Comment Report

2016-02 Modifications to CIP Standards | FERC Order No. 843 (Malicious Code Example) SAR **Project Name:**

Comment Period Start Date: 6/14/2018 Comment Period End Date:

7/13/2018

Associated Ballots:

There were 18 sets of responses, including comments from approximately 91 different people from approximately 68 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

- 1. Do you agree with the scope and objectives of this SAR? If not, please explain why you do not agree, and, if possible, provide specific language revisions that would make it acceptable to you.
- 2. Are you aware of any Canadian provincial or other regulatory requirements that may need to be considered during this project in order to develop a continent-wide approach to the standards? If yes, please identify the jurisdiction and specific regulatory requirements.
- 3. Are there any other concerns with this SAR that haven't been covered in previous questions?

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
	Aaron Ghodooshim	1,3,4	RF	FirstEnergy Corporation	Aaron Ghdooshim	FirstEnergy - FirstEnergy Corporation	4	RF
					Aubrey Short	FirstEnergy - FirstEnergy Corporation	1	RF
					Theresa Ciancio	FirstEnergy - FirstEnergy Corporation	3	RF
					Robert Loy	FirstEnergy - FirstEnergy Solutions	5	RF
					Ann Ivanc	FirstEnergy - FirstEnergy Solutions	6	RF
	Brandon McCormick		FRCC	FMPA	Tim Beyrle	City of New Smyrna Beach Utilities Commission	4	FRCC
					Jim Howard	Lakeland Electric	5	FRCC
					Lynne Mila	City of Clewiston	4	FRCC
					Javier Cisneros	Fort Pierce Utilities Authority	3	FRCC
					Randy Hahn	Ocala Utility Services	3	FRCC
					Don Cuevas	Beaches Energy Services	1	FRCC
					Jeffrey Partington	Keys Energy Services	4	FRCC
					Tom Reedy	Florida Municipal Power Pool	6	FRCC
					Steven Lancaster	Beaches Energy Services	3	FRCC

					Mike Blough	Kissimmee Utility Authority	5	FRCC
					Chris Adkins	City of Leesburg	3	FRCC
					Ginny Beigel	City of Vero Beach	3	FRCC
MRO	Dana Klem	1,2,3,4,5,6	MRO	MRO NSRF	Joseph DePoorter	Madison Gas & Electric	3,4,5,6	MRO
					Larry Heckert	Alliant Energy	4	MRO
					Amy Casucelli	Xcel Energy	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jodi Jensen	Western Area Power Administration	1,6	MRO
				Kayleigh Wilkerson	Lincoln Electric System	1,3,5,6	MRO	
					Mahmood Safi	Omaha Public Power District	1,3,5,6	MRO
				Brad Parret	Minnesota Powert	1,5	MRO	
					Terry Harbour	MidAmerican Energy Company	1,3	MRO
					Tom Breene	Wisconsin Public Service Corporation	3,5,6	MRO
					Jeremy Voll	Basin Electric Power Cooperative	1	MRO
						Kevin Lyons	Central Iowa Power Cooperative	1
					Mike Morrow	Midcontinent ISO	2	MRO
BC Hydro and Power Authority		1,3,5		BC Hydro	Patricia Robertson	BC Hydro and Power Authority	1	WECC
					Venkataramakrishnan Vinnakota	BC Hydro and Power Authority	2	WECC

					Pat G. Harrington	BC Hydro and Power Authority	3	WECC
					Clement Ma	BC Hydro and Power Authority	5	WECC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	RSC no Dominion	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Wayne Sipperly	New York Power Authority	4	NPCC
					Glen Smith	Entergy Services	4	NPCC
				Brian Robinson	Utility Services	5	NPCC	
				Alan Adamson	New York State Reliability Council	7	NPCC	
					Orange & Rockland Utilities	1	NPCC	
					David Burke	Orange & Rockland Utilities	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Laura Mcleod	NB Power	1	NPCC
			David Ramkalawan	Ontario Power Generation Inc.	5	NPCC		
					Helen Lainis	IESO	2	NPCC
				Michael Schiavone	National Grid	1	NPCC	
				Michael Jones	National Grid	3	NPCC	
			Michael Forte	Con Ed - Consolidated Edison	1	NPCC		
					Peter Yost	Con Ed - Consolidated	3	NPCC

						Edison Co. of New York		
					Sean Cavote	PSEG	4	NPCC
					Kathleen Goodman	ISO-NE	2	NPCC
					Quintin Lee	Eversource Energy	1	NPCC
					Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1,5	NPCC
					Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1,5	NPCC
					Salvatore Spagnolo	New York Power Authority	1	NPCC
					Shivaz Chopra	New York Power Authority	6	NPCC
					David Kiguel	Independent	NA - Not Applicable	NPCC
					Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	6	NPCC
					Caroline Dupuis	Hydro Quebec	1	NPCC
					Chantal Mazza	Hydro Quebec	2	NPCC
					Gregory Campoli	New York Independent System Operator	2	NPCC
					Paul Malozewski	Hydro One Networks, Inc.	3	NPCC
PSEG	Sean Cavote	1,3,5,6	NPCC,RF	PSEG REs	Tim Kucey	PSEG - PSEG Fossil LLC	5	NPCC
					Karla Barton	PSEG - PSEG Energy Resources and Trade LLC	6	RF
					Jeffrey Mueller	PSEG - Public Service Electric and Gas Co.	3	RF

					Joseph Smith	PSEG - Public Service Electric and Gas Co.	1	RF
Southwest Power Pool, Inc. (RTO)	Shannon Mickens	RE	SPP Standards Review Group	Shannon Mickens	Southwest Power Pool Inc.	2	MRO	
				Jim Williams	Southwest Power Pool Inc	2	MRO	
				John Allen	City Utilities of Springfield, Missouri	4	MRO	
					Louis Guidry	Cleco	1,3,5,6	SERC
					Matt Harward	Southwest Power Pool Inc	2	MRO
					Steven Keller	Southwest Power Pool Inc.	2	MRO
					Alan Wahlstrom	Southwest Power Pool Inc	2	MRO
				Kim Van Brimer	Southwest Power Pool Inc	2	MRO	

Thomas Foltz - AEP - 3,5						
Answer	No					
Document Name	INU INU					
Comment						
In fact, it essentially creates an Transient Cyber Assets and Rer It appears that these two properoject to three. AEP is not away project's direction and scope, a	on of the phrase "transient electronic devices", as that would imply a scope broader than that of other CIP standards. entirely new category of devices. Rather than this language, AEP suggests instead using the NERC defined terms movable Media as the obligations are further qualified. osed SARs would be applied to the project along with the existing SAR, bringing the total number of SARs for this are of any precedent of multiple, <i>concurrent</i> SARs governing a NERC project at a single point in time. A SAR helps set a and while a project's SAR may be revised over time, AEP does not believe Appendix 3A (Standards Process Manual) ciple, concurrent SARs to govern a single NERC project. Rather, the SPM allows a project's existing SAR to be revised to ieved to be necessary.					
Likes 0						
Dislikes 0						
Response						
Marty Hostler - Northern Cali	ornia Power Agency - 5,6					
Answer	No					
Document Name						
Comment						
NCPA is concerned by the inclusion of the phrase "transient electronic devices", as that would imply a scope broader than that of other CIP standards. In fact, it essentially creates an entirely new category of devices. Rather than this language, the NERC defined terms Transient Cyber Assets and Removable Media should be used.						
Likes 0						
Dislikes 0						
Response						
Dennis Sismaet - Northern Ca	alifornia Power Agency - 5,6					

Document Name	
Comment	
	phrase "transient electronic devices", as that would imply a scope broader than that of other CIP standards. category of devices. Rather than this language, the NERC defined terms Transient Cyber Assets and
Likes 0	
Dislikes 0	
Response	
Wendy Center - U.S. Bureau of Reclamat	ion - 1,5
Answer	No
Document Name	
Comment	
	requirements for low impact BCS into existing standards in the table and part format. For example, low properly be added to CIP-007; low impact transient cyber asset requirements would properly be added to
Likes 0	
Dislikes 0	
Response	
Patricia Robertson - BC Hydro and Powe	er Authority - 1,3,5, Group Name BC Hydro
Answer	No
Document Name	
Comment	

Upon review of the proposed SAR, BC Hydro offers the following comments in support of the position that this SAR needs to be more specific.

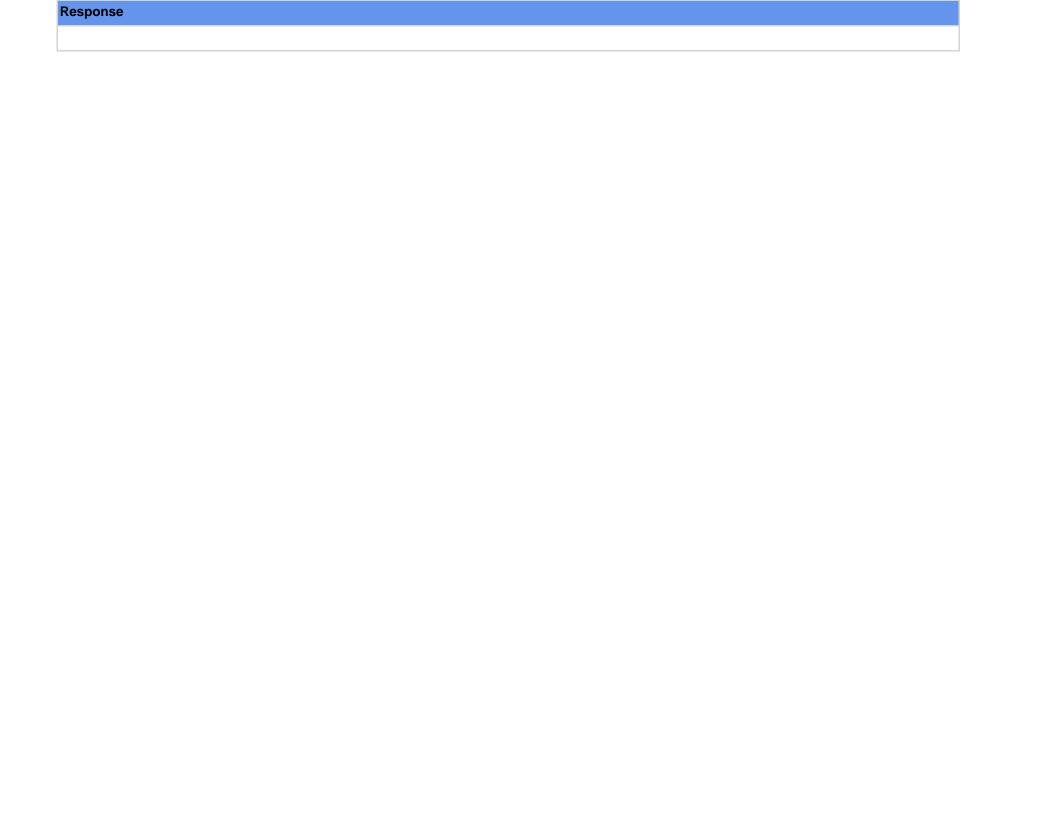
1. As the existing version of CIP-003-7 already specifies in its Section 5 of Attachment 1 mandatory prescriptions to implement "one or more plan(s) to achieve the objective of mitigating the risk of the introduction of malicious code" including third-party transient electronic devices (i.e. "Transient Cyber Asset(s) managed by a party other than the Responsible Entity" per Section 5.2), BC Hydro does not share FERC's concern and recommends that the SAR provide more clarity on the scope and reasoning behind FERC's requested modifications, i.e. "to include an explicit requirement that responsible entities implement controls to mitigate the risk of malicious code that could result from third-party transient electronic devices". (P 39 on Page 24 of FERC Order No. 843)

	alue add of revising CIP-003-7 when very similar language is already there. BC Hydro notes that y standard in regards to high and medium impact BES Cyber Systems, Attachment 1, Section 2 and subage and is not being revised.				
Likes 0					
Dislikes 0					
Response					
Russell Martin II - Salt River Project - 1,3	,5,6 - WECC				
Answer	Yes				
Document Name					
Comment					
SRP understands the main objective of the agrees with the scope of modifying CIP-003	SAR is to clarify compliance expectations regarding third-party transient electronic devices. SRP also 3-7, Attachment 1, Section 5.				
Likes 0					
Dislikes 0					
Response					
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Gre	oup Name MRO NSRF				
Answer	Yes				
Document Name					
Comment					
	AR addressing FERC's directive by modifying Section 5 of Attachment 1 to CIP-003-7 to clarify that ls to mitigate the risk of malicious code that could result from the use of third-party transient electronic				
Likes 0					
Dislikes 0					
Response					
Aaron Cavanaugh - Bonneville Power Ad	dministration - 1,3,5,6 - WECC				
Answer	Yes				
Document Name					
Comment					

None	
Likes 0	
Dislikes 0	
Response	
Sean Cavote - PSEG - 1,3,5,6 - NPCC,RF,	Group Name PSEG REs
Answer	Yes
Document Name	
Comment	
PSEG supports the proposed CIP-003-7 SA directive regarding third-party transient elec	AR because it provides sufficient scope and direction for the SDT to address the FERC Order No. 843 tronic devices.
Likes 0	
Dislikes 0	
Response	
Aaron Ghodooshim - FirstEnergy - First	Energy Corporation - 1,3,4, Group Name FirstEnergy Corporation
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Ramkalawan - Ontario Power Gene	eration Inc 5
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0				
Response				
David Jendras - Ameren - Ameren Service	ces - 1,3,6			
Answer	Yes			
Document Name				
Comment				
Likes 0				
Dislikes 0				
Response				
Andrew Gallo - Austin Energy - 1,3,4,5,6				
Answer	Yes			
Document Name				
Comment				
Likes 0				
Dislikes 0				
Response				
Vivian Vo - APS - Arizona Public Service	Co 1,3,5,6			
Answer	Yes			
Document Name				
Comment				
Likes 0				
Dislikes 0				
Response				
Brandon McCormick - Florida Municipal	Power Agency - 3,4,5,6 - FRCC, Group Name FMPA			
Answer	Yes			

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Warren Cross - ACES Power Marketing -	2,4,5,6 - WECC,Texas RE,SERC,RF
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Shannon Mickens - Southwest Power Po	ool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinati	ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	



2. Are you aware of any Canadian provincial or other regulatory requirements that may need to be considered during this project in order to develop a continent-wide approach to the standards? If yes, please identify the jurisdiction and specific regulatory requirements.				
Patricia Robertson - BC Hydro and Powe	er Authority - 1,3,5, Group Name BC Hydro			
Answer	No			
Document Name				
Comment				
At this time, this may change as the full sco	pe of the SAR is developed.			
Likes 0				
Dislikes 0				
Response				
Brandon McCormick - Florida Municipal	Power Agency - 3,4,5,6 - FRCC, Group Name FMPA			
Answer	No			
Document Name				
Comment				
None that we are aware of.				
Likes 0				
Dislikes 0				
Response				
Aaron Cavanaugh - Bonneville Power Ad	Iministration - 1,3,5,6 - WECC			
Answer	No			
Document Name				
Comment				
None				
Likes 0				
Dislikes 0				
Response				

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion			
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Shannon Mickens - Southwest Power Po	ool, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Warren Cross - ACES Power Marketing -	2,4,5,6 - WECC,Texas RE,SERC,RF		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Sean Cavote - PSEG - 1,3,5,6 - NPCC,RF,	, Group Name PSEG REs		
Answer	No		
Document Name			
Comment			

Likes 0		
Dislikes 0		
Response		
Vivian Vo - APS - Arizona Public Service	Co 1,3,5,6	
Answer	No	
Document Name		
Comment		
Likes 0		
Dislikes 0		
Response		
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Gro	pup Name MRO NSRF	
Answer	No	
Document Name		
Comment		
Likes 0		
Dislikes 0		
Response		
Andrew Gallo - Austin Energy - 1,3,4,5,6		
Answer	No	
Document Name		
Comment		
Likes 0		
Dislikes 0		
Response		
David Jendras - Ameren - Ameren Services - 1,3,6		

Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
David Ramkalawan - Ontario Power Gene	eration Inc 5		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Aaron Ghodooshim - FirstEnergy - First	Energy Corporation - 1,3,4, Group Name FirstEnergy Corporation		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Wendy Center - U.S. Bureau of Reclamation - 1,5			
Answer	No		
Document Name			
Comment			
Likes 0			

Dislikes 0			
Response			
Dennis Sismaet - Northern California Power Agency - 5,6			
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Marty Hostler - Northern California Powe	er Agency - 5,6		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Thomas Foltz - AEP - 3,5			
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Russell Martin II - Salt River Project - 1,3,5,6 - WECC			
Answer	No		

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

3. Are there any other concerns with this	s SAR that haven't been covered in previous questions?		
Wendy Center - U.S. Bureau of Reclamate	tion - 1,5		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Aaron Cavanaugh - Bonneville Power Ad	Aaron Cavanaugh - Bonneville Power Administration - 1,3,5,6 - WECC		
Answer	No		
Document Name			
Comment			
None			
Likes 0			
Dislikes 0			
Response			
Thomas Foltz - AEP - 3,5			
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Marty Hostler - Northern California Powe	er Agency - 5,6		

Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Dennis Sismaet - Northern California Por	wer Agency - 5,6		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
Aaron Ghodooshim - FirstEnergy - FirstE	Energy Corporation - 1,3,4, Group Name FirstEnergy Corporation		
Answer	No		
Document Name			
Comment			
Likes 0			
Dislikes 0			
Response			
David Ramkalawan - Ontario Power Generation Inc 5			
Answer	No		
Document Name			
Comment			
Likes 0			

Dislikes 0	
Response	
David Jendras - Ameren - Ameren Servio	ces - 1,3,6
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andrew Gallo - Austin Energy - 1,3,4,5,6	
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Gr	
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Vivian Vo - APS - Arizona Public Service	
Answer	No

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Sean Cavote - PSEG - 1,3,5,6 - NPCC,RF	, Group Name PSEG REs
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Ruida Shu - Northeast Power Coordinati	ng Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion
Answer	No
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Russell Martin II - Salt River Project - 1,3	,5,6 - WECC
Answer	Yes
Document Name	
Comment	
FERC Order 843, paragraph 34 states "shi	ould a Responsible Entity find that a third party's processes and practices for protecting its transient

FERC Order 843, paragraph 34 states, "should a Responsible Entity find that a third party's processes and practices for protecting its transient electronic devices inadequate, the Responsible Entity must be required to take mitigating action prior to connecting third-party transient electronic devices to a low impact BES Cyber System." According to NERC, "failure to take mitigating action in this circumstance could result in a finding of

	nt 1." However, the SAR does not specify this to be the reasoning for the modification. The SAR should be inderstand the intent behind the requested modification.		
Likes 0			
Dislikes 0			
Response			
Brandon McCormick - Florida Municipal	Power Agency - 3,4,5,6 - FRCC, Group Name FMPA		
Answer	Yes		
Document Name			
Comment			
the SDT to not use this phrase when modify	C Order No. 843 which uses the phrase "third-party transient electronic devices." We would strongly urge ving CIP-003-7 but instead use the NERC glossary defined term "Transient Cyber Asset". It is our opinion ent Cyber Asset will allow the SDT to satisfy the requirements of the FERC order without creating an entirely		
Likes 0			
Dislikes 0			
Response			
Shannon Mickens - Southwest Power Po	ol, Inc. (RTO) - 2 - MRO, Group Name SPP Standards Review Group		
Answer	Yes		
Document Name			
Comment			
The SPP Standards Review Group ("SSRG") understands the FERC order requires NERC address the narrowly defined issue related to risk of malicious code that could result from third-party transient electronic devices. Given the potential for other gaps within CIP-003-7 that relate to the mitigation of malicious code, the SSRG suggests the Standard Drafting Team consider utilizing this SAR to review the overarching issue of mitigating malicious code and explore whether additional changes are also appropriate to be included in proposed revisions to the standard. Also, the Standards Drafting Team understands that changes to Section 5 of Attachment 1, as directed by FERC, will apply to Low Impact BES Cyber System Assets, which are by definition low risk. The Standards Drafting Team should ensure that the changes proposed to Section 5 of Attachment 1 do not inadvertently pull in other classifications of BES Cyber System Assets.			
Finally, the SSRG recommends that Impler	mentation Guidance should be developed.		
Likes 0			
Likes 0 Dislikes 0			

Warren Cross - ACES Power Marketing - 2,4,5,6 - WECC,Texas RE,SERC,RF				
Answer Yes				
Document Name				
Comment				
Likes 0				
Dislikes 0				
Response				