

Comment Report

Project Name: 2020-04 Modifications to CIP-012 | Draft 4
Comment Period Start Date: 9/19/2023
Comment Period End Date: 11/2/2023
Associated Ballots: 2020-04 Modifications to CIP-012 CIP-012-2 AB 4 ST
2020-04 Modifications to CIP-012 CIP-012-2 Non-Binding Poll AB 4 NB
2020-04 Modifications to CIP-012 Implementation Plan AB 4 OT

There were 63 sets of responses, including comments from approximately 147 different people from approximately 102 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

- 1. The standard drafting team (SDT) revised CIP-012-1 R1 to address the comments received during previous ballots and to meet the directives outlined in FERC Order No. 866 seeking to provide for the availability of Real-time Assessment and Real-time monitoring data while in transit between Control Centers. Do you agree that the proposed language in R1 addresses the mitigation of risk as identified in FERC Order No. 866? If not, please provide comments and suggested requirement language.**
- 2. Does the language in R1.2 adequately reflect the need to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data? If not, please provide comments and suggested requirement language.**
- 3. Does the language in R1.4 provide Responsible Entities with clarity on the need to identify physically or logically where they have applied the methods required in R1.1 and R1.2? If not, please provide comments and suggested requirement language.**
- 4. The SDT proposes that the modifications in CIP-012-2 meet the FERC directives in a cost-effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for improvement to enable more cost-effective approaches, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 5. The SDT reviewed the implementation plan and did not see any reasons to make any changes. Do you still agree the proposed timeframe is appropriate in light of the proposed revisions to the standard language? If you think an alternate timeframe is needed, please propose an alternate implementation plan and time period, and provide a detailed explanation of actions planned to meet the implementation deadline.**
- 6. Provide any additional comments for the SDT to consider, including the provided technical rationale and implementation guidance document, if desired.**

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
BC Hydro and Power Authority	Adrian Andreoiu	1	WECC	BC Hydro	Hootan Jarollahi	BC Hydro and Power Authority	3	WECC
					Helen Hamilton Harding	BC Hydro and Power Authority	5	WECC
					Adrian Andreoiu	BC Hydro and Power Authority	1	WECC
MRO	Anna Martinson	1,2,3,4,5,6	MRO	MRO Group	Shonda McCain	Omaha Public Power District (OPPD)	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jamison Cawley	Nebraska Public Power District	1,3,5	MRO
					Jay Sethi	Manitoba Hydro (MH)	1,3,5,6	MRO
					Jaimin Patal	Saskatchewan Power Corporation (SPC)	1	MRO
					Kimberly Bentley	Western Area Power Administration	1,6	MRO
					Marc Gomez	Southwestern Power Administration (SWPA)	1	MRO
					Fred Meyer	Algonquin Power Co.	3	MRO
					George Brown	Pattern Operators LP	5	MRO
					Larry Heckert	Alliant Energy (ALTE)	4	MRO
Terry Harbour	MidAmerican Energy Company (MEC)	1,3	MRO					

					Bryan Sherrow	Board Of Public Utilities (BPU)	1	MRO
					Seth Shoemaker	Muscatine Power & Water	1,3,5,6	MRO
					Bobbi Welch	Midcontinent ISO, Inc.	2	MRO
					Michael Ayotte	ITC Holdings	1	MRO
Tennessee Valley Authority	Brian Millard	1,3,5,6	SERC	TVA RBB	Ian Grant	Tennessee Valley Authority	3	SERC
					David Plumb	Tennessee Valley Authority	1	SERC
					Armando Rodriguez	Tennessee Valley Authority	6	SERC
					Nehtisha Rollis	Tennessee Valley Authority	5	SERC
Chris Carnesi	Chris Carnesi		WECC	NCPA	Marty Hostler	Northern California Power Agency	4	WECC
					Dennis Sismaet	Northern California Power Agency	6	WECC
Jennie Wike	Jennie Wike		WECC	Tacoma Power	Jennie Wike	Tacoma Public Utilities	1,3,4,5,6	WECC
					John Merrell	Tacoma Public Utilities (Tacoma, WA)	1	WECC
					John Nierenberg	Tacoma Public Utilities (Tacoma, WA)	3	WECC
					Hien Ho	Tacoma Public Utilities (Tacoma, WA)	4	WECC
					Terry Gifford	Tacoma Public Utilities (Tacoma, WA)	6	WECC
					Ozan Ferrin	Tacoma Public Utilities (Tacoma, WA)	5	WECC

ACES Power Marketing	Jodirah Green	1,3,4,5,6	MRO,RF,SERC,Texas RE,WECC	ACES Collaborators	Bob Soloman	Hoosier Energy Electric Cooperative	1	RF
					Jennifer Bray	Arizona Electric Power Cooperative, Inc.	1	WECC
FirstEnergy - FirstEnergy Corporation	Mark Garza	4		FE Voter	Julie Severino	FirstEnergy - FirstEnergy Corporation	1	RF
					Aaron Ghodooshim	FirstEnergy - FirstEnergy Corporation	3	RF
					Robert Loy	FirstEnergy - FirstEnergy Solutions	5	RF
					Mark Garza	FirstEnergy-FirstEnergy	1,3,4,5,6	RF
					Stacey Sheehan	FirstEnergy - FirstEnergy Corporation	6	RF
California ISO	Monika Montez	2	WECC	ISO/RTO Council Standards Review Committee (SRC)	Monika Montez	CAISO	2	WECC
					Bobbi Welch	Midcontinent ISO, Inc.	2	RF
					Kathleen Goodman	ISO-NE	2	NPCC
					Gregory Campoli	New York Independent System Operator	2	NPCC
					Helen Lainis	IESO	2	NPCC
					Elizabeth Davis	PJM	2	RF
					Charles Yeung	Southwest Power Pool, Inc. (RTO)	2	MRO
					Kennedy Meier	Electric Reliability Council of Texas, Inc.	2	Texas RE
Southern Company - Southern Company Services, Inc.	Pamela Hunter	1,3,5,6	SERC	Southern Company	Matt Carden	Southern Company - Southern Company Services, Inc.	1	SERC

					Joel Dembowski	Southern Company - Alabama Power Company	3	SERC
					Ron Carlsen	Southern Company - Southern Company Generation	6	SERC
					Leslie Burke	Southern Company - Southern Company Generation	5	SERC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	NPCC RSC	Gerry Dunbar	Northeast Power Coordinating Council	10	NPCC
					Alain Mukama	Hydro One Networks, Inc.	1	NPCC
					Deidre Altobell	Con Edison	1	NPCC
					Jeffrey Streifling	NB Power Corporation	1	NPCC
					Michele Tondalo	United Illuminating Co.	1	NPCC
					Stephanie Ullah-Mazzuca	Orange and Rockland	1	NPCC
					Michael Ridolfino	Central Hudson Gas & Electric Corp.	1	NPCC
					Randy Buswell	Vermont Electric Power Company	1	NPCC
					James Grant	NYISO	2	NPCC
					John Pearson	ISO New England, Inc.	2	NPCC
					Harishkumar Subramani Vijay Kumar	Independent Electricity System Operator	2	NPCC
					Randy MacDonald	New Brunswick Power Corporation	2	NPCC

Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1	NPCC
David Burke	Orange and Rockland	3	NPCC
Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC
Salvatore Spagnolo	New York Power Authority	1	NPCC
Sean Bodkin	Dominion - Dominion Resources, Inc.	6	NPCC
David Kwan	Ontario Power Generation	4	NPCC
Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	1	NPCC
Glen Smith	Entergy Services	4	NPCC
Sean Cavote	PSEG	4	NPCC
Jason Chandler	Con Edison	5	NPCC
Tracy MacNicoll	Utility Services	5	NPCC
Shivaz Chopra	New York Power Authority	6	NPCC
Vijay Puran	New York State Department of Public Service	6	NPCC
ALAN ADAMSON	New York State Reliability Council	10	NPCC
David Kiguel	Independent	7	NPCC
Joel Charlebois	AESI	7	NPCC
Joshua London	Eversource Energy	1	NPCC
Steve Rueckert	WECC	10	WECC

Western Electricity Coordinating Council	Steven Rueckert				Morgan King	WECC	10	WECC
					Deb McEndaffer	WECC	10	WECC
					Tom Williams	WECC	10	WECC
Tim Kelley	Tim Kelley		WECC	SMUD and BANC	Nicole Looney	Sacramento Municipal Utility District	3	WECC
		Charles Norton			Sacramento Municipal Utility District	6	WECC	
		Wei Shao			Sacramento Municipal Utility District	1	WECC	
		Foung Mua			Sacramento Municipal Utility District	4	WECC	
		Nicole Goi			Sacramento Municipal Utility District	5	WECC	
		Kevin Smith			Balancing Authority of Northern California	1	WECC	

1. The standard drafting team (SDT) revised CIP-012-1 R1 to address the comments received during previous ballots and to meet the directives outlined in FERC Order No. 866 seeking to provide for the availability of Real-time Assessment and Real-time monitoring data while in transit between Control Centers. Do you agree that the proposed language in R1 addresses the mitigation of risk as identified in FERC Order No. 866? If not, please provide comments and suggested requirement language.

James Keele - Entergy - 1,3,6

Answer No

Document Name

Comment

Entergy proposes that the measure for requirement R1.1 concerning physical access control be changed to 'Physical Access restrictions to in-scope, unencrypted portions of the network.'

Likes 0

Dislikes 0

Response

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer No

Document Name

Comment

BC Hydro appreciates the drafting team's efforts to address BC Hydro's previous comments on Draft 3. After reviewing the revised Standard draft and Technical Rationale revisions in conjunction with this Draft 4, BC Hydro offers the following comments.

BC Hydro's previous concerns raised on CIP-012-2 Draft 1, Draft 2 and Draft 3 appear to have not been materially addressed, and BC Hydro continues to believe still hold valid grounds.

The changes in Requirement R1 in Draft 4 of CIP-012-2 still imply a possible reliance on redundancy, which does not align with the approach taken in the other existing CIP standards, particularly CIP-002-5.1a. As availability is the purview of operations, BC Hydro believes that it would be better suited to other Mandatory Reliability Standards (MRS) or any other applicable MRS (e.g., IRO-010, TOP-003, TOP-001) within the Operations and Planning (O&P) domains.

BC Hydro recommends removing the 'availability' requirement from CIP-012-2 and revising other MRS standards to address this need as appropriate.

Alternatively, similar to our comments on Draft 3, BC Hydro suggests that the drafting team provide a clear definition of the term 'availability', and clarity that it does not imply the use of redundant setups. For most of the entities, 'availability' of communication networks depends on third party telecommunication providers and, in the event of a line or telecommunication equipment failure, the entity is reliant on the third party telecommunication providers to fix the problems. BC Hydro suggests that SDT add an exemption for the links and equipment used by third party telecommunication providers, as changing or enhancing the third party telecommunication infrastructure to support 'availability' may not be feasible for many entities.

Likes 0

Dislikes 0

Response

Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer No

Document Name

Comment

NST believes there are three problems with the proposed wording of R1:

First, it fails to account for the fact "availability" is a distinctly different attribute of network and computing infrastructures and/or the data they create, store, and transmit than "confidentiality" and "integrity," and it is typically supported in distinctly different ways. Confidentiality and integrity protections for data "in transit," such as are required for data in transit between Control Centers by CIP-012-1, may be and often are manifested as technical cryptographic controls. In contrast, "Availability" protections for inter- Control Center communications could be, as noted in FERC's Order, a written service level agreement with a Responsible Entity's wide-area communications provider.

Second, adding a new component to an existing CIP Requirement would force Responsible Entities to rewrite existing plans for compliance with CIP-012-1 R1. NST believes most Entities would find it less burdensome to add new sections to existing CIP-012 documents than to create entirely new CIP-012 documents that address new availability requirements.

Third, it NST's opinion that as written, R1 does not adequately address Order 866 by virtue of the fact it says nothing about communication links between Control Centers, which should be the primary focus. NST understands that communication link availability does not, by itself, ensure data availability,** but the scope of the Order is limited to "communication links and data communicated between bulk electric system Control Centers."

** NST notes that the existing requirement to protect data confidentiality for data transmitted between Control Centers is intended to PREVENT data from being available (to, for example, eavesdroppers) while it's in transit.

Likes 1

Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Richard Vendetti - NextEra Energy - 5

Answer No

Document Name

Comment

NEE understands FERC order but is concerned with R1 P1.3 specific language and impacts with third-party service providers like telecommunications.

Redundancy and recovery plans may be outsourced and provided through service level agreements as the Entity does not own the services nor should be held accountable for availability when the vendor fails to meet defined service level. Recommending improvements to language and additional use case examples in the Technical Rational.

NEE is requesting the SDT clearly define “availability” and “loss of data” specifically for CIP-012-2 application. There are layer 2 and 3 network devices, some network devices not in scope for NERC CIP. Managing the availability of the RTA and RTM data traversing devices not in scope for NERC CIP and third-party communications services must be addressed in the standard clearly.

NEE supports NPCC comments:

As drafted, it is still unclear if Entities are required to implement mitigations to reduce the risk of losing communication links, losing the data itself during transit, and/or losing the ability to communicate the data that is in transit.

In addition, the introduction of "availability" language into the current R1 requirement seems misplaced. R1 currently addresses mitigating risks associated with unauthorized disclosure and unauthorized modification, which focuses on the cyber security priorities of protecting confidentiality and integrity. The introduction of the new language, i.e., “loss of availability of data used,” pertains to a completely different cyber security priority (availability). This commingling of cyber security priorities can make it difficult to understand and meet the security and compliance obligations.

Furthermore, embedding the new requirement in the currently effective requirement will require Entities to fully re-write their current plans and re-train their staff causing undo administrative burden. This also makes it more difficult to modify future iterations of the standard language if multiple requirements are wrapped up in one paragraph and not clearly identified in sub-requirements.

NPCC’s Recommendations:

First, NPCC RSC recommends that the SDT create a new R2 requirement to specifically address the SAR.

Second, NPCC RSC recommends the SDT assign “availability” of data to the availability of the communication links used to transmit the data and the ability to communicate the data when the communication links are unavailable and not the availability of the data itself.

R2. The Responsible Entity shall implement, except under CIP Exceptional Circumstances, one or more documented plan(s) to mitigate the risks posed by the loss of ability to communicate the RTA/RTM data due to the unavailability of the communication links used to transmit the Real-time Assessment and Real-time monitoring data between any applicable Control Centers as identified in R1.

Third, NPCC RSC recommends that the SDT consider developing subrequirements that express the required components needed for the mitigation plan in the form of processes and/or methods:

Plan components:

R2.1 Processes and/or methods to identify loss of the communication links,

R2.2 Processes and/or methods to initiate the recovery of the communication links,

R2.3 Alternative processes and/or methods to communicate the data when the communication links are unavailable such as use of backup communication capability.

Pending the clarification of the data loss vs communication link loss would impact us recommended R2 language. The proposed language above does not address the need for agreements with third parties/other responsible entities with control centers for the implementation of alternate processes.

Likes 0

Dislikes 0

Response

Ben Hammer - Western Area Power Administration - 1

Answer

No

Document Name

Comment

The standard mixes the requirements of CIP-009, CIP-012, TOP-003 and IRO-010. This effectively creates duplicate requirements stringed across multiple standards and separate orders. Requirement 1.3 should be removed from CIP-012 and placed into CIP-009 R1. There appears to be an opportunity for NERC to create efficiencies in Requirements for Control Center communications.

Likes 1

Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Mia Wilson - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC

Answer

No

Document Name

Comment

SPP recommends language changes to Part 1.1 to clarify that the methods address the risks (i.e., preventive), not the effects of the risks (i.e., corrective). Specifically, this comment form's own question uses the phrase "mitigation of", but the language as drafted uses the phrase "mitigate the risk(s) posed by". This phrase "risk(s) posed by" may lead to confusion and distract entities from satisfying the directives outlined in FERC Order No. 866. For example, a method used mitigate risk(s) posed by the unauthorized disclosure of data could include far reaching methods such as an entity's hiring, discipline, and retention policies since the disclosure of data could result in employee termination. To avoid this confusion and focus efforts on the directives SPP recommends the changes below. The use of the phrase "risk(s) of [...] to data" focuses the method and mitigations specifically to the directives outlined in the FERC order.

Recommended language:

Identification of method(s) used to mitigate the risk(s) of unauthorized disclosure or unauthorized modification to data used in Real-time Assessment and Real-time monitoring while such data is being transmitted between Control Centers;

SPP estimates that the confusion caused by the as-drafted language could result in hundreds of staff hours annually, which will distract from meeting the intended directive.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC

Answer

No

Document Name

Comment

As drafted, it is still unclear if Entities are required to implement mitigations to reduce the risk of losing communication links, losing the data itself during transit, and/or losing the ability to communicate the data that is in transit.

In addition, the introduction of "availability" language into the current R1 requirement seems misplaced. R1 currently addresses mitigating risks associated with unauthorized disclosure and unauthorized modification, which focuses on the cyber security priorities of protecting confidentiality and integrity. The introduction of the new language, i.e., "loss of availability of data used," pertains to a completely different cyber security priority (availability). This commingling of cyber security priorities can make it difficult to understand and meet the security and compliance obligations.

Furthermore, embedding the new requirement in the currently effective requirement will require Entities to fully re-write their current plans and re-train their staff causing undo administrative burden. This also makes it more difficult to modify future iterations of the standard language if multiple requirements are wrapped up in one paragraph and not clearly identified in sub-requirements.

Recommendations:

First, NPCC RSC recommends that the SDT create a new R2 requirement to specifically address the SAR.

Second, NPCC RSC recommends the SDT assign “availability” of data to the availability of the communication links used to transmit the data and the ability to communicate the data when the communication links are unavailable and not the availability of the data itself.

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Pending the clarification of the data loss vs communication link loss would impact us recommended R2 language. The proposed language above does not address the need for agreements with third parties/other responsible entities with control centers for the implementation of alternate processes.

Likes 0

Dislikes 0

Response

Nicolas Turcotte - Hydro-Quebec (HQ) - 1

Answer

No

Document Name

Comment

As drafted, it is still unclear if Entities are required to implement mitigations to reduce the risk of losing communication links, losing the data itself during transit, and/or losing the ability to communicate the data that is in transit.

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Likes 0

Dislikes 0

Response

Tracy MacNicoll - Utility Services, Inc. - 4

Answer

No

Document Name

Comment

USV Supports the comments of NPCC RSC

Likes 0

Dislikes 0

Response

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer No

Document Name

Comment

OPG supports the NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Alain Mukama - Hydro One Networks, Inc. - 1

Answer No

Document Name

Comment

Some clarification for part 1.3. There are Active/Active links and Active/Standby links, and they recovery automatically or with minimum manual intervention. For issue with ISP (Internet Service Provider) network, can only rely on ISP to resolve the issue according to the SLA.

Likes 0

Dislikes 0

Response

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer Yes

Document Name

Comment

FirstEnergy has no issues with R1 or R1.1, which is about the methods to prevent unauthorized data modification as this Requirement speaks to the intent of the Standard.

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer Yes

Document Name

Comment

The addition of “loss of availability” completes the CIA Triad and requires entities to create an information security strategy through policies, processes, or procedures to minimize threats of RTA and RTM data communications loss while in transit between Control Centers.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer Yes

Document Name

Comment

The FERC Order also indicates that data at rest is out of scope. We suggest including “data at rest” along with the “oral communications” in the into paragraph for clarity.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer Yes

Document Name

Comment

AZPS agrees that the proposed language address the mitigation risks.

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer Yes

Document Name

Comment

Southern Company agrees with EEI that the proposed language in R1 addresses the mitigation risk as identified in FERC Order 866.

Likes 0

Dislikes 0

Response

Kinte Whitehead - Exelon - 3

Answer Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI.

Likes 0

Dislikes 0

Response

Kent Feliks - AEP - 3

Answer Yes

Document Name

Comment

The addition and recognition of the "loss of availability" makes the intent clear.

Likes 0

Dislikes 0

Response

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer Yes

Document Name

Comment

The NAGF supports the proposed language for Requirement 1.

Likes 0

Dislikes 0

Response

Gail Elliott - Gail Elliott On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Gail Elliott

Answer Yes

Document Name

Comment

ITC supports the comments submitted by EEI

Likes 0

Dislikes 0

Response

Alison MacKellar - Constellation - 5

Answer Yes

Document Name

Comment

The FERC Order also indicates that data at rest is out of scope. We suggest including “data at rest” along with the “oral communications” in the into paragraph for clarity.

Alison Mackellar on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Clay Walker - Clay Walker On Behalf of: John Lindsey, Cleco Corporation, 6, 5, 1, 3; Maurice Paulk, Cleco Corporation, 6, 5, 1, 3; Robert Hirschak, Cleco Corporation, 6, 5, 1, 3; Stephanie Huffman, Cleco Corporation, 6, 5, 1, 3; Wayne Messina, LaGen, 4; - Clay Walker

Answer Yes

Document Name

Comment

Cleco agrees with EEI comments.

Likes 0

Dislikes 0

Response

Monika Montez - California ISO - 2 - WECC, Group Name ISO/RTO Council Standards Review Committee (SRC)

Answer Yes

Document Name

Comment

The ISO/RTO Council Standards Review Committee (SRC) supports broadening the term “security protection” to “method(s)” to provide entities with flexibility in meeting the standard. That said, the SRC requests the SDT validate that the proposed modifications to CIP-012 retain backwards compatibility with CIP-012-1.

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

EEI agrees that the proposed language in R1 addresses the mitigation risk as identified in FERC Order 866.

Likes 0

Dislikes 0

Response

Daniel Gacek - Exelon - 1

Answer Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI

Likes 0

Dislikes 0

Response

Hillary Creurer - Allete - Minnesota Power, Inc. - 1

Answer Yes

Document Name

Comment

Minnesota Power aligns with the NERC Standards Review Forum (NSRF) and Edison Electric Institute (EEI) responses.

Likes 0

Dislikes 0

Response

Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF

Answer Yes

Document Name

Comment

Duke Energy agrees that the proposed language in R1 is responsive to FERC Order No. 866.

Likes 0

Dislikes 0

Response

Kennedy Meier - Electric Reliability Council of Texas, Inc. - 2

Answer	Yes
Document Name	
Comment	
ERCOT joins the comments submitted by the ISO/RTO Council (IRC) Standards Review Committee (SRC) and adopts them as its own.	
Likes 0	
Dislikes 0	
Response	
Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Wendy Kalidass - U.S. Bureau of Reclamation - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	

Likes 0

Dislikes 0

Response

Donna Wood - Tri-State G and T Association, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Brian Millard - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name TVA RBB

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gladys DeLaO - CPS Energy - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sheila Suurmeier - Black Hills Corporation - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Rachel Schuldt - Rachel Schuldt On Behalf of: Josh Combs, Black Hills Corporation, 5, 6, 1, 3; - Rachel Schuldt

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Claudine Bates - Black Hills Corporation - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Micah Runner - Black Hills Corporation - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Goi, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Martin Sidor - NRG - NRG Energy, Inc. - 6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Patricia Lynch - NRG - NRG Energy, Inc. - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

John Daho - MEAG Power - 1,3 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tristan Miller - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Buchold - Southern Indiana Gas and Electric Co. - 6 - RF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Chris Carnesi - Chris Carnesi On Behalf of: Dennis Sismaet, Northern California Power Agency, 4, 6, 3, 5; Jeremy Lawson, Northern California Power Agency, 4, 6, 3, 5; Marty Hostler, Northern California Power Agency, 4, 6, 3, 5; Michael Whitney, Northern California Power Agency, 4, 6, 3, 5; - Chris Carnesi, Group Name NCPA	
Answer	Yes
Document Name	
Comment	

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Helen Lainis - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Krabe - Lower Colorado River Authority - 1,5

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Casey Jones - Berkshire Hathaway - NV Energy - 5 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Jendras Sr - Ameren - Ameren Services - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dwanique Spiller - Berkshire Hathaway - NV Energy - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Israel Perez - Israel Perez On Behalf of: Jennifer Bennett, Salt River Project, 3, 1, 6, 5; Mathew Weber, Salt River Project, 3, 1, 6, 5; Sarah Blankenship, Salt River Project, 3, 1, 6, 5; - Israel Perez

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators

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	

2, Does the language in R1.2 adequately reflect the need to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data? If not, please provide comments and suggested requirement language.

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer No

Document Name

Comment

OPG supports the NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Tracy MacNicoll - Utility Services, Inc. - 4

Answer No

Document Name

Comment

USV Supports the comments of NPCC RSC

Likes 0

Dislikes 0

Response

Nicolas Turcotte - Hydro-Quebec (HQ) - 1

Answer No

Document Name

Comment

Request alignment between the Requirement and Measures. R1 requires a plan which is a strategic deliverable while the Measures focus on tactical deliverables. Measures should not be pseudo-requirements.

Request clarification of this question since Part 1.2 does not include the language "adequately reflect the need to mitigate the loss."
How are IRO and TOP Standards deficient in mandating availability? Does CIP-012 create double jeopardy with IRO, COM standards, and TOP Standards?

Request that availability require the same level of detail as version 1's confidentiality and integrity.

Request clarification of “availability of data” vs “loss of ability to communicate.” (R1 vs R1.2).

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC

Answer No

Document Name

Comment

Request alignment between the Requirement and Measures. R1 requires a plan which is a strategic deliverable while the Measures focus on tactical deliverables. Measures should not be pseudo-requirements.

Request clarification of this question since Part 1.2 does not include the language “adequately reflect the need to mitigate the loss.”

How are IRO and TOP Standards deficient in mandating availability? Does CIP-012 create double jeopardy with IRO, COM standards, and TOP Standards?

Request that availability require the same level of detail as version 1’s confidentiality and integrity.

Request clarification of “availability of data” vs “loss of ability to communicate.” (R1 vs R1.2).

Likes 0

Dislikes 0

Response

Mia Wilson - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC

Answer No

Document Name

Comment

SPP recommends language changes to Part 1.2 to clarify that the methods address the risks (i.e., preventive), not the effects of the risks (i.e., corrective). Specifically, this comment form’s own question uses the phrase “mitigation of”, but the language as drafted uses the phrase “mitigate the risk(s) posed by”. This phrase “risk(s) posed by” may lead to confusion and distract entities from satisfying the directives outlined in FERC Order No. 866. For example, a method used mitigate risk(s) posed by the loss of the ability to communicate data could include far-reaching methods, such as an entity’s Real-time assessment, communication plans, or load shed procedures since each of those processes deal with data and would experience

effects in some situations. To avoid this confusion and focus efforts on the directives SPP recommends the changes below. The use of the phrase “to the ability” focuses the method and mitigations specifically to the directives outlined in the FERC order. To provide clarity, SPP recommends the following language change to Part 1.2:

Identification of method(s) used to mitigate the risk(s) to the loss of the ability to communicate Real-time Assessment and Real-time monitoring data between Control Centers;

SPP estimates that the confusion caused by the as-drafted language could result in hundreds of staff hours annually, which will distract from meeting the intended directive.

Likes 0

Dislikes 0

Response

Richard Vendetti - NextEra Energy - 5

Answer

No

Document Name

Comment

NEE supports NPCC comments:

Request alignment between the Requirement and Measures. R1 requires a plan which is a strategic deliverable while the Measures focus on tactical deliverables. Measures should not be pseudo-requirements.

Request clarification of this question since Part 1.2 does not include the language “adequately reflect the need to mitigate the loss.”

How are IRO and TOP Standards deficient in mandating availability? Does CIP-012 create double jeopardy with IRO, COM standards, and TOP Standards?

Request that availability require the same level of detail as version 1’s confidentiality and integrity.

Request clarification of “availability of data” vs “loss of ability to communicate.” (R1 vs R1.2).

Likes 0

Dislikes 0

Response

Chris Carnesi - Chris Carnesi On Behalf of: Dennis Sismaet, Northern California Power Agency, 4, 6, 3, 5; Marty Hostler, Northern California Power Agency, 4, 6, 3, 5; Michael Whitney, Northern California Power Agency, 4, 6, 3, 5; - Chris Carnesi, Group Name NCPA

Answer	No
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Document Name	
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Comment	
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The 1.2 proposed language should use the word "transmit" instead of "communicate" to be consistent with the rest of the standard.

Likes	0
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Dislikes	0
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Response	
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Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer	No
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Document Name	
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Comment	
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NST believes that as written, R1.2:

- Conflicts with the language of R1 (loss of data availability and loss of the ability to communicate are two different situations);
- uses language not found in Order 866, and;
- could be interpreted as applying not only to communications links between Control Centers, but also to sending and receiving Cyber Assets within Control Centers. An ICCP server's failure or misoperation could cause a loss of ability to communicate.

Likes	1	Central Hudson Gas & Electric Corp., 1, Ridolfino Michael
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Dislikes	0	
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Response	
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Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer	No
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Document Name	
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Comment	
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FirstEnergy believes R1.2 is about the methods to mitigate the risk of losing communications – this is redundant with TOP-001 R20, which requires us to demonstrate that we have diverse and redundant communications

Likes	0
Dislikes	0
Response	
Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro	
Answer	No
Document Name	
Comment	
<p>The changes in Requirement R1 in Draft 4 of CIP-012-2 still imply a possible reliance on redundancy, which does not align with the approach taken in the other existing CIP standards, particularly CIP-002-5.1a. As availability is the purview of operations, BC Hydro believes that it would be better suited to other Mandatory Reliability Standards (MRS) or any other applicable MRS (e.g., IRO-010, TOP-003, TOP-001) within the Operations and Planning (O&P) domains.</p> <p>BC Hydro recommends removing the 'availability' requirement from CIP-012-2 and revising other MRS standards to address this need as appropriate.</p> <p>Alternatively, similar to our comments on Draft 3, BC Hydro suggests that the drafting team provide a clear definition of the term 'availability', and clarity that it does not imply the use of redundant setups. For most of the entities, 'availability' of communication networks depends on third party telecommunication providers and, in the event of a line or telecommunication equipment failure, the entity is reliant on the third party telecommunication providers to fix the problems. BC Hydro suggests that SDT add an exemption for the links and equipment used by third party telecommunication providers, as changing or enhancing the third party telecommunication infrastructure to support 'availability' may not be feasible for many entities.</p>	
Likes	0
Dislikes	0
Response	
Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Goi, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC	
Answer	No
Document Name	
Comment	
<p>The Standards Drafting Team should ensure the words “transmit” and “communicate” are being used consistently in the requirement and the requirement parts. Requirement R1 refers to mitigating the risk of the loss of availability of data used in Real-time Assessment and Real-time monitoring while such data is being “transmitted between applicable Control Centers.” Part 1.1 also refers to mitigating the unauthorized disclosure and unauthorized modification of Real-time Assessment and Real-time monitoring data that is being “transmitted between Control Centers.” Part 1.2 refers to mitigating the risk posed by the loss of the ability to “communicate” Real-time Assessment and Real-time monitoring data between control centers. The wording in Part 1.3 also uses the term “communication” links.</p>	

SMUD and BANC recommend using the word “transmit” instead of “communicate” in Part 1.2 to provide clarity and consistency with the Purpose of the Standard and the Technical Rationale. The wording should also be changed in the Technical Rationale (pdf-page 9) where the Requirement R1, Part 1.2 language is listed.

Likes 1

Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF

Answer

Yes

Document Name

Comment

Duke Energy agrees that the language in R1.2 reflects the need to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data.

Likes 0

Dislikes 0

Response

Hillary Creurer - Allete - Minnesota Power, Inc. - 1

Answer

Yes

Document Name

Comment

Minnesota Power aligns with the NERC Standards Review Forum (NSRF) and Edison Electric Institute (EEI) responses.

Likes 0

Dislikes 0

Response

Daniel Gacek - Exelon - 1

Answer

Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

EEI agrees that the language in Requirement R1 part 1.2 adequately reflects the need to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data.

Likes 0

Dislikes 0

Response

Clay Walker - Clay Walker On Behalf of: John Lindsey, Cleco Corporation, 6, 5, 1, 3; Maurice Paulk, Cleco Corporation, 6, 5, 1, 3; Robert Hirschak, Cleco Corporation, 6, 5, 1, 3; Stephanie Huffman, Cleco Corporation, 6, 5, 1, 3; Wayne Messina, LaGen, 4; - Clay Walker

Answer

Yes

Document Name

Comment

Cleco agrees with EEI comments.

Likes 0

Dislikes 0

Response

Alison MacKellar - Constellation - 5

Answer

Yes

Document Name

Comment

Constellation does not have any additional comments.

Alison Mackellar on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Gail Elliott - Gail Elliott On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Gail Elliott

Answer

Yes

Document Name

Comment

ITC supports the comments submitted by EEI

Likes 0

Dislikes 0

Response

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer

Yes

Document Name

Comment

The NAGF supports the proposed language for Requirement 1.2.

Likes 0

Dislikes 0

Response

Kinte Whitehead - Exelon - 3

Answer

Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI.

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer

Yes

Document Name

Comment

Southern Company agrees with EEI that the language in Requirement R1 part 1.2 adequately reflects the need to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data.

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer

Yes

Document Name

Comment

AZPS agrees the language in R1.2 adequately reflects the need to mitigate the loss of the ability to transmit RTA/RTM data.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer

Yes

Document Name

Comment

Constellation has no comments.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer

Yes

Document Name

Comment

No comments from RF

Likes 0

Dislikes 0

Response

James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin

Answer

Yes

Document Name

Comment

LCRA would like to verify that the bulleted items in the Measures section represent an “or”, and it will not be required to calculate availability to demonstrate compliance.

Likes 0

Dislikes 0

Response

Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power

Answer

Yes

Document Name

Comment

Tacoma Power supports the change to R1.2, but recommends using the word “transmit” instead of “communicate”. This is a non-substantive change, but will align R1.2 with R1.3 and M1, which use the word “transmit”.

Likes 0

Dislikes 0

Response

Alain Mukama - Hydro One Networks, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Kennedy Meier - Electric Reliability Council of Texas, Inc. - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response	
Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Monika Montez - California ISO - 2 - WECC, Group Name ISO/RTO Council Standards Review Committee (SRC)	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Israel Perez - Israel Perez On Behalf of: Jennifer Bennett, Salt River Project, 3, 1, 6, 5; Mathew Weber, Salt River Project, 3, 1, 6, 5; Sarah Blankenship, Salt River Project, 3, 1, 6, 5; - Israel Perez	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Dwanique Spiller - Berkshire Hathaway - NV Energy - 5	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Jendras Sr - Ameren - Ameren Services - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Casey Jones - Berkshire Hathaway - NV Energy - 5 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Teresa Krabe - Lower Colorado River Authority - 1,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

Helen Lainis - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Kent Feliks - AEP - 3

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Buchold - Southern Indiana Gas and Electric Co. - 6 - RF

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

LaTroy Brumfield - American Transmission Company, LLC - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tristan Miller - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

James Keele - Entergy - 1,3,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

John Daho - MEAG Power - 1,3 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Patricia Lynch - NRG - NRG Energy, Inc. - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Martin Sidor - NRG - NRG Energy, Inc. - 6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Micah Runner - Black Hills Corporation - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Claudine Bates - Black Hills Corporation - 1,3,5,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Rachel Schuldt - Rachel Schuldt On Behalf of: Josh Combs, Black Hills Corporation, 5, 6, 1, 3; - Rachel Schuldt

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sheila Suurmeier - Black Hills Corporation - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gladys DeLaO - CPS Energy - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Brian Millard - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name TVA RBB

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Donna Wood - Tri-State G and T Association, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Wendy Kalidass - U.S. Bureau of Reclamation - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

Answer

Document Name

Comment

Texas RE understands the intent of Requirement Part 1.2 to mitigate the loss of the ability to transmit Real-time Assessment and Real-time monitoring data and interprets the language as such. However, the current language could also be read to apply solely to mitigating the risk posed by the loss of data communications. Texas RE recommends the drafting team clarify that CIP-012 applies to mitigating the loss of the ability to transmit Real-time Assessment and Real-time monitoring data. Texas Re recommends the following language:

Identification of method(s) used to mitigate the risk of the loss of the ability to communicate Real-time Assessment and Real-time monitoring data between Control Centers, including the transmission and receipt of data used for Real-time Assessment and Real-time monitoring.

Likes 0

Dislikes 0

Response

3. Does the language in R1.4 provide Responsible Entities with clarity on the need to identify physically or logically where they have applied the methods required in R1.1 and R1.2? If not, please provide comments and suggested requirement language.

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

Answer No

Document Name

Comment

Reclamation recommends modifying the language.

From: **1.4.** Identification of where the Responsible Entity implemented method(s) as required in Parts 1.1 and 1.2; and

To: **1.4.** Identification of where, physically and/or logically, the Responsible Entity implemented method(s) as required in Parts 1.1 and 1.2; and

Likes 0

Dislikes 0

Response

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer No

Document Name

Comment

The changes in Requirement R1 in Draft 4 of CIP-012-2 still imply a possible reliance on redundancy, which does not align with the approach taken in the other existing CIP standards, particularly CIP-002-5.1a. As availability is the purview of operations, BC Hydro believes that it would be better suited to other Mandatory Reliability Standards (MRS) or any other applicable MRS (e.g., IRO-010, TOP-003, TOP-001) within the Operations and Planning (O&P) domains.

BC Hydro recommends removing the 'availability' requirement from CIP-012-2 and revising other MRS standards to address this need as appropriate.

Alternatively, similar to our comments on Draft 3, BC Hydro suggests that the drafting team provide a clear definition of the term 'availability', and clarify that it does not imply the use of redundant setups. For most of the entities, 'availability' of communication networks depends on third party telecommunication providers and, in the event of a line or telecommunication equipment failure, the entity is reliant on the third party telecommunication providers to fix the problems. BC Hydro suggests that SDT add an exemption for the links and equipment used by third party telecommunication providers, as changing or enhancing the third party telecommunication infrastructure to support 'availability' may not be feasible for many entities.

Likes 0

Dislikes 0

Response

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer	No
Document Name	
Comment	
FirstEnergy believes R1.2 is about the methods to recover lost communications – this is already addressed in CIP-009, which defines our Recovery Plans for critical infrastructure.	
Likes 0	
Dislikes 0	
Response	
Richard Vendetti - NextEra Energy - 5	
Answer	No
Document Name	
Comment	
NEE supports NPCC's comments:	
Request clarification of "availability" vs "loss of data."	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC	
Answer	No
Document Name	
Comment	
Request clarification of "availability" vs "loss of data."	
Likes 0	
Dislikes 0	
Response	

Monika Montez - California ISO - 2 - WECC, Group Name ISO/RTO Council Standards Review Committee (SRC)

Answer No

Document Name

Comment

The SRC requests that the language be revised to clarify that an entity can use different methods at different locations to comply with each of the Parts of Requirement R1, and that identification of a particular method used at a particular location does not automatically require the entity to implement that particular method at all other locations.

Additionally, the SRC notes that in the **clean** and the **redline to last posted** versions of CIP-012-2, Part 1.4 only references Parts 1.1 and 1.2, while Part 1.5 references Parts 1.1, 1.2, and 1.3; however, in the **redline to last approved** version of CIP-012-2, Part 1.4 references Parts 1.1, 1.2, and 1.3, while Part 1.5 only references Parts 1.1 and 1.2. The SRC requests that the drafting team clarify which parts are intended to be referenced in Part 1.4 and Part 1.5.

Likes 0

Dislikes 0

Response

Nicolas Turcotte - Hydro-Quebec (HQ) - 1

Answer No

Document Name

Comment

Request clarification of “availability” vs “loss of data.”

Likes 0

Dislikes 0

Response

Tracy MacNicoll - Utility Services, Inc. - 4

Answer No

Document Name

Comment

USV Supports the comments of NPCC RSC

Likes 0

Dislikes 0

Response

Kennedy Meier - Electric Reliability Council of Texas, Inc. - 2

Answer No

Document Name

Comment

ERCOT joins the comments submitted by the IRC SRC and adopts them as its own.

Likes 0

Dislikes 0

Response

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer No

Document Name

Comment

OPG supports the NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Alain Mukama - Hydro One Networks, Inc. - 1

Answer No

Document Name

Comment

Identifying where the method is applied for part 1.3 need some clarification. We can identify for Internal devices/links. For issues within ISP, we can only identify our demarcation point with ISP, and initiate the problem call/ticket with ISP.

Likes 0

Dislikes 0

Response

Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power

Answer Yes

Document Name

Comment

Tacoma Power supports the R1.4 language. However, the redline to last approved file does not match the clean version verbiage. For example, the redline to last approved for R1.4 states “required in Parts 1.1, 1.2, and 1.3”, when it should show “required in Parts **1.1 and 1.2**”.

Likes 0

Dislikes 0

Response

LaTroy Brumfield - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

ATC appreciates the SDT’s efforts. While we understand the language as written we believe it would be clearer to use the word “applied” instead of “implemented”. As a result, ATC offers this idea for the team’s consideration as a clarifying change, “Identification of where the methods are applied by the Responsible Entity as required in Parts 1.1, 1.2, and 1.3.”

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer Yes

Document Name

Comment

The expanded prose listed for Part 1.4 under Measures clarifies the need for entities to clearly identify where they have applied measures from R1.1 and R1.2.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer Yes

Document Name

Comment

Constellation has no comments.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer Yes

Document Name

Comment

AZPS agrees the language in R1.4 provides clarity on the need to identify physically or logically where methods required in R1.1. and R1.2 have been applied.

Likes 0

Dislikes 0

Response

Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP

Answer Yes

Document Name

Comment

WECC suggests a revision to M1, bullet 2, as follows:

"Physical access restrictions" (add) and monitoring of (remove) to "unencrypted portions of the network."

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer Yes

Document Name

Comment

Southern Company agrees with EEI that the language in R1.4 provides sufficient clarity on the need to identify physically or logically where they have applied the methods required in R1.1 and R1.2.

Likes 0

Dislikes 0

Response

Kinte Whitehead - Exelon - 3

Answer Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI.

Likes 0

Dislikes 0

Response

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer Yes

Document Name

Comment

The NAGF supports the proposed language for Requirement 1.4.

Likes 0

Dislikes 0

Response

Gail Elliott - Gail Elliott On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Gail Elliott

Answer Yes

Document Name

Comment

ITC supports the comments submitted by EEI

Likes 0

Dislikes 0

Response

Alison MacKellar - Constellation - 5

Answer Yes

Document Name

Comment

Constellation does not have any additional comments.

Alison Mackellar on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Clay Walker - Clay Walker On Behalf of: John Lindsey, Cleco Corporation, 6, 5, 1, 3; Maurice Paulk, Cleco Corporation, 6, 5, 1, 3; Robert Hirchak, Cleco Corporation, 6, 5, 1, 3; Stephanie Huffman, Cleco Corporation, 6, 5, 1, 3; Wayne Messina, LaGen, 4; - Clay Walker

Answer Yes

Document Name

Comment

Cleco agrees with EEI comments.

Likes 0

Dislikes 0

Response

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

Answer	Yes
Document Name	
Comment	
The language in R1.4 provides sufficient clarity on the need to identify physically or logically where they have applied the methods required in R1.1 and R1.2.	
Likes 0	
Dislikes 0	
Response	
Daniel Gacek - Exelon - 1	
Answer	Yes
Document Name	
Comment	
Exelon is in support of the comments submitted by EEI	
Likes 0	
Dislikes 0	
Response	
Hillary Creurer - Allete - Minnesota Power, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Minnesota Power aligns with the NERC Standards Review Forum (NSRF) and Edison Electric Institute (EEI) responses.	
Likes 0	
Dislikes 0	
Response	
Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	

Comment

Likes 0

Dislikes 0

Response**Donna Wood - Tri-State G and T Association, Inc. - 1****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Brian Millard - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name TVA RBB****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Gladys DeLaO - CPS Energy - 1****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sheila Suurmeier - Black Hills Corporation - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Rachel Schuldt - Rachel Schuldt On Behalf of: Josh Combs, Black Hills Corporation, 5, 6, 1, 3; - Rachel Schuldt

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Claudine Bates - Black Hills Corporation - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Micah Runner - Black Hills Corporation - 1,3,5,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Goi, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Martin Sidor - NRG - NRG Energy, Inc. - 6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Patricia Lynch - NRG - NRG Energy, Inc. - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

John Daho - MEAG Power - 1,3 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

James Keele - Entergy - 1,3,6

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Tristan Miller - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Buchold - Southern Indiana Gas and Electric Co. - 6 - RF

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Chris Carnesi - Chris Carnesi On Behalf of: Dennis Sismaet, Northern California Power Agency, 4, 6, 3, 5; Jeremy Lawson, Northern California Power Agency, 4, 6, 3, 5; Marty Hostler, Northern California Power Agency, 4, 6, 3, 5; Michael Whitney, Northern California Power Agency, 4, 6, 3, 5; - Chris Carnesi, Group Name NCPA

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Kent Feliks - AEP - 3

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Helen Lainis - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Teresa Krabe - Lower Colorado River Authority - 1,5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Casey Jones - Berkshire Hathaway - NV Energy - 5 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras Sr - Ameren - Ameren Services - 3

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Dwanique Spiller - Berkshire Hathaway - NV Energy - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Israel Perez - Israel Perez On Behalf of: Jennifer Bennett, Salt River Project, 3, 1, 6, 5; Mathew Weber, Salt River Project, 3, 1, 6, 5; Sarah Blankenship, Salt River Project, 3, 1, 6, 5; - Israel Perez

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators	
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	
Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF	
Answer	
Document Name	
Comment	
Duke Energy agrees that the language in R1.4 provides clarity on the need to identify where methods in R1.1 and R1.2 have been applied.	
Likes 0	
Dislikes 0	
Response	

4. The SDT proposes that the modifications in CIP-012-2 meet the FERC directives in a cost-effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for improvement to enable more cost-effective approaches, please provide your recommendation and, if appropriate, technical or procedural justification.

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer No

Document Name

Comment

GO/GOPs will need more information to adequately assess the cost effectiveness of the proposed approach.

Likes 0

Dislikes 0

Response

Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer No

Document Name

Comment

Absent clarity about what CIP-012-2 would require a Responsible Entity to do and the scope of its requirements, NST cannot comment on the cost-effectiveness of its latest proposed modifications.

Likes 1 Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer No

Document Name

Comment

Please see our response to Questions 2 and 3 - with uncertainty of responsibility, FirstEnergy cannot effectively answer this question.

Likes 0

Dislikes 0

Response

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer No

Document Name

Comment

Please refer to comments on Question #1. BC Hydro seeks clarifications on the queries raised in the response of Question #1, and BC Hydro is not in a position to identify the cost effectiveness of the Project 2020-04 CIP-012-2 changes at this stage.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

Prior to proposing additional modifications, Reclamation also recommends each SDT take additional time to completely identify the scope to account for future potential compliance issues. This will provide economic relief for entities by minimizing the costs associated with the planning and adjustments required to achieve compliance with frequently changing standard versions. NERC should foster a compliance environment that will allow entities to fully implement technical compliance with current standards before moving to subsequent versions.

Reclamation recommends the SDT take particular care to coordinate CIP-012 changes with existing drafting teams for existing related standards to ensure consistency and avoid duplication, specifically, Project 2016-02 and Project 2019-03. This will help to minimize churn among standard versions, reduce the risk that standards will conflict with one another, and better align the standards.

Likes 0

Dislikes 0

Response

Alison MacKellar - Constellation - 5

Answer Yes

Document Name

Comment

Constellation does not have any additional comments.

Alison Mackellar on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer

Yes

Document Name

Comment

AZPS agrees.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer

Yes

Document Name

Comment

Constellation has no comments.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer

Yes

Document Name

Comment

No comments from RF.

Likes 0

Dislikes 0

Response

Alain Mukama - Hydro One Networks, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Hillary Creurer - Allete - Minnesota Power, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Israel Perez - Israel Perez On Behalf of: Jennifer Bennett, Salt River Project, 3, 1, 6, 5; Mathew Weber, Salt River Project, 3, 1, 6, 5; Sarah Blankenship, Salt River Project, 3, 1, 6, 5; - Israel Perez

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Dwanique Spiller - Berkshire Hathaway - NV Energy - 5

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Clay Walker - Clay Walker On Behalf of: John Lindsey, Cleco Corporation, 6, 5, 1, 3; Maurice Paulk, Cleco Corporation, 6, 5, 1, 3; Robert Hirchak, Cleco Corporation, 6, 5, 1, 3; Stephanie Huffman, Cleco Corporation, 6, 5, 1, 3; Wayne Messina, LaGen, 4; - Clay Walker	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Casey Jones - Berkshire Hathaway - NV Energy - 5 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Teresa Krabe - Lower Colorado River Authority - 1,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

Helen Lainis - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer Yes

Document Name

Comment	
Likes 0	
Dislikes 0	
Response	
Chris Carnesi - Chris Carnesi On Behalf of: Dennis Sismaet, Northern California Power Agency, 4, 6, 3, 5; Jeremy Lawson, Northern California Power Agency, 4, 6, 3, 5; Marty Hostler, Northern California Power Agency, 4, 6, 3, 5; Michael Whitney, Northern California Power Agency, 4, 6, 3, 5; - Chris Carnesi, Group Name NCPA	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response

James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

James Keele - Entergy - 1,3,6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

John Daho - MEAG Power - 1,3 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response**Patricia Lynch - NRG - NRG Energy, Inc. - 5****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Martin Sidor - NRG - NRG Energy, Inc. - 6****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Goi, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gladys DeLaO - CPS Energy - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response**Brian Millard - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name TVA RBB****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Donna Wood - Tri-State G and T Association, Inc. - 1****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response**Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3****Answer**

Yes

Document Name**Comment**

Likes 0

Dislikes 0

Response

Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gail Elliott - Gail Elliott On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Gail Elliott

Answer

Document Name

Comment

ITC supports the comments submitted by EEI

Likes 0

Dislikes 0

Response

Micah Runner - Black Hills Corporation - 1,3,5,6

Answer

Document Name

Comment

Black Hills Corporation will not comment on cost effectiveness.

Likes 0

Dislikes 0

Response

Claudine Bates - Black Hills Corporation - 1,3,5,6

Answer	
Document Name	
Comment	
Black Hills Corporation will not comment on cost effectiveness.	
Likes 0	
Dislikes 0	
Response	
Rachel Schuldt - Rachel Schuldt On Behalf of: Josh Combs, Black Hills Corporation, 5, 6, 1, 3; - Rachel Schuldt	
Answer	
Document Name	
Comment	
Black Hills Corporation will not comment on cost effectiveness.	
Likes 0	
Dislikes 0	
Response	
Sheila Suurmeier - Black Hills Corporation - 5	
Answer	
Document Name	
Comment	
Black Hills Corporation will not comment on cost effectiveness.	
Likes 0	
Dislikes 0	
Response	

5. The SDT reviewed the implementation plan and did not see any reasons to make any changes. Do you still agree the proposed timeframe is appropriate in light of the proposed revisions to the standard language? If you think an alternate timeframe is needed, please propose an alternate implementation plan and time period, and provide a detailed explanation of actions planned to meet the implementation deadline.

James Keele - Entergy - 1,3,6

Answer No

Document Name

Comment

Entergy believes that clarified requirement language should be agreed upon before the standard is approved. The physical access restriction measure should be clarified before an implementation window is opened.

Likes 0

Dislikes 0

Response

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer No

Document Name

Comment

At this time BC Hydro does not have sufficient information to affirm whether 24 months will be adequate to implement the solutions to comply with the changes proposed in Project 2020-04 for CIP-012.

Likes 0

Dislikes 0

Response

Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer No

Document Name

Comment

Absent clarity about what CIP-012-2 would require a Responsible Entity to do and the scope of its requirements, NST cannot comment on an implementation timetable.

Likes 1

Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Richard Vendetti - NextEra Energy - 5

Answer

No

Document Name

Comment

Until the language changes clarify R1 and R2 with measures the implementation plan cannot be considered.

Likes 0

Dislikes 0

Response

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer

Yes

Document Name

Comment

FirstEnergy has no objection to the implementation plan.

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer

Yes

Document Name

Comment

No comments from RF.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer Yes

Document Name

Comment

Constellation has no comments.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer Yes

Document Name

Comment

AZPS still agrees the proposed timeframe is appropriate.

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer Yes

Document Name

Comment

Southern Company agrees with that the proposed Implementation Plan is sufficient as proposed.

Likes 0

Dislikes 0

Response

Kinte Whitehead - Exelon - 3**Answer** Yes**Document Name****Comment**

Exelon is in support of the comments submitted by EEI.

Likes 0

Dislikes 0

Response**Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF****Answer** Yes**Document Name****Comment**

The NAGF supports the proposed 24-month implementation plan.

Likes 0

Dislikes 0

Response**Gail Elliott - Gail Elliott On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Gail Elliott****Answer** Yes**Document Name****Comment**

ITC supports the comments submitted by EEI

Likes 0

Dislikes 0

Response**Alison MacKellar - Constellation - 5****Answer** Yes

Document Name	
Comment	
Constellation does not have any additional comments.	
Alison Mackellar on behalf of Constellation Segments 5 and 6	
Likes 0	
Dislikes 0	
Response	
Clay Walker - Clay Walker On Behalf of: John Lindsey, Cleco Corporation, 6, 5, 1, 3; Maurice Paulk, Cleco Corporation, 6, 5, 1, 3; Robert Hirschak, Cleco Corporation, 6, 5, 1, 3; Stephanie Huffman, Cleco Corporation, 6, 5, 1, 3; Wayne Messina, LaGen, 4; - Clay Walker	
Answer	Yes
Document Name	
Comment	
Cleco agrees with EEI comments.	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC	
Answer	Yes
Document Name	
Comment	
The implementation plan timeline would be impacted by the scoping or determination of its availability from an infrastructure standpoint/network capability or a data loss/data protection ruling.	
Likes 0	
Dislikes 0	
Response	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	Yes

Document Name

Comment

EI agrees that the proposed Implementation Plan is sufficient as proposed.

Likes 0

Dislikes 0

Response

Nicolas Turcotte - Hydro-Quebec (HQ) - 1

Answer

Yes

Document Name

Comment

The implementation plan timeline would be impacted by the scoping or determination of its availability from an infrastructure standpoint/network capability or a data loss/data protection ruling.

Likes 0

Dislikes 0

Response

Hillary Creurer - Allete - Minnesota Power, Inc. - 1

Answer

Yes

Document Name

Comment

Minnesota Power aligns with the NERC Standards Review Forum (NSRF) and Edison Electric Institute (EEI) responses.

Likes 0

Dislikes 0

Response

Daniel Gacek - Exelon - 1

Answer

Yes

Document Name

Comment

Exelon is in support of the comments submitted by EEI

Likes 0

Dislikes 0

Response

Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF

Answer

Yes

Document Name

Comment

Duke Energy agrees that the timeframe is appropriate.

Likes 0

Dislikes 0

Response

Tracy MacNicoll - Utility Services, Inc. - 4

Answer

Yes

Document Name

Comment

USV Supports the comments of NPCC RSC

Likes 0

Dislikes 0

Response

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer

Yes

Document Name

Comment

OPG supports the NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Donna Wood - Tri-State G and T Association, Inc. - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Brian Millard - Tennessee Valley Authority - 1,3,5,6 - SERC, Group Name TVA RBB

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Gladys DeLaO - CPS Energy - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Sheila Suurmeier - Black Hills Corporation - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Rachel Schuldt - Rachel Schuldt On Behalf of: Josh Combs, Black Hills Corporation, 5, 6, 1, 3; - Rachel Schuldt

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Claudine Bates - Black Hills Corporation - 1,3,5,6

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Micah Runner - Black Hills Corporation - 1,3,5,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Goi, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO	
Answer	Yes
Document Name	
Comment	

Likes 0

Dislikes 0

Response

Martin Sidor - NRG - NRG Energy, Inc. - 6

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Patricia Lynch - NRG - NRG Energy, Inc. - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

John Daho - MEAG Power - 1,3 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Tristan Miller - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

LaTroy Brumfield - American Transmission Company, LLC - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Buchold - Southern Indiana Gas and Electric Co. - 6 - RF

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Chris Carnesi - Chris Carnesi On Behalf of: Dennis Sismaet, Northern California Power Agency, 4, 6, 3, 5; Jeremy Lawson, Northern California Power Agency, 4, 6, 3, 5; Marty Hostler, Northern California Power Agency, 4, 6, 3, 5; Michael Whitney, Northern California Power Agency, 4, 6, 3, 5; - Chris Carnesi, Group Name NCPA

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Kent Feliks - AEP - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Helen Lainis - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Teresa Krabe - Lower Colorado River Authority - 1,5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Casey Jones - Berkshire Hathaway - NV Energy - 5 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Dwanique Spiller - Berkshire Hathaway - NV Energy - 5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

David Jendras Sr - Ameren - Ameren Services - 3

Answer

Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Israel Perez - Israel Perez On Behalf of: Jennifer Bennett, Salt River Project, 3, 1, 6, 5; Mathew Weber, Salt River Project, 3, 1, 6, 5; Sarah Blankenship, Salt River Project, 3, 1, 6, 5; - Israel Perez	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Monika Montez - California ISO - 2 - WECC, Group Name ISO/RTO Council Standards Review Committee (SRC)	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

Response

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Kennedy Meier - Electric Reliability Council of Texas, Inc. - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Alain Mukama - Hydro One Networks, Inc. - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

6. Provide any additional comments for the SDT to consider, including the provided technical rationale and implementation guidance document, if desired.

Alain Mukama - Hydro One Networks, Inc. - 1

Answer

Document Name

Comment

None

Likes 0

Dislikes 0

Response

Kennedy Meier - Electric Reliability Council of Texas, Inc. - 2

Answer

Document Name

Comment

ERCOT joins the comments submitted by the IRC SRC and adopts them as its own.

Likes 0

Dislikes 0

Response

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer

Document Name

Comment

OPG supports the NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Tracy MacNicoll - Utility Services, Inc. - 4

Answer

Document Name

Comment

USV Supports the comments of NPCC RSC

Likes 0

Dislikes 0

Response

Ellese Murphy - Duke Energy - 1,3,5,6 - Texas RE,SERC,RF

Answer

Document Name

Comment

Duke Energy thanks the 2020-04 Standard Drafting Team for all the work to address FERC Order No. 866.

Likes 0

Dislikes 0

Response

Daniel Gacek - Exelon - 1

Answer

Document Name

Comment

Exelon is in support of the comments submitted by EEI

Likes 0

Dislikes 0

Response

Hillary Creurer - Allele - Minnesota Power, Inc. - 1

Answer

Document Name	
Comment	
Minnesota Power agrees with the NSRF's comments.	
Likes 0	
Dislikes 0	
Response	
Nicolas Turcotte - Hydro-Quebec (HQ) - 1	
Answer	
Document Name	
Comment	
CIP-012 R1 includes all security such as information protection, location, asset inventory, confidentiality, integrity and availability. Recommend CIP-012 provide greater specifications of this plan.	
Likes 0	
Dislikes 0	
Response	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Collaborators	
Answer	
Document Name	
Comment	
ACES would like to thank the SDT's hard work to better clarify this draft. ACES still has the concern because this has the potential to conflict with other NERC reliability standards. Further, the Cyber Assets this impacts directly could and for most entities be Cyber Assets completely outside of any ESP and PSP. Thus the reason we have continued to suggest this belongs as a part of an O&P standard.	
Likes 0	
Dislikes 0	
Response	
Ronald Bauer - MGE Energy - Madison Gas and Electric Co. - 3	
Answer	

Document Name	
Comment	
MGE thanks the SDT for their efforts, and supports the comments of the MRO NSRF.	
Likes	0
Dislikes	0
Response	
Monika Montez - California ISO - 2 - WECC, Group Name ISO/RTO Council Standards Review Committee (SRC)	
Answer	
Document Name	
Comment	
<p>Backwards Compatibility – As noted in our response to Question 1, the SRC supports broadening the term “security protection” to “method(s)” to provide entities with flexibility in meeting the standard. That said, the SRC requests the SDT validate that the proposed modifications to CIP-012 retain backwards compatibility with CIP-012-1.</p> <p>Not subject to EOP-008 or IRO-002 drills/tests - As FERC in its Order 866 and the SDT have clarified on repeated occasions in response to industry comments that CIP-012 does not overlap with or duplicate provisions under any other NERC standard, including EOP-008 or IRO-002, the SRC requests the SDT clarify that CIP-012-2, R1 method(s) are not subject to:</p> <ul style="list-style-type: none"> • EOP-008, R7 tests or drills, as the test required under R7 is limited to a test of the ability to failover to backup functionality in the event that primary Control Center functionality is lost (pursuant to EOP-008, R1, Part 1.2.2). • IRO-002-7, R3, as the test required under R3 is limited to testing the redundant and diversely routed data exchange infrastructure <i>within</i> the Reliability Coordinator's primary Control Center for redundant functionality (pursuant to IRO-002-7, R2). <p>The SRC requests the SDT update the Technical Rationale for CIP-012 to reflect the above understanding.</p>	
Likes	0
Dislikes	0
Response	
Mia Wilson - Southwest Power Pool, Inc. (RTO) - 2 - MRO,WECC	
Answer	
Document Name	
Comment	
The Technical Rationale for Part 1.5 includes the statement, “Having a clear understanding of where each side of a link each entity’s responsibilities begin and end facilitates timely restoration when there is a problem with the transmission of the data.”	

Please provide clarity around the language "timely" in this statement.

Likes 0

Dislikes 0

Response

Ben Hammer - Western Area Power Administration - 1

Answer

Document Name

Comment

The standard mixes the requirements of CIP-009, CIP-012, TOP-003 and IRO-010. This effectively creates duplicate requirements stringed across multiple standards and separate orders. Requirement 1.3 should be removed from CIP-012 and placed into CIP-009 R1. There appears to be an opportunity for NERC to create efficiencies in Requirements for Control Center communications.

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC

Answer

Document Name

Comment

CIP-012 R1 includes all security such as information protection, location, asset inventory, confidentially, integrity and availability. Recommend CIP-012 provide greater specifications of this plan.

Likes 0

Dislikes 0

Response

Richard Vendetti - NextEra Energy - 5

Answer

Document Name

Comment

Redundancy and service level agreements are primary methods available to many of the communications methods for Real-time communications. The loss of data is expected in the technology methods currently available. Redundancy elements within a site and in multiple locations are often part of the implementation required under other NERC standards. The language matters and must clearly define the risks, objects and measures for evaluation. Currently CIP-012-2 language appears to put Entities at risk of non-compliance.

More use cases and options should be provided to enable entities and auditors to clearly understand how the requirements may be applied and met based upon available and industry implemented technologies.

Likes 0

Dislikes 0

Response

Alison MacKellar - Constellation - 5

Answer

Document Name

Comment

Constellation does not have any additional comments.

Alison Mackellar on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer

Document Name

Comment

The NAGF has no additional comments.

Likes 0

Dislikes 0

Response

Teresa Krabe - Lower Colorado River Authority - 1,5

Answer

Document Name

Comment

LCRA appreciates the SDT's effort and thoughtfulness in responding to industry comment and concerns. Project 2021-03 changes the definition of Control Center to include TOs with the capability to electronically control 2 or more locations. LCRA believes that this has the potential to drastically expand the scope of CIP-012 and does not address the original intent of the SAR.

TOPs are already receiving data from their TOs field devices. They may choose to send this data to their TO as a courtesy. By implementing additional compliance obligations around this data the new definition may have inadvertent consequences resulting in less sharing of data.

LCRA recommends that CIP-012-2 carve out an exclusion to not include TO Control Centers as defined in the proposed CIP-002 project. Alternatively, scoping Real-time Assessment and Real-time monitoring data to only be applicable if that data is used for making Real-time decisions may alleviate concerns.

Likes 0

Dislikes 0

Response

Kent Feliks - AEP - 3

Answer

Document Name

Comment

These comments represent AEP as a whole, participating in Segments 1,3,5,6.

Likes 0

Dislikes 0

Response

Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company

Answer

Document Name

Comment

No additional comments.

Likes 0

Dislikes 0

Response

Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC CIP

Answer

Document Name

Comment

It appears that the language in R1 of the standard does not match the R1 language in the Implementation Guidance. The standard states "mitigate the risks", while the Implementation Guidance states "mitigate the cyber security risks."

Likes 0

Dislikes 0

Response

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer

Document Name

Comment

Alliant Energy supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

Response

Marcus Bortman - APS - Arizona Public Service Co. - 6

Answer

Document Name

Comment

AZPS has no additional comments.

Likes 0

Dislikes 0

Response

Kimberly Turco - Constellation - 6

Answer

Document Name

Comment

Constellation has no additional comments.

Kimberly Turco on behalf of Constellation Segments 5 and 6

Likes 0

Dislikes 0

Response

Lindsey Mannion - ReliabilityFirst - 10

Answer

Document Name

Comment

While the SDT has achieved their goals with the protection of Control Center to Control Center communications in CIP-012-1 and with the upcoming changes in CIP-012-2, there should be additional discussion around R1.5 to remove or modify the Measure regarding “*meeting minutes*.” At a minimum, the SDT should bolster the Measure for R1.5 to highlight or emphasize a need for clear and well-defined responsibilities of each party be included, and identified, within the meeting minutes. Lack of clarity or substance in meeting minutes regarding identification of demarcations, or use of old meeting minutes that are not updated to reflect changes in either parties’ environment may not meet the compliance obligations of R1.5.

Further, there is direct reference to “*communication links*” in R1.3 but no reference to this within R1. For consistency R1 should reflect this reference and RF recommends, “*The Responsible Entity shall implement, except under CIP Exceptional Circumstances, one or more documented plan(s) to mitigate the risks posed by unauthorized disclosure, unauthorized modification, loss of availability, and loss of communication links, of data used in Real-time Assessment and Real-time monitoring while such data is being transmitted between any applicable Control Centers.*”

Likes 0

Dislikes 0

Response

Roger Fradenburgh - Roger Fradenburgh On Behalf of: Nick Lauriat, Network and Security Technologies, 1; - Roger Fradenburgh

Answer

Document Name

Comment

NST notes that although Requirement R1 Part 1.3 requires, "Identification of method(s) used to initiate the recovery of communication links used to transmit Real-time Assessment and Real-time monitoring data between Control Centers," top-level Requirement R1 does not establish a requirement to have one or more plans to recover communications links. This oversight should be corrected.

NST offers the following observations about proposed CIP-012 Measures:

R1 Part 1.2:

Regarding, "Procedures explaining the use of alternative systems or methods for providing for the availability of the data," the SDT should clarify what is meant by "alternative systems." The extent of systems supporting CIP-012 needs to be defined and clearly articulated to understand the potential impacts of supporting availability.

Regarding, "Availability or uptime reports for equipment supporting the transmission of Real-time Assessment and Real-time monitoring data," NST notes that such reports are backward-looking and would therefore be, in our opinion, weak evidence that a Responsible Entity has controls designed to mitigate the loss of a communications link between two Control Centers. It is our opinion that real-time link monitoring and alerting would be a better approach than historical records. NST also believes the types of equipment supporting data transmission should be addressed, especially the demarcation points between the equipment of a Responsible Entity and its carriers.

R1 Part 1.3:

Regarding, "Contract, memorandum of understanding, meeting minutes, agreement or other information outlining the methods used for recovery," it is NST's opinion that meeting minutes would hardly qualify as strong evidence a Responsible Entity has adequately addressed the referenced Requirement Part.

Regarding, "Methods for the recovery of links such as standard operating procedures, applicable sections of CIP-009 recovery plan(s), or similar technical recovery plans," NST believes it is inappropriate to suggest that CIP-009 recovery plans might address any requirement to recover inter-Control Center communications links. CIP-009 is not applicable to communications links outside of Control Centers.

Regarding, "Documentation of the process to restore assets and systems that provide communications," NST believes the SDT should clarify what "assets and systems" might be in scope here.

R1 Part 1.4:

Regarding, "Identification of points within the infrastructure where the implemented methods reside," NST recommends "...within the inter- Control Center communications infrastructure..." to keep the scope of the Standard to the links specified by FERC.

R1 Part 1.5:

Regarding, "Contract, memorandum of understanding, meeting minutes, agreement or other documentation outlining the responsibilities of each entity," it is NST's opinion that, as with R1 Part 1.3, meeting minutes would hardly qualify as strong evidence a Responsible Entity has adequately addressed the referenced Requirement Part.

NST offers the following observations about proposed updates to CIP-012 Implementation Guidance:

NST believes the proposed changes to CIP-012 implementation guidance reduce rather than add clarity about what a Responsible Entity must or might do to address new availability requirements. We find suggestions to the effect that an Entity might rely on its CIP-008 and CIP-009 plans to address parts of CIP-012 to be of particular concern, for reasons including the fact such guidance creates at least the potential for "double jeopardy" situations in compliance audits. FERC wrote Order 866 precisely because the Commission believes none of the current CIP Standards address protection and recovery of communication links between Control Centers. It is NST's opinion the SDT should refrain from suggesting that perhaps they do, and should therefore be considered for inclusion in an Entity's CIP-012 compliance narratives.

NST also believes the SDT should refrain from making suggestions such as, on page 4, "Another method would be to use multiple systems that can aid availability in that one software solution providing data can fail independently of the other while data continues to flow via the alternate software/protocol stack. This can also be demonstrated utilizing network or system diagrams that identify the method(s) by which the protections are afforded by the solution." To repeat, it is NST's opinion that FERC did not intend for CIP-012 revisions to add data availability requirements that include sending and receiving Cyber Assets that are within, as opposed to between, Control Centers. The guidance should reaffirm that the focus is on the communications links between Control Centers.

Likes 1

Central Hudson Gas & Electric Corp., 1, Ridolfino Michael

Dislikes 0

Response

Jay Sethi - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Document Name

Comment

Manitoba Hydro appreciates the SDT efforts to add increased clarification to this most recent draft of CIP-012-2. Manitoba Hydro has identified similarities among the Standards addressing various facets of Real Time monitoring and Real Time Assessment data (ex. IRO-010, TOP-003, TOP-001, CIP-012). There appears to be an opportunity for NERC to create efficiencies in requirements for Control Center communications.

Likes 0

Dislikes 0

Response

James Baldwin - James Baldwin On Behalf of: Matt Lewis, Lower Colorado River Authority, 5, 1; - James Baldwin

Answer

Document Name

Comment

LCRA appreciates the SDT's effort and thoughtfulness in responding to industry comment and concerns. Project 2021-03 changes the definition of Control Center to include TOs with the capability to electronically control 2 or more locations. LCRA believes that this has the potential to drastically expand the scope of CIP-012 and does not address the original intent of the SAR.

TOPs are already receiving data from their TOs field devices. They may choose to send this data to their TO as a courtesy. By implementing additional compliance obligations around this data the new definition may have inadvertent consequences resulting in less sharing of data.

LCRA recommends that CIP-012-2 carve out an exclusion to not include TO Control Centers as defined in the proposed CIP-002 project. Alternatively, scoping Real-time Assessment and Real-time monitoring data to only be applicable if that data is used for making Real-time decisions may alleviate concerns.

Likes 0

Dislikes 0

Response

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter

Answer

Document Name

Comment

Please see our response to Question 2 and 3.

Likes 0

Dislikes 0

Response

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer

Document Name

Comment

BC Hydro suggests adding more clarity to the term 'availability' by providing a more detailed definition.

Although the SDT has altered the NIST definition of "Providing timely and reliable access to information" for defining the term 'availability' in the Technical Rationale document, a more detailed and specific definition concerning the application and use, specifically at entities to which this standard applies, will help improve a clear understanding and easier implementation. BC Hydro also suggests including some pertinent use cases and examples.

Likes 0

Dislikes 0

Response

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

Document Name

Comment

CIP-009 specifically addresses the backup and recovery for systems. It does not mention communication paths nor methods of data transport. CIP-009 should be modified to include this requirement; as it stands, there is a mismatch between standards, putting additional burden on implementation and maintenance of CIP-012.

BPA asks that the Standards Drafting Team clarify how mitigations/methods of protections (i.e., data masking and VPN/protocol encryption and the physical access restrictions) are different than CIP-005 and CIP-006 standards that are currently implemented.

BPA believes that there is too much bleed over into other standards such as CIP-005, -006 and -009 that has the potential to cause implementation errors and added burden/cost to maintaining multiple standards that cover like scenarios.

Likes 0

Dislikes 0

Response**John Daho - MEAG Power - 1,3 - SERC****Answer****Document Name****Comment**

The terms "transmit" and "communicate" should be used consistently in requirements, requirement parts, measures, technical rationale, etc. For example, Parts 1.1, 1.2 and 1.3 use both "transmit" and "communicate" terms, but it is recommended that the term "transmit" be used rather than "communicate".

Likes 0

Dislikes 0

Response**Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1****Answer****Document Name****Comment**

AEPC has signed on to ACES comments below:

ACES would like to thank the SDT's hard work to better clarify this draft. ACES still has the concern because this has the potential to conflict with other NERC reliability standards. Further, the Cyber Assets this impacts directly could and for most entities be Cyber Assets completely outside of any ESP and PSP. Thus the reason we have continued to suggest this belongs as a part of an O&P standard.

Likes 0

Dislikes 0

Response

Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO Group

Answer

Document Name

Comment

The MRO NSRF appreciates the SDT efforts to add increased clarification to this most recent draft of CIP-012-2. The MRO NSRF has identified similarities among the Standards addressing various facets of Real Time monitoring and Real Time Assessment data (ex. IRO-010, TOP-003, TOP-001, CIP-012). While the MRO NSRF understands the differences in the scopes of the different Standards, there appears to be an opportunity for NERC to create efficiencies in Requirements for Control Center communications.

Likes 0

Dislikes 0

Response

Donna Wood - Tri-State G and T Association, Inc. - 1

Answer

Document Name

Comment

NA

Likes 0

Dislikes 0

Response

Amy Wesselkamper - PNM Resources - Public Service Company of New Mexico - 1,3

Answer

Document Name

Comment

Regarding R1.5:

R1.1 and R1.2 do not require "Implementing methods", but rather Identification of methods.

R1.5 Should read:

If the Control Centers are owned or operated by different Responsible Entities, identification of the responsibilities of each Responsible Entity for implementing method(s) as **identified** in Parts 1.1 and 1.2.

Likes 0

Dislikes 0

Response

Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Merrell, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; John Nierenberg, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 1, 4, 5, 6, 3; - Jennie Wike, Group Name Tacoma Power

Answer

Document Name

Comment

Tacoma Power supports the R1.5 language. However, the redline to last approved file does not match the CIP-012-2 clean version verbiage. For example, the redline to last approved for R1.5 states “required in Parts 1.1 and 1.2”, when it should show “required in Parts 1.1, **1.2, and 1.3.**”

For the last bullet in the measures for R1.3, Tacoma Power recommends changing “vendor” to “provider”. It doesn’t necessarily need to be a vendor who maintains the communication link, so provider is a better choice for the measure. This is a non-substantive change. Recommended change: “Process or procedure to contact a communications link **provider** to initiate and or verify restoration of service.”

Likes 0

Dislikes 0

Response