control Centers that perform TOP obligations, should be considered applicable to the new criterion? For instance, would a Control Center operated by a GO/GOP or a DP be considered under this criterion, even though any operation involving Transmission lines conducted by that Control Center, would only be done at the direction of a Transmission Operator? We would also like to point out that the use of “functional obligations” is also present when referencing the BA in 2.13. Lastly, the revision proposed to criterion 2.12 appears to create some inconsistency with the language used in the High Impact section, part 1.3.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. The SDT has revised criterion 2.12 to address the confusion related to the term “functional obligation,” as noted in the VTAG transfer document. To address the risk to the BES presented by the BES Cyber Systems that are capable of operating transmission, the revision is intended to address entities that perform tasks of operating transmission, regardless of registration. Research performed by the SDT did not show the same concern with the other Criteria.

Brandon McCormick - Brandon McCormick On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 3, 5; Chris Gowder, Florida Municipal Power Agency, 6, 4, 3, 5; Ginny Beigel, City of Vero Beach, 3; Joe McKinney, Florida Municipal Power Agency, 6, 4, 3, 5; Ken Simmons, Gainesville Regional Utilities, 1, 3, 5; Lynne Mila, City of Clewiston, 4; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 3, 5; Tom Reedy, Florida Municipal Power Pool, 6; - Brandon McCormick, Group Name FMMPA

Answer

No

Document Name

2016-02_CIP-002-6_Unofficial_Comment_Form_10 27 17 draft- FMMPA.pdf

Comment

FMMPA appreciates the SDT efforts for clarifying the applicability requirements for a TO Control Center that performs the functional obligations of a TOP. We have some suggested language for Criterion 2.12 that we feel removes some ambiguity and possible interpretation questions. Our suggested language is as follows:

“Each BES Cyber System, not included in Section 1 above, associated with any of the following:”

“Cyber Assets used to control BES Transmission lines, located at Control Centers or backup Control Centers, where the summed weighted value (according to the table below) of each BES Transmission Line controlled or monitored exceeds 6000.”

Likes 0

Dislikes 0

Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

Mark Gray - Edison Electric Institute (EEI) - NA - Not Applicable - NA - Not Applicable

Answer

No

Document Name

Comment

The proposed revisions improve upon the clarity of the applicability of Criterion 2.12; however, the proposed criterion raises a number of issues, many of which are discussed in our response to question 2.

In addition, page 33 of the GTB states that “[i]n accordance with Criterion 2.12, the BES Cyber System(s) associated with the Control Center should be categorized as medium impact BES Cyber System(s).” EEI is concerned that this statement might be interpreted by an auditor as requiring that all systems controlled and monitored by a medium impact Control Center should also be rated as medium impact as well. For this reason, EEI suggests that the SDT consider revised language similar to the following: “In accordance with Criterion 2.12, all BES Cyber Systems contained within four walls of a medium impact Control Center should be categorized as medium impact BES Cyber System(s).” Such a change would more clearly categorize the applicable assets while limiting an interpretation of the language to mean something outside or beyond the four walls of the medium impact Control Center.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment and asserts that the language in the GTB is consistent with the language in Attachment 1, Section 2. While the SDT agrees that the “associated with” language could be more precise, this language exists in the currently approved version of CIP-002, and addressing the “associated with” language is not related to the SDT’s currently proposed modifications to CIP-002.

Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb

Answer	No
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Document Name	
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Comment

KCP&L incorporates by reference Edison Electric Institute’s (EEI) Question 1 response.

Likes 0	
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Dislikes 0	
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Response

Please see response to EEI comment.

Don Schmit - Nebraska Public Power District - 5

Answer	No
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Document Name	
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Comment

The new 2.12 criterion language has the Impact Rating on the “Control Center” as an asset, yet in the “Rationale for Criterion 2.12” on page 18 of the standard it has the “...aggregate weighted value for applicable BES Cyber Systems...”. This is a problem because there could be a case where the number of transmission lines being controlled from a Control Center (asset) add up to a weighted value 8000 but there are two completely separate control systems (applicable BES Cyber Systems) each controlling transmission lines that would add up to a weighted value of 4000. In this case the language of IRC would lead you to make both control systems Medium Impact as the asset is being rated. If the intent of the standard is to assign the aggregate weighted value to the BES Cyber Systems as the language in

the “Rationale for Criterion 2.12”, the two do not align and confuse the reader. The “Consideration of Issues and Directives” on the NERC project site also says that the “Criterion 2.12 provides a bright line threshold that categorizes BES Cyber Systems associated with Control Centers of Transmission as medium impact.”. This leads the reader to believe the aggregate weighted value is associated with BES Cyber Systems, not the Control Center asset itself. We recommend the language of the standard and any rationale or guidance be made clear as to which one (the Control Center asset or the BES Cyber System) the aggregate weighted value is associated.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment and has modified the rationale to make it clear that the aggregated weighted value is associated with the Control Center.

David Jendras - Ameren - Ameren Services - 3

Answer

No

Document Name

Comment

We support comments offered by EEI for this question.

Likes 0

Dislikes 0

Response

Please see response to EEI comment.

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer

No

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison	
Likes	0
Dislikes	0
Response	
The SDT notes that Southern California Edison did not comment on this question.	
Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6	
Answer	No
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities	
Answer	Yes
Document Name	
Comment	
Colorado Springs Utilities supports Cowlitz PUD and APPA comments	
Likes	0
Dislikes	0

Response	
The SDT notes that Cowlitz PUD and APPA did not comment on this question.	
Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham	
Answer	Yes
Document Name	
Comment	
<p>MidAmerica would like to change its answer for this question to NO.</p> <p>MidAmerican agrees with EEI's comments. Please see EEI's Comments below:</p> <p>The proposed revisions improve upon the clarity of the applicability of Criterion 2.12; however, the proposed criterion raises a number of issues, many of which are discussed in our response to question 2.</p> <p>In addition, page 33 of the GTB states that “[i]n accordance with Criterion 2.12, the BES Cyber System(s) associated with the Control Center should be categorized as medium impact BES Cyber System(s). This statement could be interpreted by an auditor as requiring that all systems controlled and monitored by a medium impact Control Center should also be rated as medium impact as well. For this reason, EEI suggests that the language be changed to “In accordance with Criterion 2.12, all BES Cyber Systems contained within four walls of a medium impact Control Center should be categorized as medium impact BES Cyber System(s).” Such a change would more clearly categorize the applicable assets while limiting an interpretation of the language to mean something outside or beyond the four walls of the medium impact Control Center.</p>	
Likes	0
Dislikes	0
Response	
Please see response to EEI comment.	
Barry Lawson - National Rural Electric Cooperative Association - 4	

Answer	Yes
Document Name	
Comment	
NRECA supports the modified Criterion 2.12.	
Likes 0	
Dislikes 0	
Response	
The SDT thanks you for your comment.	
Richard Vine - California ISO - 2	
Answer	Yes
Document Name	
Comment	
The California ISO supports the comments of the Security Working Group (SWG)	
Likes 0	
Dislikes 0	
Response	
The SDT notes that the Security Working Group (SWG) did not comment on this question.	
Lona Calderon - Salt River Project - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	

Salt River Project supports comments submitted by APPA.	
Likes	0
Dislikes	0
Response	
The SDT notes that APPA did not comment on this question.	
David Gordon - Massachusetts Municipal Wholesale Electric Company - 5	
Answer	Yes
Document Name	
Comment	
MMWEC agrees that revisions to Criterion 2.12 clarify the issue of “functional obligation.” However, additional wording for Criterion 2.12 is needed to further clarify how Criterion 2.12 is to be applied. MMWEC supports APPA’s response to question 5 regarding this issue.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment and notes that APPA did not comment on this question.	
Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	
ERCOT ISO signs on to the SRC + SWG comments.	

Likes	0
Dislikes	0
Response	
The SDT notes that SRC+SWG did not comment on this question.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Texas RE agrees with the Standard Drafting Team’s (SDT) approach to to replace the “functional obligation” language in CIP-002-5.1, Criteria 2.12 with a bright line 6000 weighted value for BES Transmission Line threshold for delineating Medium and Low Impact Control Centers.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment.	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	Yes
Document Name	
Comment	
Seattle City Light supports the comments of Cowlitz PUD and APPA.	
Likes	0

Dislikes	0
Response	
The SDT notes that Cowlitz PUD and APPA did not comment on this question.	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	Yes
Document Name	
Comment	
The group would like the drafting team to provide clarity on page 18 in reference to criteria 2.12 rationale. The third paragraph mention BES Cyber Systems and we feel that it should reference BES Transmission Lines instead.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment and has modified the rationale to make it clear that the aggregated weighted value is associated with the Control Center.	
Long Duong - Public Utility District No. 1 of Snohomish County - 1	
Answer	Yes
Document Name	
Comment	
SNPD does not have comments on Question 1.	
Likes	0
Dislikes	0

Response	
The SDT thanks you for your comment.	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
NRG requests that the drafting team to provide clarity on page 18 in reference to criteria 2-12 rationale. The third paragraph mentions BES Cyber Systems and NRG requests SDT consideration that it should reference BES Transmission Lines instead.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment and has modified the rationale to make it clear that the aggregated weighted value is associated with the Control Center.	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jim Nail - City of Independence, Power and Light Department - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Russell Noble - Cowlitz County PUD - 3	
Answer	Yes
Document Name	

Comment	
Likes 1	Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	Yes
Document Name	
Comment	
Likes 1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jesus Sammy Alcaraz - Imperial Irrigation District - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Mike Lotz - City of Independence, Power and Light Department - 3,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicolas Turcotte - Hydro-Qu?bec TransEnergie - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jack Cashin - American Public Power Association - 4	
Answer	Yes
Document Name	
Comment	

Likes 1	Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Payam Farahbakhsh - Hydro One Networks, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mary Ann Todd - Illinois Municipal Electric Agency - 4	
Answer	
Document Name	
Comment	
IMEA supports APPA comments.	

Likes 0	
Dislikes 0	
Response	
The SDT notes that APPA did not comment on this question.	
Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
No Response.	
Likes 0	
Dislikes 0	
Response	

2. Criterion 2.12: The SDT modified CIP-002-5.1a Attachment 1, Criterion 2.12 to be similar to the construct used in Criterion 2.5. Do you agree with the SDT's approach in the modified criterion to evaluate a BES Cyber System's span of control by summing the weighted value of each BES Transmission Line that the BES Cyber System monitors and controls? If not, please provide your rationale and an alternate proposal.

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer No

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes 0

Dislikes 0

Response

The SDT notes that Robert Blackney did not comment on this question.

Spencer Tacke - Modesto Irrigation District - 4

Answer No

Document Name

Comment

Evaluation should be based on the short circuit MVA capacity at the element location in the system.

Likes 0

Dislikes 0

Response

Thank you for your comment. Anticipating that many Responsible Entities have a large number of Transmission Lines, the SDT has established a table of weighted values to simplify the evaluation. The values are estimates based on data found in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.”

David Jendras - Ameren - Ameren Services - 3

Answer No

Document Name

Comment

We believe the control center should have the same rating as the highest impact rating of the transmission facilities that it monitors. Example, if a control center monitors high impact transmission facilities, then it should also have a high impact rating. If a control center monitors only low or medium impact transmission facilities, then it should also have a low or medium impact rating, respectively.

Likes 0

Dislikes 0

Response

The SDT notes that there are no high impact Transmission Facilities. If the Control Center is monitoring higher impact Transmission Facilities, as noted in Attachment 1 criterion 1.3, that Control Center would be high impact. However, the modification made to criterion 2.12 is to address the Control Center that do not meet criterion 1.3, making them medium or low impact based on the Transmission Facilities the Control Center monitors and/or controls.

Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb

Answer No

Document Name

Comment

KCP&L incorporates by reference Edison Electric Institute’s (EEI) Question 2 response.

Likes 0

Dislikes 0

Response

Please see response to EEI comment.

Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable

Answer

No

Document Name

Comment

EEI cannot support the modified criterion and weighted value used in Criterion 2.12 at this time for the following reasons:

1. The use of an aggregate weighted value of 6000 contains no justified rationale and appears to be an arbitrary selection.
2. The proposed criterion approach, which deviates from the facilities-based approach used to identify high impact Control Centers (i.e., those monitoring and controlling medium impact facilities), focuses more on the number of lines rather than facility impacts. *(EEI is concerned that the proposed Criterion 2.12 could create situations where control centers that simply monitor a large number of lower impact transmission lines (i.e., 24 or more - 100kV to 199kV lines) will be classified as medium impact while other Control Centers that are monitoring and controlling a small number of higher impact transmission lines (i.e., 300kV to 499kV and 200kV to 299kV lines) could be classified as low impact.)*
3. The proposed Criterion 2.12 does not consider or exempt radial feeders.

For these reasons, EEI asks the SDT to consider other approaches such as limiting the voltage range for medium impact Control Centers to 200kV, similar to Criterion 2.5, and replacing the aggregate weighted value “exceeding 6000” with a range “exceeding 2500 but below 3000.” Contained within this recommendation is a suggestion that Criterion 2.12 use the same table and methodology as provided in Criterion 2.5 since a similar approach would provide greater focus and emphasis on identifying those facilities which are most likely to have the greatest impact on BES reliability. Lastly, we suggest that if a Control Center only monitors and controls BES Transmission Lines within the range of 100kV to 199kV, then it should be considered a Low Impact Control Center.

We submit that the above recommendations more closely leverage Criterion 2.5 and provide greater consistency, which is more likely to result in the identification of higher impact Control Centers through the use of a lower “aggregate weighted value.” Moreover, Control Centers that fell just outside of the parameters used to identify high impact Control Centers would be categorized as Medium Impact with this approach. This recommended approach also does not inappropriately pull in a disproportionate number of Control Centers that are simply monitoring lower voltage transmission lines. The rationale for the proposed aggregate weighted value between 2500 to 2999 is that Control Centers monitoring and controlling transmission facilities with two connected 345kV lines or four connected 230kV lines at a transmission station or substation would be categorized as Medium Impact.

Likes 1	PSEG - Public Service Electric and Gas Co., 3, Mueller Jeffrey
Dislikes 0	

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Nicolas Turcotte - Hydro-Québec TransEnergie - 1

Answer	No
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Document Name	
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Comment

The formulation of the question #2 in the answer form is incorrect by inducing the notion of BCS whereas criterion 2.12 of the standard does not mention it. In our view, including the notion of BCS in the determination of the BES transmission lines to be included in the weighted voltage level calculation with a threshold of 6000 would allow an arbitrary division of an entity that would like to subtract from the requirement. We believe that criterion 2.12 as written in version 6 is correct and that the question of the form should be reworded in this way or at least that the respondent indicates No and specifies its answer in the comment section of the question # 2.

Likes 0	
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Dislikes 0	
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Response

The SDT thanks you for your comments. The SDT contends that Criterion 2.12 is written to evaluate the Control Centers. Once the Control Centers meeting the criterion are identified, then the BES Cyber Systems are identified and categorized as appropriate. This is in keeping with each criteria in Attachment 1. The current Criterion 2.12 does not address BES Cyber System categorization based on the span of control of BES Cyber System(s), but instead on functional registration. This has shown to be a problem with Criterion 2.12 that warranted correction.

Mike Lotz - City of Independence, Power and Light Department - 3,5

Answer No

Document Name

Comment

Not all entities controlling lower voltage transmission, which ultimately serve a large customer population, should be allowed to move from medium to low impact for their control centers. Under the proposed criteria, INDN which provides utility services to over 100,000 residents would go from a medium to low impact control center. The low impact CIP requirements are not adequate protections for some entities.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment, but asserts that the 6000 aggregate weighted value established in proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 adequately categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each rating. The SDT sought to clarify Criteria 2.12 to ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that proposed Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1

Answer No

Document Name

Comment

MEC disagrees with modified criterion and weighted value used in Criterion 2.12 for the following reasons:

1. The use of an aggregate weighted value of 6000 contains no justified rationale and appears to be an arbitrary selection.
2. The proposed criterion approach, which deviates from the facilities-based approach used to identify high impact Control Centers (i.e., those monitoring and controlling medium impact facilities), focuses more on the number of lines rather than facility impacts. *(EEI is concerned that the proposed Criterion 2.12 could create situations where control centers that simply monitor a large number of lower impact transmission lines (i.e., 24 or more - 100kV to 199kV lines) will be classified as medium impact while other Control Centers that are monitoring and controlling a small number of higher impact transmission lines (i.e., 300kV to 499kV and 200kV to 299kV lines) could be classified as low impact.)*
3. The proposed Criterion 2.12 does not consider or exempt radial feeders.

For these reasons, MEC recommends that the SDT consider limiting the voltage range for medium impact Control Centers to 200kV, similar to Criterion 2.5, and replacing the aggregate weighted value “exceeding 6000” with a range “exceeding 2500 but below 3000.” We also recommend that Criterion 2.12 use the same table and methodology as provided in Criterion 2.5 since a similar approach would provide greater focus and emphasis on identifying those facilities which are most likely to have the greatest impact on BES reliability. Lastly, we recommend that if a Control Center only monitors and controls BES Transmission Lines within the range of 100kV to 199kV, then it should be considered a Low Impact Control Center.

Our recommendations more closely leverage Criterion 2.5 and provide greater consistency, which is more likely to result in the identification of higher impact Control Centers through the use of a lower “aggregate weighted value.” Moreover, Control Centers that fell just outside of the parameters used to identify high impact Control Centers would be categorized as Medium Impact with this approach. This recommended approach also does not inappropriately pull in a disproportionate number of Control Centers that are simply monitoring lower voltage transmission lines. The rationale for the proposed aggregate weighted value between 2500 to 2999 is that Control Centers monitoring and controlling transmission facilities with two connected 345kV lines or four connected 230kV lines at a transmission station or substation would be categorized as Medium Impact.

Likes	0
Dislikes	0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3

Answer	No
Document Name	
Comment	

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

James Anderson - CMS Energy - Consumers Energy Company - 1

Answer

No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1**Answer**

No

Document Name**Comment**

NIPSCO is in support of the comment provided by EEI below.

"

EEI disagrees with modified criterion and weighted value used in Criterion 2.12 for the following reasons:

1. The use of an aggregate weighted value of 6000 contains no justified rationale and appears to be an arbitrary selection.
2. The proposed criterion approach, which deviates from the facilities-based approach used to identify high impact Control Centers (i.e., those monitoring and controlling medium impact facilities), focuses more on the number of lines rather than facility impacts. *(EEI is concerned that the proposed Criterion 2.12 could create situations where control centers that simply monitor a large number of lower impact transmission lines (i.e., 24 or more - 100kV to 199kV lines) will be classified as medium impact while other Control Centers that are monitoring and controlling a small number of higher impact transmission lines (i.e., 300kV to 499kV and 200kV to 299kV lines) could be classified as low impact.)*
3. The proposed Criterion 2.12 does not consider or exempt radial feeders.

For these reasons, EEI recommends that the SDT consider limiting the voltage range for medium impact Control Centers to 200kV, similar to Criterion 2.5, and replacing the aggregate weighted value "exceeding 6000" with a range "exceeding 2500 but below 3000." We also recommend that Criterion 2.12 use the same table and methodology as provided in Criterion 2.5 since a similar approach would provide greater focus and emphasis on identifying those facilities which are most likely to have the greatest impact on BES reliability. Lastly, we

recommend that if a Control Center only monitors and controls BES Transmission Lines within the range of 100kV to 199kV, then it should be considered a Low Impact Control Center.

Our recommendations more closely leverage Criterion 2.5 and provide greater consistency, which is more likely to result in the identification of higher impact Control Centers through the use of a lower “aggregate weighted value.” Moreover, Control Centers that fell just outside of the parameters used to identify high impact Control Centers would be categorized as Medium Impact with this approach. This recommended approach also does not inappropriately pull in a disproportionate number of Control Centers that are simply monitoring lower voltage transmission lines. The rationale for the proposed aggregate weighted value between 2500 to 2999 is that Control Centers monitoring and controlling transmission facilities with two connected 345kV lines or four connected 230kV lines at a transmission station or substation would be categorized as Medium Impact."

Likes	1	PSEG - PSEG Energy Resources and Trade LLC, 6, Barton Karla
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Dislikes	0	
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Response

Please see response to EEI comments.

Wendy Center - U.S. Bureau of Reclamation - 5

Answer	No
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Document Name	
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Comment

Reclamation recommends simplifying the Impact Rating Criteria using the methodology described in the response to Question 1.

Likes	0
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Dislikes	0
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Response

Please see response to question 1.

Jeanne Kurzynowski - Consumers Energy Company - 1 - RF

Answer	No
Document Name	
Comment	
<p>No. For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.</p> <p>An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.</p>	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	No
Document Name	
Comment	
<p>Dominion Energy disagrees with modified criterion and weighted value used in Criterion 2.12 for the following reasons:</p> <ol style="list-style-type: none"> 1. The use of an aggregate weighted value of 6000 contains no justified rationale and appears to be an arbitrary selection. There is no methodology provided that demonstrates how the value is derived. 	

2. The proposed criterion approach, which deviates from the facilities-based approach used to identify high impact Control Centers (i.e., those monitoring and controlling medium impact facilities), appears to focus on the number of lines rather than facility impacts. This appears to create situations where control centers that simply monitor a large number of lower impact transmission lines (i.e., 24 or more - 100kV to 199kV lines) will be classified as medium impact while other Control Centers that are monitoring and controlling a small number of higher impact transmission lines (i.e., 300kV to 499kV and 200kV to 299kV lines) could be classified as low impact.
3. The proposed Criterion 2.12 does not consider or exempt radial feeders.

Dominion Energy recommends that the SDT consider limiting the voltage range for medium impact Control Centers to 200kV, similar to Criterion 2.5, and in addition to providing the methodology for the derivation of the value, replacing the aggregate weighted value “exceeding 6000” with a range “exceeding 2500 but below 3000.” We also recommend that Criterion 2.12 use the same table and methodology as provided in Criterion 2.5 since a similar approach would provide greater focus and emphasis on identifying those facilities which are most likely to have the greatest impact on BES reliability. Lastly, we recommend that if a Control Center only monitors and controls BES Transmission Lines within the range of 100kV to 199kV, then it should be considered a Low Impact Control Center.

These recommendations more closely leverage Criterion 2.5 and provide greater consistency, which is more likely to result in the identification of higher impact Control Centers through the use of a lower “aggregate weighted value.” Moreover, Control Centers that fell just outside of the parameters used to identify high impact Control Centers would be categorized as Medium Impact with this approach. This recommended approach also does not inappropriately pull in a disproportionate number of Control Centers that are simply monitoring lower voltage transmission lines. The rationale for the proposed aggregate weighted value between 2500 to 2999 is that Control Centers monitoring and controlling transmission facilities with two connected 345kV lines or four connected 230kV lines at a transmission station or substation would be categorized as Medium Impact.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6

Answer	No
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
<p>NRG has a concern that there may be confusion on what the drafting team’s intent is in reference to proposed language pertaining to BES Cyber System’s span of control instead of the BES Cyber System monitors and controls. Industry interpretation of the current language leads NRG stakeholders to believe that the Rationale information may not match up correctly with the CIP-002-6 Standard. (NRG requests clarity on the operation authority versus capability). NRG requests that the drafting team provide clarity on what their intent is in reference to Criterion 2.12 and verify the alignment of the rationale document and the standard.</p> <p>Question: Does control include the ability to issue an operating instruction through another element besides a BES Cyber System element? Is it the intent of the SDT, that a TOP could drop from Medium to Low based on these calculations? It seems that most if not all TOPs are Medium and this can reduce them to Low which may be a concern for the industry.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT thanks you for your comment. Please note that the language, “span of control” is not in the language of the Criterion, it is used to help explain the difference between the functional registration and the Transmission monitoring and control services the Control Center can perform.</p>	

In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Long Duong - Public Utility District No. 1 of Snohomish County - 1

Answer	Yes
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Document Name	
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Comment

SNPD agrees with the SDT’s approach in using the “aggregated weighted values” per line and per voltage class to determine the Impact Ratings of Control Centers and Backup Control Centers.

When the aggregated weighted value of lines for each of the applicable voltage classes exceeds 6000 points, both the Control Center and the Backup Control Center whose Facilities are rated Medium Facilities, and all BES Cyber Systems that are part of the Control Centers should also be rated Medium Impact by association. However, the new terminology, that was adopted by the SDT, “**BES Cyber System’s Span of Control**”, is somewhat ambiguous. Is this concept related to evaluating the applicability of the BES Reliability Operating Services (BROS)?

Likes 0	
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Dislikes 0	
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Response

The SDT thanks you for your comment. Please note that the language, “span of control” is not in the language of the Criterion, it is used to help explain the difference between the functional registration and the Transmission monitoring and control services the Control Center can perform.

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer	Yes
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Document Name**Comment**

The SPP Standards Review Group has a concern that there is confusion on what the drafting team's intent is in reference to proposed language pertaining to BES Cyber System's span of control instead of the BES Cyber System monitors and controls. Our interpretation of the current language leads us to believe that the Rationale information doesn't match up correctly with the CIP-002-6 Standard. (need clarity on the operation authority versus capability). We would ask the drafting team to provide clarity on what their intent is in reference to Criterion 2.12 and verify the alignment of the rationale document and the standard.

Question:

Does control include the ability to issue an operating instruction through another element besides a BES Cyber System element?

Is it the intent of the SDT, that a TOP could drop from Medium to Low based on these calculations?

It seems that most if not all TOP are Medium and this can reduce them to Low. This is a concern.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. Please note that the language, "span of control" is not in the language of the Criterion, it is used to help explain the difference between the functional registration and the Transmission monitoring and control services the Control Center can perform.

In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts	
Answer	Yes
Document Name	
Comment	
<p>The term Transmission Line as defined in the Glossary of Terms Used in NERC Reliability Standards does not adequately identify the endpoints of a Transmission Line. Does the Transmission Line begin and end at the circuit breaker, line switch, or at the bus? A clarification of this issue would help Responsible Entities determine how to count lines in certain configurations, such as tapped lines. Additionally, are Responsible Entities required to count a Transmission Line if they only control the breakers on one end of the line, such as a tie line with a neighboring TOP?</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT has added further clarification in the Guidelines and Technical Basis providing examples of several Transmission Line configurations. This includes a discussion of multiple-point and multiple-tapped lines. The SDT asserts that operating a breaker on one end of a Transmission Line would constitute control of that line as the Responsible Entity has the ability to permit or disrupt the flow of current along that Transmission Line.</p>	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	Yes
Document Name	
Comment	
<p>Seattle City Light supports the comments of Cowlitz PUD and APPA.</p>	
Likes	0
Dislikes	0

Response	
Please see responses to Cowlitz PUD and APPA.	
Elizabeth Axson - Electric Reliability Council of Texas, Inc. – 2	
Answer	Yes
Document Name	
Comment	
ERCOT ISO signs on to the SRC + SWG comments.	
Likes	0
Dislikes	0
Response	
The SDT notes that SRC + SWG did not comment on this question.	
Jack Cashin - American Public Power Association – 4	
Answer	Yes
Document Name	
Comment	
<p>APPA agrees that SDT’s approach of “summing the weight value of each BES Transmission Lines that the BES Cyber System monitors and controls” is the desired approach. However, this is not what Criterion 2.12 requires (see answer to question 5 below). As written, Criterion 2.12 sums the BES Transmission Lines that the Control Center monitors and controls.</p>	
Likes	5
Dislikes	0
	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long

Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

David Gordon - Massachusetts Municipal Wholesale Electric Company - 5

Answer	Yes
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Document Name	
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Comment

MMWEC supports comments submitted by APPA.

Likes 0	
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Dislikes 0	
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Response

Please see response to APPA.

Lona Calderon - Salt River Project - 1,3,5,6 - WECC

Answer	Yes
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Document Name	
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Comment

Salt River Project supports comments submitted by APPA.

Likes 0	
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Dislikes 0	
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Response

Please see response to APPA.

Richard Vine - California ISO - 2	
Answer	Yes
Document Name	
Comment	
The California ISO supports the comments of the Security Working Group (SWG)	
Likes	0
Dislikes	0
Response	
The SDT notes that Security Working Group (SWG) did not comment on this question.	
David Rivera - New York Power Authority - 3	
Answer	Yes
Document Name	
Comment	
Agree with the weighting concept however, consider the following:	
<ol style="list-style-type: none"> 1. Assuming wording became specific to TOs, should there be a caveat noting the transmission Facilities need to be at two or more locations similar to the existing Control Center definition with respect to TOP? This would exclude TOs that operate one large station. 2. Assuming wording became specific to TOs there should be a weighting for 500 KV and above. Criterion 1.3 would apply to Control Center (TOP registration) that control 500 kV+ lines (criterion 2.4); if 2.12 were specific to TOs, then a weight should be given to the 500 kV+ lines. If the intention is for a TO's control center that "operates" a 500 kV+ facility to be High impact, then clarification is needed in criterion 1.3; if the intention is that TO control centers would, at most, be classified as Medium impact, then a weighting is needed for the 500 kV+ lines in criterion 2.12. 	

Likes	0
Dislikes	0
Response	
The SDT thanks you for your comments. The SDT contends that if a Control Center monitors or controls Transmission at a single station that meets Criterion 2.12, it should be considered medium impact. The SDT notes that Criterion 1.3, would still be relevant as a high impact Control Center. If the Transmission Control Center does not meet Criterion 1.3, it should then be evaluated under Criterion 2.12.	
Barry Lawson - National Rural Electric Cooperative Association - 4	
Answer	Yes
Document Name	
Comment	
NRECA supports weighted value approach in the modified Criterion 2.12.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment.	
Russell Noble - Cowlitz County PUD - 3	
Answer	Yes
Document Name	
Comment	
Cowlitz PUD agrees with the intent of the SDT as implied in Question 2. However, as written, Criterion 2.12 appears to require an evaluation of the Control Center’s span of control rather than the BES Cyber System associated with the Control Center. Please see response to Question 5.	

Likes 5	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.	
Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham	
Answer	Yes
Document Name	
Comment	
MidAmerica would like to change its answer for this question to NO.	
MidAmerican agrees with EEI's comments. Please see EEI's Comments below:	
EEI disagrees with modified criterion and weighted value used in Criterion 2.12 for the following reasons:	
<ol style="list-style-type: none"> 1. The use of an aggregate weighted value of 6000 contains no justified rational and appears to be an arbitrary selection. 2. The proposed criterion approach, which deviates from the facilities-based approach used to identify high impact Control Centers (i.e., those monitoring and controlling medium impact facilities), focuses more on the number of lines rather than facility impacts. <i>(EEI is concerned that the proposed Criterion 2.12 could create situations where control centers that simply monitor a large number of lower impact transmission lines (i.e., 24 or more - 100kV to 199kV lines) will be classified as medium impact while other Control Centers that are monitoring and controlling a small number of higher impact transmission lines (i.e., 300kV to 499kV and 200kV to 299kV lines) could be classified as low impact.)</i> 3. The proposed Criterion 2.12 does not consider or exempt radial feeders. 	

For these reasons, EEI recommends that the SDT consider limiting the voltage range for medium impact Control Centers to 200kV, similar to Criterion 2.5, and replacing the aggregate weighted value “exceeding 6000” with a range “exceeding 2500 but below 3000.” We also recommend that Criterion 2.12 use the same table and methodology as provided in Criterion 2.5 since a similar approach would provide greater focus and emphasis on identifying those facilities which are most likely to have the greatest impact on BES reliability. Lastly, we recommend that if a Control Center only monitors and controls BES Transmission Lines within the range of 100kV to 199kV, then it should be considered a Low Impact Control Center.

Our recommendations more closely leverage Criterion 2.5 and provide greater consistency, which is more likely to result in the identification of higher impact Control Centers through the use of a lower “aggregate weighted value.” Moreover, Control Centers that fell just outside of the parameters used to identify high impact Control Centers would be categorized as Medium Impact with this approach. This recommended approach also does not inappropriately pull in a disproportionate number of Control Centers that are simply monitoring lower voltage transmission lines. The rationale for the proposed aggregate weighted value between 2500 to 2999 is that Control Centers monitoring and controlling transmission facilities with two connected 345kV lines or four connected 230kV lines at a transmission station or substation would be categorized as Medium Impact.

Likes	0
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Dislikes	0
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Response

Please see response to EEI comments.

Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities

Answer	Yes
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Document Name	
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Comment

Colorado Springs Utilities supports Cowlitz PUD and APPA comments

Likes	0
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Dislikes	0
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Response	
Please see response to Cowlitz PUD and APPA comments.	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	Yes
Document Name	
Comment	
N&ST assumes, based on the precise wording of Criterion 2.12, that what must be evaluated is a <i>Control Center's</i> span of control, vs. any particular BES Cyber System associated with a Control Center, and that if a Control Center meets this criterion, <i>all</i> of its associated BES Cyber Systems must be categorized as medium impact.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment and agrees with the assumptions made.	
Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC	
Answer	Yes
Document Name	
Comment	
Seminole agrees that this is a valid approach as long as Functional Registrations are honored.	
Likes	0
Dislikes	0
Response	

Proposed Criterion 2.12 is applicable to all BES Cyber Systems associated with Control Centers (regardless of functional registration), not included in High Impact Rating (H) that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the associated table.

Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Don Schmit - Nebraska Public Power District - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. - 1	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Brandon McCormick - Brandon McCormick On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 3, 5; Chris Gowder, Florida Municipal Power Agency, 6, 4, 3, 5; Ginny Beigel, City of Vero Beach, 3; Joe McKinney, Florida Municipal Power Agency, 6, 4, 3, 5; Ken Simmons, Gainesville Regional Utilities, 1, 3, 5; Lynne Mila, City of Clewiston, 4; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 3, 5; Tom Reedy, Florida Municipal Power Pool, 6; - Brandon McCormick, Group Name FMPA

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Jesus Sammy Alcaraz - Imperial Irrigation District - 1

Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	Yes
Document Name	
Comment	
Likes 1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes 0	
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Jim Nail - City of Independence, Power and Light Department - 5	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
No Response.	
Likes 0	
Dislikes 0	
Response	

Mary Ann Todd - Illinois Municipal Electric Agency - 4	
Answer	
Document Name	
Comment	
IMEA supports APPA comments.	
Likes 0	
Dislikes 0	
Response	
Please see response to APPA comments.	

3. Criterion 2.12: Do you agree with the 6000 aggregate weighted value that is used in Criterion 2.12 to establish the minimum threshold for medium impact BES Cyber Systems associated with Control Centers that monitor and control Transmission? If not, please provide your rationale and an alternate proposal.

Jim Nail - City of Independence, Power and Light Department – 5

Answer No

Document Name

Comment

As written, there will be TOP Control Centers that will drop from Medium to Low and become exempt from many of the current requirements. Given the propensity for NOT maintaining standards of performance which are not enforced/required, this WILL produce a predictable weakening of the BES's overall Cyber-Security posture.

Likes 0

Dislikes 0

Response

In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion

Answer No

Document Name

Comment

Dominion Energy does not support the 6000 aggregate weighted value used in Criterion 2.12 for the reasons specified in our response to question 2.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC's document "Integrated Risk Assessment Approach – Refinement to Severity Risk Index." The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Jeanne Kurzynowski - Consumers Energy Company - 1 – RF

Answer

No

Document Name

Comment

No. For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Hien Ho - Tacoma Public Utilities (Tacoma, WA) – 4

Answer

No

Document Name

Comment	
<p>Tacoma Power proposes that the aggregate weighted value be 30000 instead of 6000. The proposed weighting values overestimates the impact of 115 kV subtransmission networks. For example, between two of our major substations we have a line rated at 239 MW with 4 intermediate looped through distributions stations. In the proposed evaluation methodology each of the short sections between substations would be weighted as 250 for a total value of 1250, overstating the importance of the line by more than a factor of 5.</p> <p>An alternative to adjusting the threshold would be to exclude any line that terminates at a substation that only has two transmission lines connected.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT appreciates your comments, but asserts that the misuse of BES Cyber Systems that are associated with Control Centers that monitor and control a considerable number of BES Transmission Lines in the 100 to 199 kV range could impact the reliability of the Bulk Electric System. <i>The SDT has revised the Guidelines and Technical Basis of proposed Reliability Standard CIP-002-6 to address Transmission Line configurations. Consistent with the GTB for criterion 2.5, multiple-point (or multiple-tap) lines are considered to contribute a single weight value per line.</i></p>	
Wendy Center - U.S. Bureau of Reclamation – 5	
Answer	No
Document Name	
Comment	
<p>Reclamation recommends simplifying the Impact Rating Criteria using the methodology described in the response to Question 1.</p>	
Likes 0	
Dislikes 0	

Response

The SDT appreciates your comments. The SDT is only authorized to address the TOCC issues as identified in the Standards Authorization Request for Project 2016-02.

Steve Toosevich - NiSource - Northern Indiana Public Service Co. – 1

Answer No

Document Name

Comment

NIPSCO is in support of the comment provided by EEI below.

"EEI does not support the 6000 aggregate weighted value used in Criterion 2.12 for the reasons specified in our response to question 2."

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the

misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES .

James Anderson - CMS Energy - Consumers Energy Company – 1

Answer No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Karl Blaszkowski - CMS Energy - Consumers Energy Company – 3

Answer No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT asserts that if a BES Cyber System associated with a Control Center has been categorized as high impact, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers, if the BES Cyber Systems associated with the Control Centers were already categorized as high impact.

Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns

Answer No

Document Name

Comment

Suggest 3000 points to be in-line with Criterion 2.5. Concerns that entities with large amounts of 100-199kV lines would be excluded (6000 points = 24 100kV lines).

Likes 0

Dislikes 0

Response

The SDT appreciates your comment, but contends that proposed Criterion 2.12 adequately categorizes BES Cyber Systems associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT used Criterion 2.5 as a basis for developing proposed Criterion 2.12. In Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled this value to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls BES Transmission Lines.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. – 1

Answer

No

Document Name

Comment

MEC does not support the 6000 aggregate weighted value used in Criterion 2.12 for the reasons specified in our response to question 2.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Mike Lotz - City of Independence, Power and Light Department - 3,5

Answer	No
Document Name	

Comment

The aggregate weighted value of 6000 is too high for entities controlling lower voltage transmission ultimately serving a large customer population. Under the proposed criteria, INDN which provides utility services to over 100,000 residents would go from a medium to low impact control center. The low impact CIP requirements are not adequate protections for some entities.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment, but asserts that the 6000 aggregate weighted value established in proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 adequately categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each rating. The SDT sought to clarify Criteria 2.12 to ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that proposed Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable

Answer

No

Document Name

Comment

EI cannot support the 6000 aggregate weighted value used in Criterion 2.12 at this time for the reasons specified in our response to question 2.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC's document "Integrated Risk Assessment Approach – Refinement to Severity Risk Index." The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES .

Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb

Answer	No
Document Name	
Comment	
KCP&L incorporates by reference Edison Electric Institute’s (EEI) Question 3 response.	
Likes 0	
Dislikes 0	
Response	
<p>The SDT thanks you for your comments.</p> <p>In CIP-002-5.1a, Attachment 1, Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled 3000 in order to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.</p> <p>The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple BES Transmission Lines in the 100 to 199 kV voltage class could impact the reliability of the Bulk Electric System and require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.</p>	

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders can be excluded in Exemption 1 of the Bulk Electric System definition.

The SDT appreciates your proposed revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in this voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES .

David Jendras - Ameren - Ameren Services – 3

Answer	No
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Document Name	
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Comment

See the response to question 2 above.

Likes	0
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Dislikes	0
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Response

The SDT appreciates your comments, but contends that categorizing BES Cyber Systems associated with a Control Center by matching the impact rating of the highest Transmission Facility that it controls would not sufficiently categorize the BES Cyber System based on its span of control. Additionally, there are no high impact Transmission Facilities, so the proposed approach would shift all high impact BES Cyber Systems used by and located at Control Centers to a medium impact rating.

Kenya Streeter - Edison International - Southern California Edison Company – 6

Answer	No
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Document Name	
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Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes 0

Dislikes 0

Response

The SDT verified that Robert Blackney did not submit a comment for Question 3.

Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

No comment provided by commenter.

Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities

Answer

Yes

Document Name

Comment

Co lorado Srings Utilitiessupports Cowlitz PUD and APPA comments

Likes 0

Dislikes	0
Response	
The SDT appreciates your comment and asserts that the aggregate weighted value, as detailed in proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12, consists of the summation of the weighted values of the BES Transmission Lines that are monitored and controlled collectively by the BES Cyber System(s) associated with a Responsible Entity's Control Center.	
Russell Noble - Cowlitz County PUD – 3	
Answer	Yes
Document Name	
Comment	
Cowlitz PUD agrees the aggregated weighted value will properly identify the impact threshold of a BES Cyber System as long as the calculated <i>value</i> relates directly to those Transmission Lines the BES Cyber System <i>monitors and controls</i> .	
Likes	5
Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long	
Dislikes	0
Response	
The SDT appreciates your comment and asserts that the aggregate weighted value, as detailed in proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12, consists of the summation of the weighted values of the BES Transmission Lines that are monitored and controlled by the BES Cyber System(s) associated with a Responsible Entity's Control Center.	
Barry Lawson - National Rural Electric Cooperative Association – 4	
Answer	Yes
Document Name	
Comment	

NRECA supports the 6000 aggregate weighted value used in Criterion 2.12.

Likes 0

Dislikes 0

Response

The SDT thanks you for your support.

David Rivera - New York Power Authority – 3

Answer

Yes

Document Name

Comment

Agree with the weighting concept however, consider the following:

1. Assuming wording became specific to TOs, should there be a caveat noting the transmission Facilities need to be at two or more locations similar to the existing Control Center definition with respect to TOP? This would exclude TOs that operate one large station.
2. Assuming wording became specific to TOs there should be a weighting for 500 KV and above. Criterion 1.3 would apply to Control Center (TOP registration) that control 500 kV+ lines (criterion 2.4); if 2.12 were specific to TOs, then a weight should be given to the 500 kV+ lines. If the intention is for a TO's control center that "operates" a 500 kV+ facility to be High impact, then clarification is needed in criterion 1.3; if the intention is that TO control centers would, at most, be classified as Medium impact, then a weighting is needed for the 500 kV+ lines in criterion 2.12.

Likes 0

Dislikes 0

Response

The SDT appreciates your comments, but does not intend to limit the scope of Criterion 2.12 to Transmission Owners. The proposed criterion is meant to apply to any Control Center, as defined in the NERC Glossary of Terms, that monitors and controls applicable BES Transmission Lines, regardless of registration. Additionally, the SDT asserts that Criterion 1.3 does not apply only to Responsible Entities that are registered as Transmission Operators. Criterion 1.3 applies to any Responsible Entity that performs the functional obligations of the Transmission Operator for one or more of the assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10.

Richard Vine - California ISO – 2

Answer	Yes
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Document Name	
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Comment

The California ISO supports the comments of the Security Working Group (SWG)

Likes 0	
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Dislikes 0	
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Response

The SDT verified that the SWG did not provide a comment for Question 3.

Lona Calderon - Salt River Project - 1,3,5,6 – WECC

Answer	Yes
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Document Name	
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Comment

Salt River Project supports comments submitted by APPA.

Likes 0	
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Dislikes 0	
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Response

The SDT verified that APPA did not provide a comment for Question 3.	
Elizabeth Axson - Electric Reliability Council of Texas, Inc. – 2	
Answer	Yes
Document Name	
Comment	
ERCOT ISO signs on to the SRC + SWG comments.	
Likes	0
Dislikes	0
Response	
The SDT verified that the SRC and SWG did not provide a comment for Question 3.	
Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECE & Member G&Ts	
Answer	Yes
Document Name	
Comment	
Does Criterion 2.12 allow a Responsible Entity to mitigate risk to the BES by separating it’s monitoring and control functions at a Control Center into multiple separate BES Cyber Systems? For example, a Responsible Entity monitors and controls Transmission Lines that sum to an aggregate weighted value of 7000, but they split the monitoring and control functions between two BES Cyber Systems (3500 each) that reside in two separate ESPs. This option reduces the risk to the reliability of the BES if a system is compromised. Does this allow the BES Cyber Systems associated with the Control Center in this example to be categorized as low impact BES Cyber Systems?	
Likes	0
Dislikes	0
Response	

The SDT thanks you for your comments. Proposed Criterion 2.12 describes a Control Center that monitors and controls BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the associated table in proposed Criterion 2.12. Segmentation of a BES Cyber System into separate systems doesn't result in a reduction in impact rating of the BES Cyber Systems because they are associated with the same Control Center.

Long Duong - Public Utility District No. 1 of Snohomish County – 1

Answer Yes

Document Name

Comment

SNPD does not have comments on Question 3.

Likes 0

Dislikes 0

Response

Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
David Maier - Intermountain REA - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	Yes
Document Name	

Comment	
Likes 1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jesus Sammy Alcaraz - Imperial Irrigation District - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy	
Answer	Yes
Document Name	
Comment	

Likes	0
Dislikes	0
Response	
<p>Brandon McCormick - Brandon McCormick On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 3, 5; Chris Gowder, Florida Municipal Power Agency, 6, 4, 3, 5; Ginny Beigel, City of Vero Beach, 3; Joe McKinney, Florida Municipal Power Agency, 6, 4, 3, 5; Ken Simmons, Gainesville Regional Utilities, 1, 3, 5; Lynne Mila, City of Clewiston, 4; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 3, 5; Tom Reedy, Florida Municipal Power Pool, 6; - Brandon McCormick, Group Name FMMPA</p>	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
<p>Nicolas Turcotte - Hydro-Quebec TransEnergie - 1</p>	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0

Response	
David Gordon - Massachusetts Municipal Wholesale Electric Company - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jack Cashin - American Public Power Association - 4	
Answer	Yes
Document Name	
Comment	
Likes 1	Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Don Schmit - Nebraska Public Power District - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
<p>Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham</p>	
Answer	
Document Name	
Comment	
<p>MidAmerica would like to change its answer for this question to NO.</p> <p>MidAmerican agrees with EEI's comments. Please see EEI's Comments below:</p> <p>EEI does not support the 6000 aggregate weighted value used in Criterion 2.12 for the reasons specified in our response to question 2.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT thanks you for your comments. Please see the SDT's response to EEI's comments.</p>	
<p>Mary Ann Todd - Illinois Municipal Electric Agency – 4</p>	
Answer	
Document Name	
Comment	

IMEA supports APPA comments.	
Likes	0
Dislikes	0
Response	
The SDT verified that APPA did not provide a comment for Question 3.	
Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
No Response.	
Likes	0
Dislikes	0
Response	
Rachel Coyne - Texas Reliability Entity, Inc. – 10	
Answer	
Document Name	
Comment	
The SDT elected to double weighted value used to define Medium Impact substations in Criterion 2.5. While this may be a reasonable approach, the Texas RE requests the SDT provide a basis for this approach, including why the Control Center weighted value bright line	

should be higher than that used for the Transmission Facility criterion set forth in 2.5. In addition, Texas RE requests clarification on how double circuits are calculated as it is assumed they are calculated as a single line.

Likes 0

Dislikes 0

Response

In Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station or substation. The SDT doubled this value to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT considers double circuits to be a single Transmission Line and has modified the Guidelines and Technical Basis of proposed Reliability Standard CIP-002-6 to provide further clarity.

Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light

Answer

Document Name

Comment

Seattle City Light supports the comments of Cowlitz PUD and APPA.

Likes 0

Dislikes 0

Response

The SDT appreciates your comment. Please refer to the SDT's response to Cowlitz PUD's comment.

4. Criterion 2.12: The SDT modified Criterion 2.12 to categorize BES Cyber Systems associated with Control Centers that monitor and control Transmission regardless of a Responsible Entity’s functional registration. Do you agree with this approach? If not, please provide your rationale and an alternate proposal.

Long Duong - Public Utility District No. 1 of Snohomish County – 1

Answer No

Document Name

Comment

SNPD suggests that a Control Center that is only responsible for Low Impact Facilities, should default to a Low Impact Control Center rating; independent of its registration or weighted value criterion. Currently, there are numerous Medium Impact Control Centers that meet the registration requirements or proposed weighting criteria, but clearly do not have BES Cyber Assets.

“A Cyber Asset that if rendered unavailable, degraded, or misused would, within 15 minutes of its required operation, misoperation, or non-operation, adversely impact one or more Facilities, systems, or equipment, which, if destroyed, degraded, or otherwise rendered unavailable when needed, would affect the reliable operation of the Bulk Electric System. Redundancy of affected Facilities, systems, and equipment shall not be considered when determining adverse impact. Each BES Cyber Asset is included in one or more BES Cyber Systems.”

Registered Entities have identified SCADA related assets and systems as BCS and BCAs in order to comply with Reliability Standards interpretations and the expectations of the regulators. However, if these assets were rendered unavailable, degraded, or misused, they would not adversely impact the Bulk Electric System. In these cases the scope of the impact would be local load service and restoration efforts. They would not result in BES cascading events. The original intent of the NERC Reliability Standards were to address BES reliability, yet the application of Medium Impact Control Centers operating Low Impact Facilities often targets local load service and distribution systems.

Likes 0

Dislikes 0

Response

The SDT appreciates your suggested revisions, but contends that they do not adequately categorize BES Cyber Systems associated with Control Centers that monitor and control a considerable number of BES Transmission Lines. Industry comments and historical events indicate that BES Transmission Lines in the 100 – 199 kV voltage class can impact the reliability of the BES and the SDT asserts that proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 categorizes applicable BES Cyber Systems commensurate with their risk to the reliability of the BES.

Kenya Streeter - Edison International - Southern California Edison Company – 6

Answer No

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes 0

Dislikes 0

Response

The SDT verified that Robert Blackney did not provide a comment for Question 4.

Brandon McCormick - Brandon McCormick On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 3, 5; Chris Gowder, Florida Municipal Power Agency, 6, 4, 3, 5; Ginny Beigel, City of Vero Beach, 3; Joe McKinney, Florida Municipal Power Agency, 6, 4, 3, 5; Ken Simmons, Gainesville Regional Utilities, 1, 3, 5; Lynne Mila, City of Clewiston, 4; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 3, 5; Tom Reedy, Florida Municipal Power Pool, 6; - Brandon McCormick, Group Name FMPPA

Answer No

Document Name

Comment

We agree with the described concept of categorizing BES Cyber Systems but would want to see the suggested language used from our comments for Question 1.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments. After considering the proposed revisions (from commenter), the SDT has decided to retain the language in proposed Reliability Standard CIP-002-6, Attachment 1, Criterion 2.12 because it is based on the Control Center. This approach is consistent with the rest of the criteria in Attachment 1.

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy

Answer No

Document Name

Comment

See our response to question 1. Does this question confirm that the drafting team’s intent is that all Control Centers should be considered under this criterion, notwithstanding the fact that in order to control Transmission facilities (100kV and above), a NERC BA/TOP certification is required?

Likes 0

Dislikes 0

Response

Proposed Criterion 2.12 is applicable to all BES Cyber Systems associated with Control Centers (regardless of functional registration), not included in High Impact Rating (H), that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the associated table.

David Rivera - New York Power Authority – 3

Answer No

Document Name	
Comment	
<p>The approach does not clarify the issue. The removal of the term “functional obligation” from 2.12 still does not clarify the requirement applies to TO because the capitalized term Control Center is used and that term implies functional registry (RC/BA/TOP/GOP). Clarification could be improved by using the non-capitalized term “control center” and defined as used in CIP-014. In addition, the use of the term “control” is also a source of confusion as it can be interpreted as having operational control (ie. Direct the switching operation) or physical control (perform the switching operation).</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT asserts that using a weighting function based on the Transmission lines that a Control Center monitors and controls clarifies a Control Center that performs the reliability tasks of a TOP. The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012. The proposed weighting methodology adds clarity to the difference between medium impact BES Cyber Systems associated with a Control Center and low impact BES Cyber Systems associated with a Control Center.</p> <p>Criterion 2.12 does not need to reference “functional obligation” to apply to TO’s, as the definition of Control Center encompasses all functional entities that perform the reliability tasks of RC/BA/TOP/GOP. It is not limited to functional entities registered as RC/BA/TOP/GOP.</p> <p>Criterion 2.12 encompasses both the ability to direct actions and the capability to physically operate BES elements per the Control Center definition. The “monitoring” capability is the part that enables the direction of actions. The “control” capability is the part that enables the actual physical change to the BES element.</p>	
Karl Blaszkowski - CMS Energy - Consumers Energy Company – 3	
Answer	No
Document Name	
Comment	

No Comment	
Likes 0	
Dislikes 0	
Response	
Wendy Center - U.S. Bureau of Reclamation – 5	
Answer	No
Document Name	
Comment	
Reclamation recommends that impact ratings apply to BES Cyber Systems associated with Transmission (Control Center or control room) or generation (Control Center, control room, or plant), or any identified Facilities regardless of a Responsible Entity’s functional registration.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT asserts that CIP-002-6, Attachment 1 consists of a categorization process that focuses on a BES Cyber System's span of control and its associated risk to the reliability of the Bulk Electric System. The proposed revision to Criterion 2.12 is based solely on a BES Cyber Systems span of control over BES Transmission Lines, regardless of functional registration.	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	No
Document Name	
Comment	

Section 2.12 of the proposed standard conflicts with the Applicability section of the standard. Under criterion 2.12, Distribution Provider control centers could be applicable, but Distribution Providers are not included as applicable entities. The Applicability section should be the ultimate deciding factor for determining applicability. In addition, we recommend the removal of the first line in the table.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments. The SDT assumes that entities operating BES Transmission Lines would be registered as either a TO or TOP.

The first line of the table is provided to reinforce that non-BES facilities are not included in proposed Criterion 2.12.

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

No

Document Name

Comment

The Proposed Definition of Control Center would have direct bearing on the outcome of how Xcel Energy interprets this question. The term would have to be finalized before an opinion could be formed.

Likes 0

Dislikes 0

Response

The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012.

Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 – FRCC

Answer

No

Document Name

Comment

Per the registration criteria, Transmission Operators are “responsible for the reliability of its local transmission system and operates or directs the operations of the transmission Facilities.” As a result, this responsibility falls on directly on Transmission Operators. Further expansion of the criterion places responsibilities on Transmission Owners for activities they are not registered for.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments. CIP-002-5.1a is a Critical Infrastructure Protection standard that requires Responsible Entities to perform a categorization of their BES Cyber System(s). BES Cyber System categorization is based on the span of control of BES Cyber System(s), not functional registration. Transmission Owners are currently required to determine if they perform the functional obligation of a Transmission Operator under Criterion 2.12. Any Transmission Owner that operates BES Cyber System(s), associated with a Control Center, that can functionally control BES Transmission Facilities at one or more locations should be identified as medium impact in accordance with Criterion 2.12. The proposed Criterion 2.12 attempts to provide further clarity to TOs through a bright line approach and does not expand beyond the current scope of Criterion 2.12.

Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6

Answer

No

Document Name

Comment

Likes 0

Dislikes 0

Response

Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts

Answer	Yes
Document Name	
Comment	
AECI agrees with the approach and believes that a BES Cyber System (BCS) should be categorized by the BCS's span of control, regardless of functional registration.	
Likes 0	
Dislikes 0	
Response	
The SDT thanks you for your comments.	
Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	
ERCOT ISO signs on to the SRC + SWG comments.	
Likes 0	
Dislikes 0	
Response	
Please see the response to the SRC comment.	
Lona Calderon - Salt River Project - 1,3,5,6 – WECC	
Answer	Yes
Document Name	

Comment

Salt River Project supports comments submitted by APPA.

Likes 0

Dislikes 0

Response

The SDT verified that APPA did not provide a comment for Question 4.

Richard Vine - California ISO – 2

Answer

Yes

Document Name

Comment

The California ISO supports the comments of the Security Working Group (SWG)

Likes 0

Dislikes 0

Response

Please see the response to the SRC comment.

Barry Lawson - National Rural Electric Cooperative Association – 4

Answer

Yes

Document Name

Comment

NRECA supports this approach.

Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment.	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	
Any entity that controls Transmission service that could impact the overall grid reliability, capability, and the functionality of power delivery should be following the CIP security structure in monitoring, maintaining and reporting on those systems that have physical control capability.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment.	
Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns	
Answer	Yes
Document Name	
Comment	
Agree. However would be clearer if the statement "...regardless of a Responsible Entity's functional registration" was included in criteria 2.12.	

Likes	0	
Dislikes	0	
Response		
The SDT appreciates your comments, but contends that the proposed revision wouldn't be consistent with the existing criteria and would require further changes within CIP-002-5.1a.		
Russell Noble - Cowlitz County PUD - 3		
Answer	Yes	
Document Name		
Comment		
Cowlitz PUD is in agreement as long as the definition of "Control Center" is modified to clearly point to registered functions, including Transmission Owners.		
Likes	5	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes	0	
Response		
The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012.		
Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities		
Answer	Yes	
Document Name		
Comment		
Colorado Springs Utilities supports Cowlitz PUD and APPA comments		

Likes	0
Dislikes	0
Response	
The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012.	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. – 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Jendras - Ameren - Ameren Services – 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Rachel Coyne - Texas Reliability Entity, Inc. – 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Don Schmit - Nebraska Public Power District – 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. – 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. – 1	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jack Cashin - American Public Power Association – 4	
Answer	Yes
Document Name	
Comment	
Likes 1	Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	

Response	
David Gordon - Massachusetts Municipal Wholesale Electric Company – 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicolas Turcotte - Hydro-Quebec TransEnergie – 1	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Mike Lotz - City of Independence, Power and Light Department - 3,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jesus Sammy Alcaraz - Imperial Irrigation District – 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. – 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	Yes
Document Name	
Comment	
Likes 1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes 0	
Response	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. – 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Bette White - AES - Indianapolis Power and Light Co. – 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Vivian Vo - APS - Arizona Public Service Co. – 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable – WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steve Toosevich - NiSource - Northern Indiana Public Service Co. – 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Aaron Austin - AEP – 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicholas Lauriat - Network and Security Technologies – 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA – 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power – 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC – 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jim Nail - City of Independence, Power and Light Department – 5	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator – 2	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 – WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara – 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	
Document Name	
Comment	
Seattle City Light supports the comments of Cowlitz PUD and APPA.	

Likes 0	
Dislikes 0	
Response	
The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012.	
Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
No Response.	
Likes 0	
Dislikes 0	
Response	
Mary Ann Todd - Illinois Municipal Electric Agency – 4	
Answer	
Document Name	
Comment	
IMEA supports APPA comments.	
Likes 0	
Dislikes 0	
Response	

The SDT verified that APPA did not provide a comment for Question 4.

Jeanne Kurzynowski - Consumers Energy Company - 1 – RF

Answer

Document Name

Comment

No comment.

Likes 0

Dislikes 0

Response

5. Criterion 2.12: Do you agree with the proposed modifications to Criterion 2.12? If not, please provide your rationale and an alternate proposal.

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer No

Document Name

Comment

See response to Question 4.

Likes 0

Dislikes 0

Response

Jim Nail - City of Independence, Power and Light Department - 5

Answer No

Document Name

Comment

As written, there will be TOP Control Centers that will drop from Medium to Low and become exempt from many of the current requirements. Given the propensity for NOT maintaining standards of performance which are not enforced/required, this WILL produce a predictable weakening of the BES's overall Cyber-Security posture.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities

Answer No

Document Name

Comment

Colorado Springs Utilities supports Cowlitz PUD and APPA comments

Likes 0

Dislikes 0

Response

Please see response to Cowlitz PUD and APPA comments.

Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion

Answer No

Document Name

Comment

Based on the response to Question 4, Dominion Energy recommends the following additional language modification.

“TO and TOP Control Centers or backup Control Centers, not included in High Impact Rating (H) above, that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 2500 but below 3000 according to the table below. The "aggregate

weighted value" for a TO or TOP Control Center or backup Control Center is determined by summing the "weight value per line" shown in the table below for each BES Transmission Line monitored and controlled by the Control Center or backup Control Center."

Likes 0

Dislikes 0

Response

The SDT appreciates your comments.

In Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station/substation. The SDT doubled this value to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls Transmission Lines.

The SDT asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT also asserts that the misuse of BES Cyber Systems that are associated with Control Centers that control multiple Transmission Lines in the 100 to 199 kV could impact the reliability of the Bulk Electric System and would require a medium impact classification. BES Cyber Systems used by and located at Control Centers that perform the functional obligations of the Transmission Operator for one or more of the ("higher impact") assets that meet criterion 2.2, 2.4, 2.5, 2.7, 2.8, 2.9, or 2.10 are already categorized as high impact BES Cyber Systems in Criterion 1.3.

The SDT asserts that Criterion 2.12 considers radial feeders exempt from classification. The proposed criterion uses the phrase BES Transmission Lines to include only those Transmission Lines that are identified in the Bulk Electric System definition. Radial feeders would be excluded in Exemption 1 of the Bulk Electric System definition.

Jeanne Kurzynowski - Consumers Energy Company - 1 - RF

Answer

No

Document Name	
Comment	
<p>No. For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.</p> <p>An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.</p>	
Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	No
Document Name	
Comment	
<p>Reclamation recommends simplifying the Impact Rating Criteria using the methodology stated in the response to Question 1.</p>	
Likes 0	
Dislikes 0	
Response	

Please see response to question 1.	
Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1	
Answer	No
Document Name	
Comment	
NIPSCO is in support of the comment provided by EEI below.	
"See our comments, rationale and alternate proposal as provided in our response to question 2."	
Likes	0
Dislikes	0
Response	
Please see response to EEI comments.	
James Anderson - CMS Energy - Consumers Energy Company - 1	
Answer	No
Document Name	
Comment	
<p>For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.</p> <p>An alternate proposal to the drafted criterion would precede the Criterion with: "Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]", which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.</p>	
Likes	0

Dislikes	0
Response	
<p>The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.</p>	
Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3	
Answer	No
Document Name	
Comment	
<p>For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.</p> <p>An alternate proposal to the drafted criterion would precede the Criterion with: "Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]", which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.</p>	
Russell Noble - Cowlitz County PUD - 3	
Answer	No

Document Name	
Comment	
<p>Cowlitz PUD fully supports establishment of medium and low impact TOP/TO Control Centers, and believes that summing the weighted value of each BES Transmission Line that the BES Cyber System monitors and controls is the desired approach. However, it is possible that Criterion 2.12 can be interpreted by the Regional Entity contrary to this approach. As written, Criterion 2.12 appears to mandate a “Control Center impact designation” by summing the weighted values of Transmission Lines that the Control Center monitors and controls via any methodology. Cowlitz PUD has obtained confirmation from regional compliance personnel opinion in this regard. Monitoring and control can include Control Center operator verbal communication with field personnel, or non-programmable electronic devices <i>along with</i> BES Cyber Assets. The result is the BES Cyber System is not categorized by evaluating its integral importance to the BES asset’s function, it is categorized based on mere association with the asset regardless of whether it is necessary for the asset’s complex function.</p> <p>Cowlitz PUD supports the APPA suggested alternate proposal.</p>	
Likes 5	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
<p>The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.</p>	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	No
Document Name	
Comment	

See our comments, rationale and alternate proposal as provided in our response to question 2.

Likes 0

Dislikes 0

Response

Please response to question 2.

David Rivera - New York Power Authority - 3

Answer

No

Document Name

Comment

Removing functional obligation does not remove the conflict with the existing definition of Control Center for performing the functional obligation of a TOP. Removing Control Center and replacing with the control center concept used in CIP-014 would provide clarification.

Likes 0

Dislikes 0

Response

The SDT asserts that utilizing a weighting function based on the Transmission lines that a Control Center monitors and controls clarifies a Control Center that performs the functional obligation of a TOP. The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012. The weighting methodology proposed adds clarity to the difference between a Control Center containing Medium Impact BES Cyber Systems, and a Control Center containing Low Impact BES Cyber Systems

Jesus Sammy Alcaraz - Imperial Irrigation District - 1

Answer

No

Document Name

Comment

IID believes that summing the weighted value of each BES Transmission Line that the BES Cyber System monitors and controls is the desired approach, but Criterion 2.12 can be interpreted by the Regional Entity contrary to this approach. As written, Criterion 2.12 appears to mandate a “Control Center impact designation” by summing the weighted values of Transmission Lines that the Control Center monitors and controls via any methodology. Monitoring and control can include Control Center operator verbal communication with field personnel, or non-programmable electronic devices along with BES Cyber Assets. The result is the BES Cyber System is not categorized by evaluating its integral importance to the BES asset’s function, it is categorized based on mere association with an asset regardless of whether it is necessary for the asset’s complex function.

Further, IID has concerns a Control Center that may be used for various functions, and may have several isolated BES Cyber Systems (BCS) to cover each. In addition, applicable entities should be encouraged to apply technology which is not subject to the inherent vulnerabilities of programmable devices using routable protocol. Removal of key high risk control to highly secure technology should be removed from the “aggregate weighted value” of the BES Cyber Systems used to monitor and control.

IID supports the following possible modifications:

1. At the beginning of Section 2: Each BES Cyber System, not included in Section 1 above, integral in the operation of the following:
2. For Rational for criterion 2.12, last paragraph, second sentence: ... “weight value per line” shown in the associated table for each BES Transmission Line monitored and controlled by the Control Center’s or backup Control Center’s BES Cyber System...
3. For criterion 2.12: Control Centers or backup Control Centers, not included in High Impact Rating (H) above, that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the table below. The "aggregate weighted value" for a Control Center or backup Control Center is determined by summing the "weight value per line" shown in the table below for each BES Transmission Line monitored and controlled by the Control Center’s or backup Control Center’s BES Cyber System.

Likes 0

Dislikes 0

Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems. In the case where isolated BES Cyber Systems are present for various functions, Criteria 2.12 clearly applies to the monitoring and controlling of transmission lines. BES Cyber Systems associated with other functions would need to be assessed as appropriate by the Responsible Entity based on the other criteria set forth throughout Attachment 1.

Mike Lotz - City of Independence, Power and Light Department - 3,5

Answer	No
Document Name	
Comment	
<p>The proposed changes to criterion 2.12 will allow some entities, currently rated at medium impact, to change their control center(s) impact rating to low. This change could significantly increase both cyber and physical risks to reliability for the entity moving to low, and also the entities they are connected to. The low impact CIP requirements are not adequate protections for some entities.</p>	
Likes 0	
Dislikes 0	

Response

The SDT thanks you for your comment. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Lona Calderon - Salt River Project - 1,3,5,6 - WECC

Answer	No
Document Name	

Comment

Salt River Project supports comments submitted by APPA.

Likes 0

Dislikes 0

Response

Please see response to APPA comment.

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy

Answer

No

Document Name

Comment

Based on the lack of clarity that exists regarding whether criterion 2.12 would be applicable to all Control Centers, not just TO Control Centers, Duke Energy does not support the proposed modifications. In the CIP V5 Issues for Standard Drafting Team Consideration document, the V5TAG group suggests the following:

“Clarify the applicability of requirements on a TO Control Center that perform the functional obligations of a TOP, particularly if the TO has the ability to operate switches, breakers and relays in the BES.”

The sentence above from the V5TAG document, specifically makes reference to a need to clarify requirements on TO Control Centers that perform functional obligations of a TOP. As we have stated previously, this proposed modification could be interpreted to include all Control Centers, not just TO Control Centers. Was it the drafting team’s intent to clear up the “functional obligations of a TOP” issue by inserting the phrase “that monitor and control BES Transmission Lines” into the criterion of 2.12? Perhaps a better understanding of what “performing the functional obligations of” would be beneficial, since it is commonly used throughout Attachment 1.

If it was the drafting team’s intent that this proposed modification to the criterion only refer to TO Control Centers, we recommend revising said criterion to explicitly reference TO Control Centers.

Likes	0
Dislikes	0
Response	
Proposed Criterion 2.12 is applicable to all BES Cyber Systems associated with Control Centers (regardless of functional registration), not included in High Impact Rating (H), that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the associated table.	
Brandon McCormick - Brandon McCormick On Behalf of: Carol Chinn, Florida Municipal Power Agency, 6, 4, 3, 5; Chris Gowder, Florida Municipal Power Agency, 6, 4, 3, 5; Ginny Beigel, City of Vero Beach, 3; Joe McKinney, Florida Municipal Power Agency, 6, 4, 3, 5; Ken Simmons, Gainesville Regional Utilities, 1, 3, 5; Lynne Mila, City of Clewiston, 4; Richard Montgomery, Florida Municipal Power Agency, 6, 4, 3, 5; Tom Reedy, Florida Municipal Power Pool, 6; - Brandon McCormick, Group Name FMPPA	
Answer	No
Document Name	
Comment	
Please see our comments for Question 1.	
Likes	0
Dislikes	0
Response	
Please see response to question 1.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	No
Document Name	
Comment	

See our comments, rationale and alternate proposal as provided in our response to question 2.

Likes 0

Dislikes 0

Response

Please see response to question 2.

David Gordon - Massachusetts Municipal Wholesale Electric Company - 5

Answer

No

Document Name

Comment

MMWEC supports the comments submitted by APPA, and suggests adding the following sentence (similar to wording in criteria 2.1 and 2.1) to the end of the proposed Criterion 2.12. "The only BES Cyber Systems that meet this criterion are those shared BES Cyber Systems that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the table below."

Likes 0

Dislikes 0

Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

Jack Cashin - American Public Power Association - 4

Answer

No

Document Name

Comment

Public power supports the concept of establishing criteria for Medium Impact Control Centers and Low Impact Control Centers. We support the approach of basing the criteria on "aggregate weighted value" of Transmission Lines controlled by BES Cyber Systems located at the Control Centers. However, as proposed, Criterion 2.12 is ambiguous as to how the "aggregate weighted value" is derived. Is it derived by summing the values for all Transmission Lines monitored and controlled by a Control Center, or should it be derived by summing the value for Transmission Lines monitored and controlled by BES Cyber Systems located at the Control Center? Also, the criterion is not clear on whether "control" refers to control by personnel at the Control Center (e.g., by verbal instruction to field personnel) or to control by a BES Cyber System.

APPA suggests adding the following sentence (similar to wording in criteria 2.1 and 2.1) to the end of the proposed Criterion 2.12. "The only BES Cyber Systems that meet this criterion are those shared BES Cyber Systems that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the table below."

Public power appreciates the SDT efforts for clarifying the applicability requirements for a TO Control Center that performs the functional obligations of a TOP. We have some suggested language for Criterion 2.12 that we feel removes some ambiguity and possible interpretation questions. Our suggested language is as follows:

"Cyber Assets used to control BES Transmission lines, located at Control Centers or backup Control Centers, where the summed weighted value (according to the table below) of each BES Transmission Line controlled and monitored exceeds 6000."

Likes	5	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long
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Dislikes	0	
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Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

Payam Farahbakhsh - Hydro One Networks, Inc. - 1

Answer	No
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Document Name	
Comment	
Hydro One supports comments submitted by NPCC RSC.	
Likes	0
Dislikes	0
Response	
Please see response to NPCC RSC comment.	
Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	
Answer	No
Document Name	
Comment	
KCP&L incorporates by reference Edison Electric Institute’s (EEI) Question 5 response.	
Likes	0
Dislikes	0
Response	
Please see response to EEI comment.	
Don Schmit - Nebraska Public Power District - 5	
Answer	No
Document Name	
Comment	

See comments on question #1.	
Likes	0
Dislikes	0
Response	
Please see response to question 1.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	No
Document Name	
Comment	
<p>We support the concept of establishing criteria for Medium Impact Control Centers and Low Impact Control Centers. We support the approach of basing the criteria on "aggregate weighted value" of Transmission Lines controlled by BES Cyber Systems located at the Control Centers. However, as proposed, Criterion 2.12 is ambiguous as to how the "aggregate weighted value" is derived. Is it derived by summing the values for all Transmission Lines monitored and controlled by a Control Center, or should it be derived by summing the value for Transmission Lines monitored and controlled by BES Cyber Systems located at the Control Center? Also, the criterion is not clear on whether "control" refers to control by personnel at the Control Center (e.g., by verbal instruction to field personnel) or to control by a BES Cyber System.</p> <p>We suggest adding the following sentence (similar to wording in criteria 2.1 and 2.1) to the end of the proposed Criterion 2.12. "The only BES Cyber Systems that meet this criterion are those shared BES Cyber Systems that monitor and control BES Transmission Lines with an "aggregate weighted value" exceeding 6000 according to the table below."</p>	
Likes	0
Dislikes	0
Response	

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the weighting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

David Jendras - Ameren - Ameren Services - 3

Answer No

Document Name

Comment

See the response to question 2 above

Likes 0

Dislikes 0

Response

Please see response to question 2.

Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group

Answer No

Document Name

Comment

See comments on question #2.

Likes 0

Dislikes 0

Response

Please see response to question 2.

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer	No
Document Name	
Comment	
Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison	
Likes 0	
Dislikes 0	
Response	
Please see response to Robert Blackney comment on behalf of Southern California Edison.	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	No
Document Name	
Comment	
<p>NRG has a concern that there may be confusion on what the drafting team’s intent is in reference to proposed language pertaining to BES Cyber System’s span of control instead of the BES Cyber System monitors and controls. Industry interpretation of the current language leads NRG stakeholders to believe that the Rationale information may not match up correctly with the CIP-002-6 Standard. (NRG requests clarity on the operation authority versus capability). NRG requests that the drafting team provide clarity on what their intent is in reference to Criterion 2.12 and verify the alignment of the rationale document and the standard.</p> <p>Question: Does control include the ability to issue an operating instruction through another element besides a BES Cyber System element? Is it the intent of the SDT, that a TOP could drop from Medium to Low based on these calculations? It seems that most if not all TOPs are Medium and this can reduce them to Low which may be a concern for the industry.</p>	
Likes 0	
Dislikes 0	

Response

The SDT thanks you for your comment. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns

Answer Yes

Document Name

Comment

Suggest 3000 points to be in-line with Criterion 2.5. Concerns that entities with large amounts of 100-199kV lines would be excluded (6000 points = 24 100kV lines).

Likes 0

Dislikes	0
Response	
<p>The SDT appreciates your comment and asserts that proposed Criterion 2.12 categorizes medium impact BES Cyber Systems, associated with Control Centers that monitor and control BES Transmission Lines, commensurate with their risk to the reliability of the BES. The SDT used Criterion 2.5 as a basis for developing proposed Criterion 2.12. In Criterion 2.5, the total aggregated weighted value of 3,000 was derived from weighted values related to three connected 345 kV lines and five connected 230 kV lines at a transmission station or substation. The total aggregated weighted value is used to account for the true impact to the BES, irrespective of line kV rating and mix of multiple kV rated lines. The values were established in NERC’s document “Integrated Risk Assessment Approach – Refinement to Severity Risk Index.” The SDT used the 3,000 weighted value from Criterion 2.5 to establish the maximum weighted value for low impact BES Cyber Systems associated with a single Transmission station/substation. The SDT doubled this value to establish a 6000 aggregate weighted value because an applicable Control Center operates transmission Facilities at two or more locations. This establishes the "floor" for medium impact BES Cyber Systems associated with a Control Center that monitors and controls BES Transmission Lines.</p>	
Barry Lawson - National Rural Electric Cooperative Association - 4	
Answer	Yes
Document Name	
Comment	
NRECA supports the proposed modifications.	
Likes	0
Dislikes	0
Response	
Thank you for your comment.	
Richard Vine - California ISO - 2	
Answer	Yes
Document Name	

Comment

The California ISO supports the comments of the Security Working Group (SWG)

Likes 0

Dislikes 0

Response

Please see response to Security Working Group comment.

Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2

Answer

Yes

Document Name

Comment

ERCOT ISO signs on to the SRC + SWG comments.

Likes 0

Dislikes 0

Response

Please see response to SRC + SWG comment.

Long Duong - Public Utility District No. 1 of Snohomish County - 1

Answer

Yes

Document Name

Comment

SNPD only agrees with the weighted approach to identify ratings of Control Centers. A BES Cyber System that is an integrated part of a Control Center, and involves one or more BES Reliability Operating Service (BROS), should have a Medium Impact rating by association. The introduction of Span of Control, from the SDT is somewhat confusing language for SNPD.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. Please note that the language, “span of control” is not in the language of the Criterion, it is used to help explain the difference between the functional registration and the Transmission monitoring and control services the Control Center can perform.

Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5

Answer

Yes

Document Name

Comment

Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicholas Lauriat - Network and Security Technologies - 1	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Nicolas Turcotte - Hydro-Qu?bec TransEnergie - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham

Answer

Document Name

Comment

MidAmerica would like to change its answer for this question to NO.

MidAmerican agrees with EEI's comments. Please see EEI's Comments below:

See our comments, rationale and alternate proposal as provided in our response to question 2.

Likes 0

Dislikes 0

Response

Please see response to question 2.

Mary Ann Todd - Illinois Municipal Electric Agency - 4

Answer

Document Name

Comment

IMEA supports APPA comments.

Likes 0

Dislikes 0

Response

Please see response to APPA comments.

Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer

Document Name

Comment

No Response.

Likes 0

Dislikes 0

Response

Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light

Answer

Document Name

Comment

Seattle City Light supports the comments of Cowlitz PUD and APPA.

Likes 0

Dislikes 0

Response

Please see response to Cowlitz PUD and APPA comments.

6. Implementation Plan: Do you agree with the SDT's proposed Implementation Plan? If you agree with the proposed implementation time period, please note the actions you will take that require this amount of time to complete. If you think an alternate implementation time period is needed – shorter or longer - please propose an alternate implementation plan and provide a detailed explanation of actions and time needed to meet the implementation deadline.

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer No

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes 0

Dislikes 0

Response

Please refer to the SDT's response to Southern California Edison's comment(s).

David Jendras - Ameren - Ameren Services - 3

Answer No

Document Name

Comment

It is premature in our opinion to comment on the implementation plan because Ameren disagrees with the revisions.

Likes 0

Dislikes 0

Response	
The SDT thanks you for your comment. Please see the SDT's response to EEI's comments on the proposed revisions.	
Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	
Answer	No
Document Name	
Comment	
KCP&L incorporates by reference Edison Electric Institute's (EEI) Question 6 response	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment. Please see the SDT's response to EEI's comments on the proposed revisions.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	No
Document Name	
Comment	
It is premature to comment on the implementation plan because EEI disagrees with the proposed revisions to the standard.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment. Please see the SDT's response to EEI's comments on the proposed revisions.	

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy	
Answer	No
Document Name	
Comment	
Based on the lack of clarity on the scope of criterion 2.12, we cannot agree that 12 months would be a sufficient time to address impact changes resulting from an unplanned change to the system.	
Likes 0	
Dislikes 0	
Response	
The SDT thanks you for your comment. The SDT has removed the Planned and Unplanned Changes sections of the Implementation plan and intends to address this matter more broadly across the entire body of CIP standards in the future.	
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro	
Answer	No
Document Name	
Comment	
Enforcement schedules triggered by a system change or periodic review should be incorporated directly within the Standard, not within a standalone Implementation Plan. An example of doing this is CIP-014-2 R5. The “unplanned changes compliance implementation table” in the Implementation Plan creates a situation where this Implementation Plan is never fully vested/implemented. An Implementation Plan should be used to dictate timelines required to implement a requirement, where timelines allowing for compliance maintenance (after Standard is fully implemented) should be incorporated directly within the standard, which allows the Implementation Plan itself to expire. This supports NERC’s implementation timeline reporting in Col L, here .	
Likes 1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes 0	

Response

The SDT asserts that this concept does not deviate from the existing Implementation Plan. The SDT is simply carrying forward these concepts from the previously approved CIP-002-5.1 Implementation Plan.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1

Answer No

Document Name

Comment

It is premature to comment on the implementation plan because MEC disagrees with the revisions.

Likes 0

Dislikes 0

Response

See the SDT's response to MEC's comments.

Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3

Answer No

Document Name

Comment

No Comment

Likes 0

Dislikes 0

Response

Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	No
Document Name	
Comment	
<p>AZPS recommends that the proposed implementation time period be extended to 24 months for all options. Regardless of whether a facility’s categorization is revised from Low to Medium or Medium to High, the effort required would involve the design and implementation of new or different technology, new or revised processes, procurement and contracting efforts, etc. To design and implement an approach to compliance could – alone – take 12 months. When the additional time required for and uncertainty associated with the execution and completion of the supply chain and procurement processes are considered, implementation efforts could easily exceed 12 months. For this reason, implementation efforts should be allotted 24 months for completion as such timeline better aligns with the time needed for analysis, procurement of long lead items, and actual work.</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT thanks you for your comment. The SDT has removed the Planned and Unplanned Changes sections of the Implementation plan and intends to address this matter more broadly across the entire body of CIP standards in the future.</p>	
Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1	
Answer	No
Document Name	
Comment	
<p>NIPSCO is in support of the comment provided by EEI below.</p> <p>"It is premature to comment on the implementation plan because EEI disagrees with the revisions."</p>	
Likes	0

Dislikes	0
Response	
See the SDT's response to EEI's comments.	
Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	No
Document Name	
Comment	
Reclamation recommends an initial implementation period of 18 months to allow entities time to determine the effects of the revised Impact Rating Criteria and an additional 18 months to comply.	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment. The SDT has removed the Planned and Unplanned Changes sections of the Implementation plan and intends to address this matter more broadly across the entire body of CIP standards in the future.	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	No
Document Name	
Comment	
N&ST agrees with the proposed implementation time frames in the draft Implementation Plan. However, N&ST believes there a number of issues with the accompanying narrative that should be addressed:	

- Third paragraph under heading, “Planned and Unplanned Changes:” N&ST does not believe it is possible for “unplanned” changes, defined in the Implementation Plan document as changes not planned and implemented by the responsible entity, to be made to one or more of that entity’s BES Cyber Systems.

- That same paragraph describes a “...scenario where a particular BES Cyber System at a transmission substation does not meet the criteria in CIP-002-6, Attachment 1,...” N&ST believes this condition is logically impossible. An unplanned change, outside of the hypothetical transmission substation, could only result either in (a) an existing Cyber Asset, not previously identified as a BES Cyber Asset, becoming part of a new or existing BES Cyber System, or (b) a low impact BES Cyber System being recategorized as a medium impact BES Cyber System.

N&ST recommends the following changes to the Implementation Plan’s timeline table:

- For ease of reference, table entries should be numbered.

- The Implementation Plan should state explicitly that the table’s third and fourth entries (an existing BES Cyber System is recategorized from medium to high or from low to medium impact) applies to responsible entities that have previously identified at least one medium impact BES Cyber System.

- N&ST finds it difficult to envision a scenario wherein a new high or medium impact BES Cyber System must be implemented as the result of an unplanned change (first and second entries in table). At the same time, N&ST believes it is possible, if unlikely, that an existing Cyber Asset could be recategorized as a BES Cyber Asset as the result of an unplanned change. If this is the scenario the Drafting Team had in mind, these timeline table entries should be clarified. Otherwise, N&ST recommends they be deleted.

Likes 0

Dislikes 0

Response

The SDT asserts that while unplanned changes resulting in newly identified BES Cyber System(s) or changes to categorization are unlikely, the SDT recognizes that they are possible. Should this occur, the Implementation Plan provides timelines for the effective dates of the requirements. That said, the SDT has removed the Planned and Unplanned Changes sections of the Implementation plan and intends to address this matter more broadly across the entire body of CIP standards in the future.

Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name	
Southern Company	
Answer	No
Document Name	
Comment	
<p>The question asks, “please note the actions you will take that require this amount of time to complete”, although there is no time afforded entities to complete any actions. The proposed Implementation Plan states “Where approval by an applicable governmental authority is required, Reliability Standard CIP-002-6 shall become effective on the effective date of the applicable governmental authority’s order approving the standard, or as otherwise provided for by the applicable governmental authority.” This does not allow entities adequate time to achieve compliance with ‘main R’ requirements to have ‘one or more documented processes’ at the time of approval. Updates to entity policies, programs, plans, and procedures would be required, regardless of whether or not the modifications result in the identification of new, or reclassification of existing BES Cyber Systems at Control Centers.</p> <p>The Implementation Plan does explicitly state “For the purposes of transitioning from CIP-002-5.1a to CIP-002-6, increases in BES Cyber System categorization (i.e., from low to medium/high or from medium to high) from the application of CIP-002-6 Attachment 1 criteria are provided 24 months for implementation of applicable CIP Cyber-Security Standards.” However, there is no explicit clarification whether the changes to CIP-002-6 are considered a <i>Planned</i> change, or an <i>Unplanned</i> change. This impacts entities where there is no change to BES Cyber System categorization, but yet policies, programs, plans, and procedures must comply as of the effective date of the new approved standard. For the 24 month implementation clause above, this needs to also explicitly state “This includes changes or updates necessary to entity policies, programs, plans or procedures to address these modifications in CIP-002-6.”</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT asserts that the language in the Planned and Unplanned Changes section is sufficiently clear and does not plan to include specific language regarding updates necessary to entity policies, programs, plans or procedures.	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	

Answer	No
Document Name	
Comment	
The implementation time period needed would be contingent on the status of the changes to the definition of Control Center.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT is proposing a new Control Center definition to address the communication networks directive as it relates to CIP-012.	
Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC	
Answer	No
Document Name	
Comment	
The following language is not adequately clear.	
“Responsible entity identifies first medium impact or high impact BES Cyber System (i.e., the responsible entity previously had no BES Cyber Systems categorized as high impact or medium impact according to the CIP-002-6 identification and categorization processes)” (24 months)	
This language needs to be clarified to clearly identify that 12 months is for the first medium or high impact BES Cyber System for this asset.	
Likes 0	
Dislikes 0	
Response	

The SDT asserts that the Implementation Plan is clear in this area and does not deviate from the existing Implementation Plan. The SDT is simply carrying forward these concepts from the previously approved CIP-002-5.1 Implementation Plan.

Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6

Answer No

Document Name

Comment

Likes 0

Dislikes 0

Response

Long Duong - Public Utility District No. 1 of Snohomish County - 1

Answer Yes

Document Name

Comment

SNPD does not have comments on Question 6.

Likes 0

Dislikes 0

Response

Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts

Answer Yes

Document Name	
Comment	
<p>AECI requests the SDT to revise the implementation plan to provide added clarity. AECI suggests moving the statement, “For the purposes of transitioning from CIP-002-5.1a to CIP-002-6, increases in BES Cyber System categorization (i.e., from low to medium/high or from medium to high) from the application of CIP-002-6 Attachment 1 criteria are provided 24 months for implementation of applicable CIP Cyber-Security Standards.” to the beginning of the Planned/Unplanned Changes section of the Implementation Plan. It is confusing to read through all of the planned/unplanned options in the associated table and finally conclude with the statement that is most impactful to Responsible Entities.</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT has deleted the Planned and Unplanned Changes section of the Implementation Plan.</p>	
Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	
<p>ERCOT ISO signs on to the SRC + SWG comments.</p>	
Likes	0
Dislikes	0
Response	
<p>Jack Cashin - American Public Power Association - 4</p>	

Answer	Yes
Document Name	
Comment	
We agree with the intent of the implementation plan but feel that the unintended consequences of potential interpretations could bring assets into scope, thereby requiring recalibration of compliance programs in an ongoing manner.	
Likes 5	Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long
Dislikes 0	
Response	
The SDT has clarified the Planned and Unplanned Changes section by removing it from the Implementation Plan to the Standard.	
Lona Calderon - Salt River Project - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Salt River Project supports comments submitted by APPA.	
Likes 0	
Dislikes 0	
Response	
Richard Vine - California ISO - 2	
Answer	Yes

Document Name	
Comment	
The California ISO supports the comments of the Security Working Group (SWG)	
Likes 0	
Dislikes 0	
Response	
Barry Lawson - National Rural Electric Cooperative Association - 4	
Answer	Yes
Document Name	
Comment	
NRECA supports the proposed implementation plan.	
Likes 0	
Dislikes 0	
Response	
Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns	
Answer	Yes
Document Name	
Comment	

Consider further clarification of the classification of planned or unplanned changes. Existing definitions are vague with regard to regard to change of facility ownership, criterion that are based on agreements (2.7 NUC-001) or other entities or internal.

Likes 0

Dislikes 0

Response

The SDT is considering moving forward with language with the classification of planned or unplanned changes in the standard.

Russell Noble - Cowlitz County PUD - 3

Answer Yes

Document Name

Comment

Cowlitz PUD supports APPA comment.

Likes 1

Public Utility District No. 1 of Snohomish County, 1, Duong Long

Dislikes 0

Response

Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities

Answer Yes

Document Name

Comment

Colorado Springs Utilities supports Cowlitz PUD and APPA comments

Likes	0
Dislikes	0
Response	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Shannon Mickens - Southwest Power Pool, Inc. (RTO) - 2 - SPP RE, Group Name SPP Standards Review Group	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Don Schmit - Nebraska Public Power District - 5	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
David Gordon - Massachusetts Municipal Wholesale Electric Company - 5	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Nicolas Turcotte - Hydro-Quebec TransEnergie - 1	
Answer	Yes
Document Name	

Comment

Likes 0

Dislikes 0

Response

Mike Lotz - City of Independence, Power and Light Department - 3,5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jesus Sammy Alcaraz - Imperial Irrigation District - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
David Rivera - New York Power Authority - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jim Nail - City of Independence, Power and Light Department - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	
Document Name	
Comment	
Seattle City Light supports the comments of Cowlitz PUD and APPA.	
Likes 0	

Dislikes	0
Response	
<p>Rachel Coyne - Texas Reliability Entity, Inc. - 10</p>	
Answer	
Document Name	
Comment	
<p>While Texas RE does not necessarily object to the proposed Implementation Plan timeframes, the IP, as currently drafted, could introduce ambiguity regarding the expected compliance timelines for entities with Control Centers that are would be newly subject to the proposed CIP-002-6 Criteria 2.12 definition. In particular, Texas RE requests the SDT should clarify whether the change to the Control Center criteria would constitute a planned or unplanned change.</p> <p>The standard will become effective immediately upon the effective date of the FERC order approving the revisions. However, the new criteria presumably will interact with the impact rating review criteria set forth in CIP-002-5.1 R2. Specifically, Transmission Owners with Control Centers that satisfy the proposed 2.12 criteria presumably will have to identify those Control Centers during its periodic 15-month review of its Medium Impact BES Cyber System identifications. As such, depending on the time of the approval, entities could have as much as 15 months to properly categorize and implement medium impact controls for any Control Centers now captured by the changes to the CIP-002-5.1 Criteria 2.12 language. Further, entities may possibly have an additional 12 months beyond the 15 month categorization window if the SDT changes fall within the definition of an “unplanned change.” That is, “any changes of the electric system or BES Cyber System, as identified through the assessment under CIP-002-6, Requirement R2, which were not planned by the responsible entity.” Texas RE recommends that the SDT clarify this timeline, and, particularly, whether the SDT intends for the additional 12-month period for unplanned changes to be applicable in these circumstances.</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT moved the Planned and Unplanned section to the standard.</p>	

Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer

Document Name

Comment

No Response.

Likes 0

Dislikes 0

Response

Mary Ann Todd - Illinois Municipal Electric Agency - 4

Answer

Document Name

Comment

IMEA supports APPA comments.

Likes 0

Dislikes 0

Response

Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham

Answer

Document Name	
Comment	
<p>MidAmerica would like to change its answer for this question to NO.</p> <p>MidAmerican agrees with EEI's comments. Please see EEI's Comments below:</p> <p>It is premature to comment on the implementation plan because EEI disagrees with the revisions.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT thanks you for your comment. Please see the SDT's response to EEI's comments on the proposed revisions.</p>	
Jeanne Kurzynowski - Consumers Energy Company - 1 - RF	
Answer	
Document Name	
Comment	
<p>No comment.</p>	
Likes 0	
Dislikes 0	
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	
Document Name	

Comment

As the IESO does not own or operate BES Transmission Lines we have no opinion or comment on the implimentation plan.

Likes 0

Dislikes 0

Response

7. The SDT considered a number of approaches and determined that proposed CIP-002-6 provides entities with flexibility to meet the reliability objectives in a cost effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for a more cost effective approach that addresses the reliability objective, please provide your recommendation and, if appropriate, technical justification.

Jeanne Kurzynowski - Consumers Energy Company - 1 - RF

Answer

No

Document Name

Comment

No. For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. In the case where an entity determines that a Control Center already meets High Impact criteria, there is no need for further evaluation to determine if a lower, and thus irrelevant criteria, is also applicable. Once a Control Center is deemed to meet the High Impact criteria, the evaluation of that Control Center is complete.

Wendy Center - U.S. Bureau of Reclamation - 5**Answer**

No

Document Name**Comment**

Reclamation recommends that the Impact Rating Criteria in CIP-002 Attachment 1 be simplified, using the methodology described in the response to Question 1, to reduce the overall impact of CIP-002-6 and allow entities to reduce the time spent “review[ing] the identifications in Requirement R1 and its parts (and update[ing] them if there are changes identified) at least once every 15 calendar months” and the cost of implementing the standard.

Likes 0

Dislikes 0

Response

The SDT appreciates your comments. The SDT is only authorized to address the TOCC issues as identified in the Standards Authorization Request for Project 2016-02. The SDT has revised criteria 2.12 to address the risk to the BES presented by the BES Cyber Systems that are capable of operating transmission.

Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1**Answer**

No

Document Name**Comment**

NIPSCO is in support of the comment provided by EEI below.

"It is premature to comment on the cost effectiveness of the proposed changes because EEI disagrees with the revisions."

Likes 0

Dislikes 0

Response

See the SDT's response to EEI's comments.

James Anderson - CMS Energy - Consumers Energy Company - 1

Answer

No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: "Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]", which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. In the case where an entity determines that a Control Center already meets High Impact criteria, there is no need for further evaluation to determine if a lower, and thus irrelevant criteria, is also applicable. Once a Control Center is deemed to meet the High Impact criteria, the evaluation of that Control Center is complete.

Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3

Answer

No

Document Name

Comment

For entities where TO Control Centers already meet High Impact criteria (by way of High Watermark), this clarification only serves to create additional compliance burden to determine an irrelevant criteria.

An alternate proposal to the drafted criterion would precede the Criterion with: “Where TO Control Centers are not determined to meet High Impact criteria then.....[perform aggregate weighting evaluation to determine IRC 2.12]”, which would allow an entity to avoid the unnecessary compliance burden of performing this evaluation for High Impact TO Control Centers.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. In the case where an entity determines that a Control Center already meets High Impact criteria, there is no need for further evaluation to determine if a lower, and thus irrelevant criteria, is also applicable. Once a Control Center is deemed to meet the High Impact criteria, the evaluation of that Control Center is complete.

Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham

Answer

No

Document Name

Comment

Removal of the guidelines and technical basis on which entities implemented their CIP-002 BES Cyber System identifications and classifications could cause significant re-work if it results in compliance interpretations other than what the SDT intended. Re-work is not cost effective.

Likes 0

Dislikes 0

Response

There is no plan to remove the GTB from the standard at this time.	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	No
Document Name	
Comment	
It is premature to comment on the cost effectiveness of the proposed changes because MEC disagrees with the revisions.	
Likes	0
Dislikes	0
Response	
See the SDT's response to MEC's comments.	
Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy	
Answer	No
Document Name	
Comment	
See our response to question 6. Without clarity on the scope, it is difficult to determine the cost effectiveness.	
Likes	0
Dislikes	0
Response	
See response to comments in question 6.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	No

Document Name	
Comment	
It is premature to comment on the cost effectiveness of the proposed changes because EEI disagrees with the revisions.	
Likes 0	
Dislikes 0	
Response	
See response to EEI's comments.	
Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb	
Answer	No
Document Name	
Comment	
KCP&L incorporates by reference Edison Electric Institute's (EEI) Question 7 response.	
Likes 0	
Dislikes 0	
Response	
See response to EEI's comments.	
David Jendras - Ameren - Ameren Services - 3	
Answer	No
Document Name	
Comment	

See the response to question 6 above.

Likes 0

Dislikes 0

Response

Jeff Johnson - Jeff Johnson On Behalf of: Martine Blair, Sempra - San Diego Gas and Electric, 5, 3, 1; - Jeff Johnson

Answer

No

Document Name

Comment

Item 7 is ambiguous and needs to be explained. SDG&E seeks clarification to what the “cost effective manner” element is of this proposed change to CIP-002-5.1.

Likes 0

Dislikes 0

Response

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer

No

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes	0
Dislikes	0
Response	
Please see response to comments submitted by Robert Blackney on behalf of Southern California Edison	
Regan Haines - TECO - Tampa Electric Co. - 1,3,5,6	
Answer	No
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities	
Answer	Yes
Document Name	
Comment	
Colorado Springs Utilities supports Cowlitz PUD and APPA comments	
Likes	0
Dislikes	0
Response	
Please see response to Cowlitz PUD and APPA comments.	

Vivian Vo - APS - Arizona Public Service Co. - 3	
Answer	Yes
Document Name	
Comment	
<p>AZPS agrees that the SDT’s proposal meets the reliability objectives in a cost effective manner so long as a reasonable implementation period, i.e., at least 24 months, is allotted. Otherwise, entities to which these modifications are applicable may expend significant resources unnecessarily to meet timeframes that were, at their time of proposal, unreasonable. Such unnecessary expenditures would gravely adversely impact the cost-effectiveness of the proposed revisions.</p>	
Likes	0
Dislikes	0
Response	
The SDT thanks you for your comment.	
Russell Noble - Cowlitz County PUD - 3	
Answer	Yes
Document Name	
Comment	
Cowlitz PUD supports APPA comment.	
Likes	1
Dislikes	0
Response	
Please see response to APPA’s comments.	
Richard Vine - California ISO - 2	

Answer	Yes
Document Name	
Comment	
The California ISO supports the comments of the Security Working Group (SWG)	
Likes 0	
Dislikes 0	
Response	
Please see response to SWG comments.	
Lona Calderon - Salt River Project - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Salt River Project supports comments submitted by APPA.	
Likes 0	
Dislikes 0	
Response	
Please see response to APPA comments.	
David Gordon - Massachusetts Municipal Wholesale Electric Company - 5	
Answer	Yes
Document Name	
Comment	

MMWEC supports the concept of establishing criteria for Medium Impact Control Centers and Low Impact Control Centers. We support the approach of basing the criteria on "aggregate weighted value" of Transmission Lines controlled by BES Cyber Systems located at the Control Centers.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comments.

Jack Cashin - American Public Power Association - 4

Answer

Yes

Document Name

Comment

Based on the perception of the SDT intent, public power agrees with the weighted values for transmission lines that the BES cyber system monitors and controls approach and that the allowing for low impact Control Centers is a positive action.

The changes proposed should reduce cost and/or potentially provide flexibility in compliance options.

Likes 5

Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long

Dislikes 0

Response

The SDT thanks you for your comment.

Elizabeth Axson - Electric Reliability Council of Texas, Inc. - 2

Answer

Yes

Document Name	
Comment	
ERCOT ISO signs on to the SRC + SWG comments.	
Likes 0	
Dislikes 0	
Response	
Please see response to the SRC + SWG comments.	
Long Duong - Public Utility District No. 1 of Snohomish County - 1	
Answer	Yes
Document Name	
Comment	
SNPD does not have comments on Question 7.	
Likes 0	
Dislikes 0	
Response	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sandra Pacheco - Silicon Valley Power - City of Santa Clara - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Brandon Cain - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - FRCC,MRO,WECC,Texas RE,SERC,SPP RE, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jim Nail - City of Independence, Power and Light Department - 5	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Jennifer Hohenshilt - Talen Energy Marketing, LLC - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Anton Vu - Los Angeles Department of Water and Power - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Maier - Intermountain REA - 3	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Aaron Austin - AEP - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Powell - Trans Bay Cable LLC - NA - Not Applicable - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Bette White - AES - Indianapolis Power and Light Co. - 3	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Stephanie Burns - Stephanie Burns On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Stephanie Burns	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Francis - SRC - 2,3 - MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF, Group Name SRC + SWG	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes	0	
Response		
Mike Smith - Manitoba Hydro - 1, Group Name Manitoba Hydro		
Answer	Yes	
Document Name		
Comment		
Likes	1	Manitoba Hydro , 5, Xiao Yuguang
Dislikes	0	
Response		
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation		
Answer	Yes	
Document Name		
Comment		
Likes	0	
Dislikes	0	
Response		
Bob Solomon - Hoosier Energy Rural Electric Cooperative, Inc. - 1		
Answer	Yes	

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jesus Sammy Alcaraz - Imperial Irrigation District - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Mike Lotz - City of Independence, Power and Light Department - 3,5	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Nicolas Turcotte - Hydro-Qu?bec TransEnergie - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Don Schmit - Nebraska Public Power District - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Riley - Associated Electric Cooperative, Inc. - 1, Group Name AECI & Member G&Ts	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	
Document Name	
Comment	
As the IESO does not own or operate BES Transmission Lines we have no opinion or comment on the implementation plan.	
Likes	0
Dislikes	0
Response	
Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC	
Answer	
Document Name	
Comment	

The SDT should strongly consider replacing CIP-002 and the associated CIP standards with an alternative non-prescriptive approach that focuses on effective cyber and physical security and adapt the enforcement approach to be consistent with those used in financial auditing. This alternative approach would reduce costs and allow Registered Entities to focus on maintaining a secure power grid .

Likes 0

Dislikes 0

Response

The SDT appreciates your comments. The SDT is only authorized to address the TOCC issues as identified in the Standards Authorization Request for Project 2016-02. The SDT has revised criteria 2.12 to address the risk to the BES presented by the BES Cyber Systems that are capable of operating transmission.

Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE

Answer

Document Name

Comment

We have not performed a cost analysis on the proposed changes.

Likes 0

Dislikes 0

Response

Mary Ann Todd - Illinois Municipal Electric Agency - 4

Answer

Document Name

Comment

IMEA supports APPA comments.	
Likes	0
Dislikes	0
Response	
Please see response to APPA comments.	
Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
No Response.	
Likes	0
Dislikes	0
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	
Comment	
Texas RE does not have comments on this question.	
Likes	0

Dislikes	0
Response	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	
Document Name	
Comment	
Seattle City Light supports the comments of Cowlitz PUD and APPA.	
Likes	0
Dislikes	0
Response	
Please see response to Cowlitz PUD and APPA comments.	

8. If you have additional comments on proposed CIP-002-6, Attachment 1, Criterion 2.12 that you have not provided in response to the questions above, please provide them here.	
Kara White - NRG - NRG Energy, Inc. - 3,4,5,6 - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF	
Answer	
Document Name	
Comment	
N/A	
Likes	0

Dislikes	0
Response	
Robert Blackney - Edison International - Southern California Edison Company - 1,3,5,6 - WECC	
Answer	
Document Name	
Comment	
<p>SCE does not agree with the first paragraph that has been inserted into the Guidelines and Technical Basis (GTB) section of the proposed standard.</p> <p>SCE used the existing Guidelines and Technical basis section of CIP-002 (and other CIP standards) to inform the implementation of NERC compliant CIP programs and, consequently, SCE does not think that NERC should remove this section from the proposed standard without providing a replacement process to inform the understanding of the impact rating criteria in CIP-002, and the impact of BES Cyber System impact ratings on the applicability of other CIP standards.</p> <p>In proposed standard CIP-002-6, NERC states that the guidance that is normally provided in the GTB section of the standard could be moved into the accompanying Implementation Guidance document, however, NERC does not provide any assurance that the Implementation Guidance will be released in a timely manner, or if industry participants would have the opportunity to vet and/or approve the information. Consequently, SCE does not agree with NERC’s proposal to remove the GTB sections of CIP-002-6 unless NERC can provide clear and discrete next steps about what implementation information will be made available to industry participants, when NERC will release the information, and NERC provides assurance that industry stakeholders will have an opportunity to reviewing/vet the information prior to its implementation.</p> <p>Furthermore, SCE does not believe that the Implementation Guidance document is an appropriate place to present the information that would typically be accessible in the GTB section of the standard. Currently, the GTB section of the standards provides valuable examples that clarify the specific compliance circumstances and variables NERC could/would review during the NERC audit process. Additionally, the GTB provides industry stakeholders insight to the SDT’s drafting process and the underlying intents of the proposed requirements in a draft standard. Conversely, Implementation Guidance documents provide a specific, NERC endorsed approach that an entity can use to achieve compliance with a particular requirement. Therefore, SCE does not think it would be appropriate to relocate information from</p>	

the GTB section into Implementation Guidance. If necessary, the SDT could modify Attachment 1 of the proposed standard to include the guidance from the GTB.

Having said that, if NERC disagrees with SCE and believes that Implementation Guidance is an appropriate place to present the guidance normally found in the GTB section, SCE recommends that NERC issue the Implementation Guidance document for the review and approved of industry participants. Specifically, SCE believes that the Implementation Guidance document should pass through an industry participant ballot process before to the final ballot for CIP-002 (analogous to NERC’s process for CIP-013).

Lastly, SCE is concerned that removal of the GTB may impact SCE’s ability to support the approval of the proposed CIP-002-6. SCE recommends NERC address the concerns surrounding GTB before taking CIP-002-6 to a second ballot.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Long Duong - Public Utility District No. 1 of Snohomish County - 1

Answer

Document Name

Comment

Are there any RC and TOP functional obligations that SNPD should consider, other than the services already stated in BROS?

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. The SDT has revised criterion 2.12 to address the confusion related to the term “functional obligation,” as noted in the VTAG transfer document. To address the risk to the BES presented by the BES Cyber Systems that are capable

of operating transmission, the revision is intended to address entities that perform tasks of operating transmission, regardless of registration. Research performed by the SDT did not show the same concern with the other Criteria.

Michael Johnson - Burns & McDonnell - NA - Not Applicable - FRCC,MRO,WECC,Texas RE,NPCC,SERC,SPP RE,RF

Answer

Document Name

Visio-CIP V6 Diagram Trans - 20170826 - 2-12.pdf

Comment

As part of the diagrams provided for 2.12, we are providing a suggested additional diagram we feel the Standard should display in the Supplemental Material section. Even though the text for 2.12 indicates it is for “BES Transmission Lines”, it is not clear that generator lead line(s) should not be counted as part of aggregated weight value of 6000. To avoid having to have separate guidance document like Criteria 2.5 has (CIP-002-5, Requirement R1, Attachment 1: Criterion 2.5 and Generator Interconnection), we recommend the standard include a third diagram which clearly indicates the generator lead line(s) are not part of the aggregated weighted value. A suggested diagram has been provided to Wendy Muller since diagrams may not import correctly to the comment portal. The file name of the diagram provided to Wendy was “Visio-CIP V6 Diagram Trans - 20170826 - 2-12.pdf”

Likes 0

Dislikes 0

Response

Diagram included below

Kenya Streeter - Edison International - Southern California Edison Company - 6

Answer

Document Name

Comment

Please refer to comments submitted by Robert Blackney on behalf of Southern California Edison

Likes 0

Dislikes	0
Response	
Please see response to SCE's comments.	
Fred Frederick - Southern Indiana Gas and Electric Co. - 3	
Answer	
Document Name	
Comment	
<p>While Vectren's subject matter experts are in agreement with the proposed modifications for CIP-002-06 Attachment 1 Criterion 2.12, Vectren does not agree with removing the Guidelines and Technical Basis (G&TB) from CIP-002-6. The G&TB addresses complex concepts and provides additional guidance regarding what should be considered when developing the methodology to categorize Facilities, systems, and equipment into high-, medium-, and low-impact ratings. It also provides clarification for some ambiguities in the requirements and has been referenced as one source in our documentation of how we arrived at our approach. It is unclear where this information will reside or how it will be maintained once it is removed from the CIP-002-6 standard. The removal of the G&TB should be delayed until a defined removal process has been developed by NERC staff, including the new location of the information.</p> <p>Vectren is committed to the safety and reliability of the BES and committed to compliance excellence. We appreciate the efforts of the Standard Drafting Team and will be glad to provide any additional detail upon request. Thank you for allowing Vectren the opportunity to provide comments on this draft standard.</p>	
Likes	0
Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	
David Jendras - Ameren - Ameren Services - 3	
Answer	

Document Name	
Comment	
We support comments offered by EEI for this question.	
Likes 0	
Dislikes 0	
Response	
Please see response to EEI's comments.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion and ISO-NE	
Answer	
Document Name	
Comment	
<p>Since the Guidance & Technical Basis (GTB) will be removed, we need clarification on where this GTB goes. Some GTB information such as the BROS (BES Reliability Operating Services) should be included in an Implementation Guideline and not a technical reference document.</p> <p>NERC's statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language currently contained solely in the requirements of the standard.</p> <p>The problem is that registered entities' existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. As a result, we do not agree with NERC's approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated. Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.</p>	
Likes 0	

Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	
Paul Haase - Seattle City Light - 1,3,4,5,6 - WECC, Group Name Seattle City Light	
Answer	
Document Name	
Comment	
Seattle City Light supports the comments of Cowlitz PUD and APPA.	
Likes	0
Dislikes	0
Response	
See response to APPA.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	
Comment	
Texas RE has the following comments regarding the Guidelines and Technical Basis:	
<ul style="list-style-type: none"> Texas RE requests clarification as to what Part 1, which is mentioned several times, in the Guidelines and Technical Basis refers. 	

- It appears version 5 is left out of the sentence on page 20: “This is a process familiar to Responsible Entities that have to comply with versions 1, 2, 3, and 4. As in versions 1, 2, 3, and 4, Responsible Entities may use substations, generation plants, and Control Centers at single site locations as identifiers of these groups of Facilities, systems, and equipment”.
- Page 27 of the GTb contains a reference to functional obligations. Since the intent of this project was to clarify the use of the term “to perform the functional obligations of” and the SDT created the 2.12 criteria in Attachment 1, it does not seem necessary to use this term in the GTB. Texas RE requests the SDT ensure that it makes sense to use the term in this case.
- Page 33 contains the phrase “Associated data centers”. As it is important and to be consistent, Texas RE recommends the phrase be included in criteria 2.12 of Attachment 1.
- Page 37 describes the SDT’s rationale behind some of the CIP version 5 changes. It would be helpful to have this description for the CIP-002-6 changes.

Texas RE noticed the Violation Severity Level table references CIP-002-5.1a.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. The SDT has made modifications to remove some references to transitioning from prior versions as the industry has already transitioned to the CIP version 5 standards. The SDT has adjusted the GTB associated with criterion 2.12, but references to the phrase “perform the functional obligation” remain in the CIP-002 standard. Research performed by the SDT did not show the same concern with the other Criteria. The SDT did not include associated data centers in criterion 2.12 as they are already included as part of the Control Center definition. The SDT has included rationale for Criterion 2.12 and attempted to make conforming changes to the standard as appropriate.

Don Schmit - Nebraska Public Power District - 5

Answer

Document Name

Comment

None.	
Likes	0
Dislikes	0
Response	
<p>Douglas Webb - Douglas Webb On Behalf of: Harold Wyble, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; James McBee, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; Jennifer Flandermeyer, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; John Carlson, Great Plains Energy - Kansas City Power and Light Co., 5, 1, 3, 6; - Douglas Webb</p>	
Answer	
Document Name	
Comment	
KCP&L incorporates by reference Edison Electric Institute’s (EEI) Question 8 response.	
Likes	0
Dislikes	0
Response	
Please see response to EEI’s comments.	
Sandra Shaffer - Berkshire Hathaway - PacifiCorp - 6	
Answer	
Document Name	
Comment	
PacifiCorp supports EEI comments.	

Likes	0
Dislikes	0
Response	
Please see response to EEI's comments.	
Steve Rawlinson - Southern Indiana Gas and Electric Co. - 1	
Answer	
Document Name	
Comment	
<p>While Vectren's subject matter experts are in agreement with the proposed modifications for CIP-002-06 Attachment 1 Criterion 2.12, Vectren does not agree with removing the Guidelines and Technical Basis (G&TB) from CIP-002-6. The G&TB addresses complex concepts and provides additional guidance regarding what should be considered when developing the methodology to categorize Facilities, systems, and equipment into high-, medium-, and low-impact ratings. It also provides clarification for some ambiguities in the requirements and has been referenced as one source in our documentation of how we arrived at our approach. It is unclear where this information will reside or how it will be maintained once it is removed from the CIP-002-6 standard. The removal of the G&TB should be delayed until a defined removal process has been developed by NERC staff, including the new location of the information.</p> <p>Vectren is committed to the safety and reliability of the BES and committed to compliance excellence. We appreciate the efforts of the Standard Drafting Team and will be glad to provide any additional detail upon request. Thank you for allowing Vectren the opportunity to provide comments on this draft standard.</p>	
Likes	0
Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	

Quintin Lee - Eversource Energy - 1, Group Name Eversource Group	
Answer	
Document Name	
Comment	
Since the Guidance & Technical Basis (GTB) will be removed, we need clarification on where this GTB goes. Some GTB information such as the BROS (BES Reliability Operating Services) should be included in an Implementation Guideline and not a technical reference document	
Likes 0	
Dislikes 0	
Response	
Sheranee Nedd - PSEG - 1,3,5,6 - NPCC,RF, Group Name PSEG REs	
Answer	
Document Name	
Comment	
PSEG generally supports EEI's comments on Questions 8. PSEG does not agree with NERC's approach to remove the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale.	
Likes 4	PSEG - PSEG Fossil LLC, 5, Kucey Tim; PSEG - Public Service Electric and Gas Co., 1, Smith Joseph; PSEG - PSEG Energy Resources and Trade LLC, 6, Barton Karla; PSEG - Public Service Electric and Gas Co., 3, Mueller Jeffrey
Dislikes 0	
Response	

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Jack Cashin - American Public Power Association - 4

Answer

Document Name

Comment

The possible new interpretations could impact the application of other criteria. (2.11 and 2.13)

The removal of the Guidelines and Technical Basis (GTB) section from the standard reduces the standard’s continuity and authority. This removal makes it so that the language in the requirements includes the details currently included in guidance. Such inclusion makes requirements out of guidance.

Likes 5

Public Utility District No. 1 of Snohomish County, 4, Martinsen John; Snohomish County PUD No. 1, 3, Oens Mark; Public Utility District No. 1 of Snohomish County, 5, Nietfeld Sam; Snohomish County PUD No. 1, 6, Lu Franklin; Public Utility District No. 1 of Snohomish County, 1, Duong Long

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable

Answer

Document Name

Comment

NERC’s statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language

currently contained solely in the requirements of the standard while removing the original SDT intent by which was the basis for industry approval and implementation.

The problem is that registered entities’ existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. As a result, EEI does not agree with NERC’s approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated. Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.

It is also unclear why NERC is directing the removal of the GTB when the currently approved Standards Process Manual clearly allows the development of Application Guidelines as a component of a Reliability Standard, noting that such documents are intended “to support the implementation of the associated Reliability Standard.” Implementation Guidance is meant to gain NERC endorsement of specific approaches to compliance with a particular requirement or part of a requirement. Much of the GTB is more like application guidance; it is not necessarily an approach to compliance, but supports implementation by providing the SDT’s intent behind the requirements, which includes examples to further clarify this intent. However, if NERC disagrees and views the GTB to primarily consist of Implementation Guidance, then the SDT should be directed to convert this information into Implementation Guidance and NERC should endorse it in a ballot before the final ballot like it did with CIP-013.

It is also important to note that most of the CIP-002 GTB (excluding the redlined text for CIP-002-6) has been submitted with previous versions of the standard and has been relied upon not only by industry, but also by FERC and Regional auditors in understanding the SDT’s intent behind the requirements. At this point, it is unclear if the Technical Rationale will be submitted to FERC along with the revised standard and how much of the GTB will be converted into Technical Rationale.

EEI is concerned that removal of the GTB may impact the ability for this standard to pass ballot. We recommend that NERC address these concerns before taking CIP-002-6 to a second ballot.

Likes 1	PSEG - Public Service Electric and Gas Co., 3, Mueller Jeffrey
Dislikes 0	
Response	

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Colby Bellville - Colby Bellville On Behalf of: Greg Cecil, Duke Energy , 6, 5, 3, 1; - Colby Bellville, Group Name Duke Energy

Answer

Document Name

Comment

Duke Energy has some concerns regarding the removal of the Guidelines and Technical Basis Section (GT&B) of the standard. While the GT&B section is not considered to be an enforceable part of the standard (as opposed to requirements), it may be used by some entities to get a better understanding of the standard’s expectations, as well as determining a compliance approach. If the GT&B section is removed from the standard, we recommend that it be incorporated into ERO Enterprise-Endorsed Implementation Guidance.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Russel Mountjoy - Midwest Reliability Organization - 10

Answer

Document Name

Comment

Provide clarity: If each end of a line is controlled and monitored by separate Control Centers (same or different entities) is the line weight counted for each Control Center?

Likes 0

Dislikes 0

Response

The SDT notes that each Responsible Entity is responsible for protecting the BES Cyber Systems needed to fulfill their functional requirements to maintain BES reliability. As stated in the requirement, the weighting is determined by summing the Transmission lines that the Control Center in question monitors and controls.

Lona Calderon - Salt River Project - 1,3,5,6 - WECC

Answer

Document Name

Comment

Salt River Project supports comments submitted by APPA.

Likes 0

Dislikes 0

Response

Please see response to APPA's comments.

Mike Lotz - City of Independence, Power and Light Department - 3,5

Answer

Document Name

Comment

Other factors besides transmission values, such as customers served, should be used to determine an entities' impact. It should not be assumed that all entities will voluntarily implement and maintain security controls above the low impact threshold if not mandated to do so. The low impact requirements may not be adequate in all situations.

Likes 0

Dislikes 0

Response

The SDT thanks you for your comment. In drafting and approving the CIP v5 Standards, the Commission, ERO, and Industry collectively saw the need for, and benefit in, defining impact ratings as well as the requirements that would be applicable to each. The SDT sought to clarify Criteria 2.12 to help ensure that the standards do not mandate protection above the commensurate risk a given Control Center poses to the BES. The SDT asserts that the new Criteria 2.12 establishes a bright line that maintains adequate protection for BES Cyber Systems and does not introduce increased security risk, while providing practicality for Control Centers containing Low Impact BES Cyber Systems that monitor and control BES Transmission lines.

Jesus Sammy Alcaraz - Imperial Irrigation District - 1

Answer

Document Name

Comment

IID fully supports SDT efforts so far, and regrets the need for submitting a negative ballot. However, the application interpretations received from regional auditors of the proposed criterion is cause for serious concern, and can impact application of other criteria in similar fashion.

Likes 0

Dislikes 0

Response

Thank you for your comments.

Shelby Wade - PPL - Louisville Gas and Electric Co. - 3,5,6 - SERC, Group Name Louisville Gas and Electric Company and Kentucky Utilities Company

Answer

Document Name

Comment

LG&E and KU Services Company as agent for Louisville Gas and Electric Company and Kentucky Utilities Company (LKE) submits these comments for NERC’s consideration. LKE strongly supports the comments submitted by Edison Electric Institute (EEI) with respect to the Guidelines and Technical Basis (GTB) portion of the draft changes to the standard. Specifically, LKE is deeply concerned with the proposed approach of removing the GTB section of the standards without the simultaneous posting of 1) Technical Rationale prepared by the Standards Drafting Team for industry comment or 2) potential Implementation Guidance developed through the Compliance Guidance policy. It is our understanding that the Standards Committee is working with NERC staff to develop a process for removal of the GTB sections from standards. We recommend that GTB sections not be removed from any standard until that process has been defined. As detailed in section 2.5 of the Standards Processes Manual (Rules of Procedures Appendix 3A), Application Guidelines are included, among other reasons, “to support the implementation of the associated Reliability Standard,” “establish relevant scope and technical paradigm, and to provide guidance to Functional Entities concerning how compliance will be assessed by the Compliance Enforcement Authority.” In many cases, and specifically in the case of CIP-002-5.1a, the GTB plays a critical role in determining the scope of the standard to which it applies. Consequently, removal of GTB sections without simultaneously publishing a Technical Rationale document as proposed for this standard creates unnecessary and significant ambiguity. Furthermore, removing the GTB may inadvertently contradict the Standards Process Manual and we suggest NERC should avoid any such appearance.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer

Document Name

Comment

Guidelines and Technical Basis

At NERC’s direction, the current draft Guidelines and Technical Basis section will be removed from the Reliability Standard template prior to final ballot. The SDT will evaluate the content for placement in a Technical Rationale document for posting along with, but separate from, the Reliability Standard. Additionally, the SDT may develop Implementation Guidance on this Reliability Standard to submit for ERO endorsement based on the content of this section.

The NSRF has concerns with removing the Guideline and Technical Basis from all Standard(s). Currently Entities feel they vote for the “entire standard” including the Guideline and Technical Basis. The NSRF understands that Entities are actually voting for the Requirements but the perception is that FERC approves all th verbiage and sections to the Entire Standard.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Lan Nguyen - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer

Document Name

Comment

CenterPoint Energy Houston Electric, LLC (“CenterPoint Energy”) agrees with Edison Electric Institute’s comments regarding the removal of the Guidelines and Technical Basis (GTB) from the Reliability Standard prior to final ballot. CenterPoint Energy does not agree with NERC’s proposal to remove the GTB without providng guidance on how the information in the GTB will be retained. CenterPoint Energy believes the GTB in CIP-002 provides pertinent information that establishes guidance for identifying and categorizing the BES Cyber Systems that would be subject to CIP-002, which sets the foundation of applicability for the other CIP standards. CenterPoint Energy is concerned that the removal of the GTB will provide less guidance to entities regarding the technical basis for the requirements and the intent of the Standard Drafting Team, which has been relied upon by the industry and regulatory authorities.

Likes 0

Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	
Aaron Ghodooshim - FirstEnergy - FirstEnergy Corporation - 3, Group Name FirstEnergy Corporation	
Answer	
Document Name	
Comment	
FirstEnergy supports the comments supplied by EEI regarding the removal of the Guidelines and Technical Basis Section from the CIP-002 Standard. This section provides valuable application guidance that the industry has relied on in implementing the CIP-002 Standard, and should remain part of the Standard.	
Likes	0
Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	
Richard Vine - California ISO - 2	
Answer	
Document Name	
Comment	

The California ISO supports the comments of the Security Working Group (SWG)

Likes 0

Dislikes 0

Response

See response to SWG.

David Rivera - New York Power Authority - 3

Answer

Document Name

Comment

Since the Guidance & Technical Basis (GTB) will be removed, we need clarification on where this GTB goes. Some GTB information such as the BROS (BES Reliability Operating Services) should be included in an Implementation Guideline and not a technical reference document.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1

Answer

Document Name

Comment

NERC’s statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language currently contained solely in the requirements of the standard.

The problem is that registered entities’ existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. As a result, EEI does not agree with NERC’s approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated. Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.

It is also unclear why NERC is directing the removal of the GTB when the currently approved Standards Process Manual clearly allows the development of Application Guidelines as a component of a Reliability Standard, noting that such documents are intended “to support the implementation of the associated Reliability Standard.” Implementation Guidance is meant to gain NERC endorsement of specific approaches to compliance with a particular requirement or part of a requirement. Much of the GTB is more like application guidance; it is not necessarily an approach to compliance, but supports implementation by providing the SDT’s intent behind the requirements, which includes examples to further clarify this intent. However, if NERC disagrees and views the GTB to primarily consist of Implementation Guidance, then the SDT should be directed to convert this information into Implementation Guidance and NERC should endorse it in a ballot before the final ballot like it did with CIP-013.

It is also important to note that most of the CIP-002 GTB (excluding the redlined text for CIP-002-6) has been submitted with previous versions of the standard and has been relied upon not only by industry, but also by FERC in understanding the SDT’s intent behind the requirements. At this point, it is unclear if the Technical Rationale will be submitted to FERC along with the revised standard and how much of the GTB will be converted into Technical Rationale.

MEC is concerned that removal of the GTB may impact the ability for this standard to pass ballot. We recommend that NERC address these concerns before taking CIP-002-6 to a second ballot.

Likes	0
Dislikes	0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Tyson Archie - Platte River Power Authority - 5

Answer

Document Name

Comment

Platte River Power Authority (PRPA) supports the comments provided by the American Public Power Administration (APPA).

Likes 0

Dislikes 0

Response

See response to APPA.

Barry Lawson - National Rural Electric Cooperative Association - 4

Answer

Document Name

Comment

NRECA appreciates the hard work of the drafting team over a long period of time on complex issues.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Daniel Grinkevich - Con Ed - Consolidated Edison Co. of New York - 1

Answer	
Document Name	
Comment	
<p>NERC's statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language currently contained solely in the requirements of the standard.</p> <p>The problem is that registered entities' existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. As a result, Con Edison does not agree with NERC's approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated. Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.</p>	
Russell Noble - Cowlitz County PUD - 3	
Answer	
Document Name	
Comment	
<p>Cowlitz PUD supports APPA comment.</p>	
Likes 0	

Dislikes 0	
Response	
Please see response to APPA.	
Mary Ann Todd - Illinois Municipal Electric Agency - 4	
Answer	
Document Name	
Comment	
IMEA supports APPA comments.	
Likes 0	
Dislikes 0	
Response	
See response to APPA.	
Darnez Gresham - Darnez Gresham On Behalf of: Annette Johnston, Berkshire Hathaway Energy - MidAmerican Energy Co., 1, 3; - Darnez Gresham	
Answer	
Document Name	
Comment	
MEC supports the comments of EEI on this question. The content of the guidelines and technical basis is essential to convey the SDT’s intent, which was the basis for industry approval and implementation and therefore must continue to be a part of the standard. Also, the proposal to remove the guidelines and technical basis from CIP-002 is out of scope of the Standards Authorization Request, which states, “Finally, the SDT will review the Guidelines and Technical Basis sections of the CIP V5 standards and adjust where appropriate as well as correct any grammatical, punctuation, and/or formatting errors, and make other errata changes to the CIP V5 standards, as necessary.” This indicates continuation of the guidelines and technical basis, not removal.	

MEC also agrees with EEI's comments for questions #8	
Likes	0
Dislikes	0
Response	
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.	
Karl Blaszkowski - CMS Energy - Consumers Energy Company - 3	
Answer	
Document Name	
Comment	
Additional savings for entities could be gained by not requiring evaluation of lower priority CIP-002-6, Attachment 1 Criteria, where applicable assets are determined to meet higher priority IRC Criteria (and are High Watermarked for the higher priority IRC Criteria/CIP Controls).	
Likes	0
Dislikes	0
Response	
The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.	
Brian Evans-Mongeon - Utility Services, Inc. - 4	
Answer	
Document Name	

Comment

Utility Services supports the efforts of the Standard Development Team to date and believe that the revised language for Criteria 2.12 is a significant incremental step forward which will focus efforts on the most critical locations. We are aware of issues with the interpretation of the of the TOCC proposed version of Criteria 2.12 and encourage the Standard Development Team to clarify the specific language of criteria 2.12 to clarify the scoring application of Criteria 2.12. To that end, Utility Services supports the comments of the NPCC Regional Standards Committee suggesting revision of the criteria for clarity.

Likes 0

Dislikes 0

Response

The SDT asserts that the proposed requirement is clear in that the BES Cyber Systems are to be classified as Medium if they are associated with Control Centers that monitor and control BES Transmission lines that meet the wieghting criteria of 2.12. The Transmission lines to be summed are those that are identified as being part of the Bulk Electric System, which are in turn supported by BES Cyber Systems.

James Anderson - CMS Energy - Consumers Energy Company - 1

Answer

Document Name

Comment

Additional savings for entities could be gained by not requiring evaluation of lower priority CIP-002-6, Attachment 1 Criteria, where applicable assets are determined to meet higher priority IRC Criteria (and are High Watermarked for the higher priority IRC Criteria/CIP Controls).

Likes 0

Dislikes 0

Response

The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.

Steve Toosevich - NiSource - Northern Indiana Public Service Co. - 1

Answer

Document Name

Comment

NIPSCO is in support of the comment provided by EEI below.

"

NERC's statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language currently contained solely in the requirements of the standard.

The problem is that registered entities' existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. As a result, EEI does not agree with NERC's approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated. Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.

It is also unclear why NERC is directing the removal of the GTB when the currently approved Standards Process Manual clearly allows the development of Application Guidelines as a component of a Reliability Standard, noting that such documents are intended "to support the implementation of the associated Reliability Standard." Implementation Guidance is meant to gain NERC endorsement of specific approaches to compliance with a particular requirement or part of a requirement. Much of the GTB is more like application guidance; it is not necessarily an approach to compliance, but supports implementation by providing the SDT's intent behind the requirements, which includes examples to further clarify this intent. However, if NERC disagrees and views the GTB to primarily consist of Implementation

Guidance, then the SDT should be directed to convert this information into Implementation Guidance and NERC should endorse it in a ballot before the final ballot like it did with CIP-013.

It is also important to note that most of the CIP-002 GTB (excluding the redlined text for CIP-002-6) has been submitted with previous versions of the standard and has been relied upon not only by industry, but also by FERC in understanding the SDT’s intent behind the requirements. At this point, it is unclear if the Technical Rationale will be submitted to FERC along with the revised standard and how much of the GTB will be converted into Technical Rationale.

EEL is concerned that removal of the GTB may impact the ability for this standard to pass ballot. We recommend that NERC address these concerns before taking CIP-002-6 to a second ballot."

Likes	1	PSEG - PSEG Energy Resources and Trade LLC, 6, Barton Karla
Dislikes	0	
Response		
See the SDT’s response to EEL’s comments.		
Wendy Center - U.S. Bureau of Reclamation - 5		
Answer		
Document Name		
Comment		
None		
Likes	0	
Dislikes	0	
Response		
Jeanne Kurzynowski - Consumers Energy Company - 1 - RF		

Answer	
Document Name	
Comment	
<p>Additional savings for entities could be gained by not requiring evaluation of lower priority CIP-002-6, Attachment 1 Criteria, where applicable assets are determined to meet higher priority IRC Criteria (and are High Watermarked for the higher priority IRC Criteria/CIP Controls).</p>	
Likes 0	
Dislikes 0	
Response	
<p>The SDT asserts that if the BES Cyber Systems associated with a Control Center already meet the High Impact criteria, there is no need for a Responsible Entity to attempt to apply Criteria 2.12 to its environment. Criteria 2.12 states, "Control Centers, or backup Control Centers, not included in the High Impact Rating (H) above..." This statement relieves an entity of attempting to apply Criteria 2.12 to its Control Centers if the BES Cyber Systems associated with the Controls Centers were already acknowledged to be High Impact.</p>	
<p>Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion</p>	
Answer	
Document Name	
Comment	
<p>NERC's statement inserted into the first paragraph of the Guidelines and Technical Basis (GTB) regarding removal of the GTB before final ballot is a critical issue for this ballot. This creates an untenable situation where the approval of this standard must rest on the language currently contained solely in the requirements of the standard.</p> <p>Of significant concern is that registered entities' existing CIP programs have been built using the GTB as a guide to understanding the meaning of the impact rating criteria in CIP-002, which is used to identify the BES Cyber System impact ratings that set the foundation of applicability for the other CIP standards. Dominion Energy does not agree with NERC's approach to removing the GTB without providing transparent next steps as to which information will be retained in the Technical Rationale and how that rationale will be treated.</p>	

Implementation Guidance is also mentioned as a possibility for the SDT, but no certainty as to whether or when the SDT will develop it is provided. Alternatively, the SDT could modify the Attachment 1 criteria to include the guidance from the GTB.

It is also unclear why NERC is directing the removal of the GTB when the currently approved Standards Process Manual clearly allows the development of Application Guidelines as a component of a Reliability Standard, noting that such documents are intended “to support the implementation of the associated Reliability Standard.” Implementation Guidance is meant to gain NERC endorsement of specific approaches to compliance with a particular requirement or part of a requirement. Much of the GTB is more like application guidance; it is not necessarily an approach to compliance, but supports implementation by providing the SDT’s intent behind the requirements, which includes examples to further clarify this intent. However, if NERC disagrees and views the GTB to primarily consist of Implementation Guidance, then the SDT should be directed to convert this information into Implementation Guidance and NERC should endorse it in a ballot before the final ballot like it did with CIP-013.

It is also important to note that most of the CIP-002 GTB (excluding the redlined text for CIP-002-6) has been submitted with previous versions of the standard and has been relied upon not only by industry, but also by FERC in understanding the SDT’s intent behind the requirements. At this point, it is unclear if the Technical Rationale will be submitted to FERC along with the revised standard and how much of the GTB will be converted into Technical Rationale.

Likes	1	Long Island Power Authority, 1, Ganley Robert
Dislikes	0	
Response		
The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.		
Shannon Fair - Colorado Springs Utilities - 6, Group Name Colorado Springs Utilities		
Answer		
Document Name		
Comment		
Colorado Springs Utilities supports Cowlitz PUD and APPA comments		

Likes 0	
Dislikes 0	
Response	
See response to APPA.	
Nicholas Lauriat - Network and Security Technologies - 1	
Answer	
Document Name	
Comment	
(No additional comments)	
Likes 0	
Dislikes 0	
Response	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP RE	
Answer	
Document Name	
Comment	
We suggest that rationale similar to Criterion 2.12 should also be referenced for 1.3.	
Likes 0	
Dislikes 0	
Response	

The SDT thanks you for your comment. The intent of the SDT was to address the ambiguity created by the phrase "performs the functional obligation" within Criteria 2.12, and not to assess similar phrases throughout the standards that were not identified by the commission or v5TAG group for consideration.

Kristine Ward - Seminole Electric Cooperative, Inc. - 1,3,4,5,6 - FRCC

Answer

Document Name

Comment

1. As this team is planning to submit the Guidelines and Technical Basis as a separate document from the Standard itself, Seminole requests the drafting team to revise the language “adversely impact the reliable operation” and make it more clear. This phrase is very unclear. How is an adverse impact quantitatively measured?
2. The Interpretation listed in Section C on page 13 of the redline, is that part of the Reliability Standard, or more of an Associated Document?
3. Should the Guidelines and Technical Basis be listed under Associated Documents (Section F) on p. 13 of 43 of the redline?
4. In the Guidelines and Technical Basis, the SDT has differentiated between Control Centers and backup Control Centers. However, in portions of the redline changes (see page 34 for example), the SDT only references Control Centers. This is confusing as Seminole isn’t sure if the drafting team purposely means not to include backup Control Centers in these sections where they are not specifically identified. The team should only use one term or define backup Control Centers (make it a NERC defined term) and reference both throughout the document.

Likes 0

Dislikes 0

Response

The SDT has no plans to take any further action removing the GTB at this time, as NERC is currently working with the Standards Committee to create a process of reviewing standards with GTBs.

Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC

Answer	
Document Name	
Comment	
None	
Likes 0	
Dislikes 0	
Response	
Val Ridad - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	
Document Name	
Comment	
SVP appreciates the effort by the SDT to look at and improve criterion 2.12	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment.	
Jeff Ipsaro - Silicon Valley Power - City of Santa Clara - 3,4,5	
Answer	
Document Name	
Comment	

I am in agreement with the proposed changes.

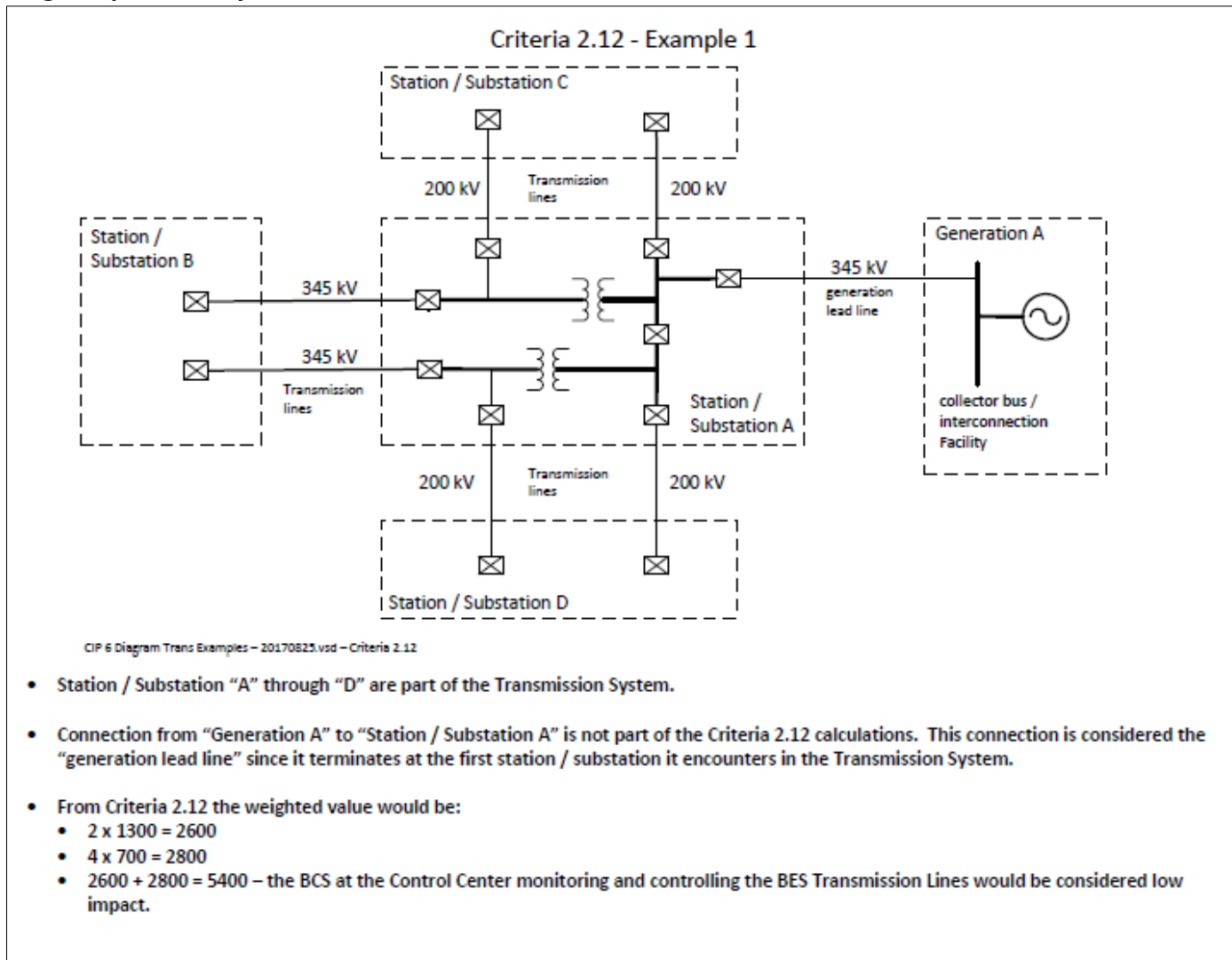
Likes 0

Dislikes 0

Response

Thank you for your comment.

Diagram provided by Michael Johnson Burns & McDonnell



End of Report