

Consideration of Comments

Project 2012-13 Nuclear Plant Interface Coordination

The Project 2012-13 Five-Year Review Team (FYRT) thanks all commenters who submitted comments on the draft Five-Year Review Recommendation on NUC-001-2. The draft recommendation was posted for a 45-day comment period from July 26, 2013 through September 9, 2013. Stakeholders were asked to provide feedback on the draft recommendation and associated documents through a special electronic comment form. There were 25 sets of responses, including comments from approximately 98 different people from approximately 75 companies representing 9 of the 10 Industry Segments as shown in the table on the following pages. All comments submitted may be reviewed in their original format on the project page.

Summary Consideration: The FYRT notes that most commenters agree with the FYRT's recommendation to revise NUC-001-2, but that several commenters expressed specific comments and concerns about that recommendation. Also, several comments in response to Questions 1, 2, 3, and 4 are duplicative, and several commenters raise substantively the same issues. Therefore, the FYRT's consideration of all comments are summarized in this section, with duplicate comments treated as a single issue in the FYRT's response.

Commenters suggest adding new defined terms to the NERC Glossary of Terms, including "electric system," and "Protective Relay Setpoints." It does not appear that industry supports adding any new defined terms to the NERC Glossary of Terms at this time, and the FYRT agrees. However, the standard drafting team (SDT) should evaluate whether "electric system" should be defined in the NUC-001 standard. The FYRT agrees that a single term is appropriate to provide consistency in R7 and R8 for "protective setpoints" and "relay setpoints," and proposes "protective relay setpoints" as a substitute.

Commenters note that some changes identified in the SAR are not reflected in the proposed redlined standard, and that the proposed redlined standard does not contain Compliance Elements. The SDT will develop all Complicance Elements including VSLs, VRFs, measures, and Time Horizons if the NUC-001-2.1 standard is revised.

Commenters asked the FYRT to consider the "Standards Independent Experts Review Project," which stated that the NUC standard is "steady state." The FYRT considered the Independent Experts Report and generally agreed with its recommendations on NUC-001-2. However, based on industry's experience and recent changes to the standard to incorporate the defined term Protection System, the FYRT believes – and a majority of commenters appear to support – that the standard should be revised to improve the standard.

Commenters noted that the NPLR definition in the standard is not consistent with the NERC Glossary of Terms. The FYRT agrees that the term "NPLR" as related to the Canadian nuclear plants is potentially confusing and recommends changing the term to "Canadian Nuclear Plant Licensing Requirements

(CNPLR)," which is not used in the NERC Glossary of Terms. Use of the term "Canadian Nuclear Plant Licensing Requirements (CNPLR)" will differentiate the unique licensing requirements of the Canadian Nuclear Power Plants from those in the U.S.

At least one commenter expressed concern that material changes in NUC-001 could lead to continent-wide revisions of the individual plant NPIR agreements, and that the standard should be affirmed. However, the FYRT was careful to avoid recommendations that would renumber the standard to minimize impacts any revisions might have on existing agreements. Any inconvenience caused by the changes required to improve the standard will be offset by enhanced clarity.

Commenters asked for revised effective date language that accounts for Canada. NERC and the Canadian Electricity Association (CEA) have agreed upon new boilerplate language for the effective date section of a standard. This new language was inserted into the FYRT's recommendation and will be used moving forward in all standards, including NUC-001. The revised standard NERC language for Effective Date takes into account Canadian jurisdictional characteristics (please see the proposed redlined standard).

Commenters note that Requirement R9 states that some elements may not apply, and that each section should not be a subrequirement. The FYRT notes that in the new format, R9.3 becomes Part 9.3, i.e., not a subrequirement. The SDT will consider and address transmission concerns in the body of the requirements. Another option for the SDT to consider is to add clarifying language in an external "Rationale" text box directly in the standard, or to add an opening sentence in R9 indicating that the Nuclear Plant Generator Operator has the responsibility for ensuring all the R9 requirements are addressed in aggregate within the agreements with the transmission entities. The FYRT also has clarified that the transmission entities have responsibility for ensuring that those requirements that are applicable to them are included in their agreements. The FYRT has developed a more succinct discussion of the agreements with one transmission entity versus the agreements with all transmission entities. Please see the proposed redlined standard for the FYRT's recommended clarifying language, understanding that the ultimate resolution will be addressed by the SDT.

One commenter suggested retiring R9.4.5, explaining that training already is covered in PER-005. The FYRT determined that PER-005 does not sufficiently address specific training and discussion of the nuclear plant interface requirements and therefore will not recommended retiring R9.4.5. The topic of consolidation of training requirements into a single standard is still the subject of active discussion in the context of the IERP recommendations, and if there is general stakeholder support for moving in that direction, it will be addressed in the future.

Commenters asked the FYRT to review R9.3.5 to ensure it is not redundant with other standards. The FYRT reviewed R9.3.5 and does not believe the standards are duplicative because R9.3.5 adds the concept of a nuclear power plant in a condition where there is no onsite power available. NUC-001 addresses that the transmission entities must have an understanding of the offsite power requirements within the agreements, and EOP-005 addresses that the transmission entities must have an understanding of the nuclear offsite power requirements within their blackstart restoration plan.

These are two separate documents that the FYRT believes cannot be adequately addressed by one standard.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Mark Lauby, at 404-446-2560 or at mark.lauby@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process. ¹

¹ The appeals process is in the Standard Processes Manual: http://www.nerc.com/comm/SC/Documents/Appendix 3A StandardsProcessesManual.pdf

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4.	If you have any other comments on the Five-Year Review Recommendation to Revise or the SAR that you have not already mentioned above, please provide them here:



The Industry Segments are:

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

G	roup/Individ	ual	Commenter	Organization				Registered Ballot Body Segment										
							1	2	3	4	5	6	7	8	9	10		
1.	Group	Group Russel Mountjoy MRO NERC Stanrdards Review Forum		s Review Forum	Χ	Χ	Χ	Χ	Χ	Х								
	Additional Memb	er	Additional Organization	Region	Segment Selection													
1.	Alice Ireland	Xcel	Energy	MRO	1, 3, 5, 6													
2.	Dan Inman	Minr	nkota Power Cooperative	MRO	1, 3, 5, 6													
3.	Dave Rudolph	Basi	n Electric Power Coop	MRO	1, 3, 5, 6													
4.	Kayleigh Wilkerson	n Linc	oln Electric System	MRO	1, 3, 5, 6													
5.	Jodi Jensen	Wes	stern Area Power Administration	MRO	1, 6													
6.	Joseph DePoorter	Mad	lison Gas & Electric	MRO	3, 4, 5, 6													
7.	Ken Goldsmith	Allia	nt Energy	MRO	4													
8.	Mahmood Safi	Oma	aha Public Power District	MRO														
9.	Marie Knox	Midd	continent Independent System Operato	r MRO	2													
10.	Mike Brytowski	Grea	at River Energy	MRO	1, 3, 5, 6													
11.	Scott Bos	Mus	catine Power and Water	MRO	1, 3, 5, 6													

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Group/Individual	Commenter	Organization		Registered Ballot Body Segment										Formatted: line	re: 0.4 line, After		
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12. Scott Nickels	Rochester Public Utilities	MRO 4											_ (line			
13. Terry Harbour	MidAmerican Energy	MRO 1, 3, 5, 6															
	Wisconsin Public Service	MRO 3, 4, 5, 6															
15. Tony Eddleman	Nebraska Public Power District	MRO 1, 3, 5															
2. Group	Guy Zito	Northeast Power Coordinating Council										Х					
Additional Member	Additional Organization	Region Segment Selection															
Alan Adamson	New York State Reliability Council, LLC	NPCC 10															
2. Greg Campoli	New York Independent System Operator	r NPCC 2															
3. Ben Wu	Orange and Rockland Utilities	NPCC 1															
Gerry Dunbar	Northeast Power Coordinating Council	NPCC 10															
Mike Garton	Dominion Resources Services, Inc.	NPCC 5															
Kathleen Goodman	ISO - New England	NPCC 2															
7. Michael Jones	National Grid	NPCC 1															
8. Mark Kenny	Northeast Utilities	NPCC 1															
9. David Kiguel	Hydro One Networks Inc.	NPCC 1															
10. Christina Koncz	PSEG Power LLC	NPCC 5															
11. Helen Lainis	Independent Electricity System Operator	r NPCC 2															
12. Michael Lombardi	Northeast Power Coordinating Council	NPCC 10															
13. Randy MacDonald	New Brunswick Power Transmission	NPCC 9															
14. Bruce Metruck	New York Power Authority	NPCC 6															
15. Silvia Parada Mitchell	NextEra Energy, LLC	NPCC 5															
16. Lee Pedowicz	Northeast Power Coordinating Council	NPCC 10															
17. Rogert Pellegrini	The United Illuminating Company	NPCC 1															
18. Brian Robinson	Utility Services	NPCC 8															
19. Brian Shanahan	National Grid	NPCC 1															
20. Wayne Sipperly	New York Power Authority	NPCC 5															
21. Donald Weaver	New Brunswick System Operator	NPCC 2				,			,								
3. Group	Ben Engelby	ACES Standards Collaborators						Χ									
	dditional Organization Region Segme rairie Power, Inc. SERC 3	ent Selection															
4. Group	Patrick Brown	NAGF Standards Review Team					Х										
Additional Member 1. Allen Schriver		Segment Selection 5															

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Terry Crawley Sou	uthern Company Generation	5												
4. Pamela Dautel IPR	R-GDF Suez Generation NA	5												
5. Dan Duff Lib	erty Electric Power	5												
6. Gary Kruempel Mid	American Energy Company	5												
7. Katie Legates Am	erican Electric Power	5												
8. Don Lock PP	L Generation, LLC	5												
9. Joe O'Brien NIF	PSCO	5												
10. Chris Schaeffer Dul	ke Energy	5												
11. Dana Showalter E.C	ON Climate & Renewables	5												
12. William Shultz Sou	uthern Company	5												
13. Mark Young Ter	naska, Inc	5												
5. Group	Stuart Goza	SERC OC Review Group	Х		Χ		Х	Χ						
James D Porter TVA Jennifer R Weber A. James Case Group	SERC 1, 3, 5,	6	X		Х		Х	Х						
Additional Member	Additional Organization Reg	gion Segment Selection	l .	<u> </u>	1		1			1	1			
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	ninion Resources Services, Inc. MR0													
	·	CC 5, 6												
	nia Electric and Power Company SEF	-												
7. Group	Kathleen Black	DTE Electric			Х	Х	Х							
Additional Member	Additional Organization	Region Segment Selection												
Kent Kujala NER	C Compliance	RFC 3												
2. Daniel Herring NER	C Training & Standards Development	RFC 4												
3. Al Eizans Regu	ulated Marketing	RFC 5												
4. Karie Barczak NER	C Compliance	RFC												
5. Joseph Staniak OPE		RFC												
6. Barbara Holland SOC)	RFC												
8. Group	Michael Lowman	Duke Energy	Х		Х		Х	Х						

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Group/Individua		ual	Comm	enter			Organization			Regi	stere	d Ball	ot Boo	ly Seg	ment		+
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9.	Group		Frank Gaffne	y		Florida M	Iunicipal Power Agency	Х		Х	Х	Х	Χ				
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1. Tin	nothy Beyrle	City o	of New Smyrna Bead														
	n Howard		and Electric	FRCC													
	eg Woessner		mmee Utility Authorit														
	nne Mila iiro Vanegas	-	of Clewiston Pierce Utility Authorit	FRCC													
	indy Hahn		Utility Services	FRCC													
	anley Rzad		Energy Services	FRCC													
10.						Southern	Company: Southern	Χ		Χ		Χ	Χ				
						Company	/Services, Inc.; Alabama Power										
						Company	;; Georgia Power Company; Gulf										
						Power Co	ompany; Mississippi Power										
						Company	;; Southern Company Generation;										
						Southern	Company Generation and Energy										
	Group		Marcus Pelt			Marketin	g										
No a	dditional m	embe	ers added					•					•				
11.	Individual		Silvia Parada	Mitch	nell	NextEra l	Energy										
12.	Individual		Winnie Hold	en		PSEG		Х		Х		Х	Х				
13.	Individual		Thomas Foltz	z		Americar	n Electric Power	Х		Х		Х	Х				
14.	Individual		Michael Falv	0		Independ	dent Electricity System Operator		Χ								
15.	Individual		RoLynda Shu	mper	t	South Ca	rolina Electric and Gas	Х		Χ		Χ	Х				
16.	Individual		RoLynda Shu	mper	t	South Ca	rolina Electric and Gas	Х		Х		Х	Х				
17.	Individual		Tiffany Lake			Westar E	Х		Χ		Х	Х					
18.	Individual		John Bee			Exelon a	nd its' affiliates	Χ		Χ		Х					

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19.	Individua	al	Oliver Burke	Entergy Services, Inc.	Х												
20.	Individua	al	Andrew Gallo	City of Austin dba Austin Energy	Х		Х	Х	Х	Х							
21.	Individua	al	David Thorne	Pepco Holdings Inc	Х		Х										
22.	Individua	al	Kathleen Goodman	ISO New England Inc.		Х											
23.	Individua	al	Chris de Graffenried	Consolidated Edison Co. of NY, Inc.	Х		Х		Х	Х							
24.	Individual Andrew Z. Pusztai		Andrew Z. Pusztai	American Transmission Company, LLC	Х												

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If you support the comments submitted by another entity and would like to indicate you agree with their comments, please select "agree" below and enter the entity's name in the comment section (please provide the name of the organization, trade association, group, or committee, rather than the name of the individual submitter).

Organization	Agree	Supporting Comments of "Entity Name"					
South Carolina Electric and Gas	Agree	The SERC OC Standards Working Group					
South Carolina Electric and Gas	Agree	SERC OC Standards Working Group					
Entergy Services, Inc.	Agree	SERC OC Review Group comments.					
ISO New England Inc.	Agree	NPCC RSC					
American Transmission Company, LLC	Agree	ATC supports and agrees with the "MRO NERC Standards Review Forum (NSRF)" comments that were submitted.					

1. Do you agree with this recommendation? If not, please explain specifically what aspects of the recommendation you disagree with.

Summary Consideration: Please see the Summary Consideration above, which includes the FYRT's response to comments in this section.

Organization	Yes or No	Question 1 Comment
ACES Standards Collaborators	No	We agree with the Five Year Review team that there are areas that could be refined within NUC-001. However, we question the format of Requirement R9, in particular using sub-requirements. The proposed redline text states that some of these elements may not apply, and therefore, each section should not be a sub-requirement.
Consolidated Edison Co. of NY, Inc.	No	See reply to Question 4
MRO NERC Stanrdards Review Forum	Yes	Yes, the NSRF agrees with the overall recommendation to "REVISE" NUC-001-2 Standard, however, it does not appear the changes proposed are properly reflected and coordinated between the three applicable documents, (1) Five-Year Review Recommendation to Revise NUC-001-2, (2) the SAR and (3) Redlined version of NUC-001-2. Examples of these are in responses to Questions #3 and #4 of the Comment Form.
NAGF Standards Review Team	Yes	1. We agree with proposed revisions to the standard, especially revision #3. We believe that "Protection Systems" should be omitted from R7 and R8. The intent of the NUC-001 standards was not to tie in PRC-005 compliance obligations of maintenance and testing of Relays, CTs & PTs, D.C. Circuitry, Communication Devices and Batteries, but instead was to coordinate major changes to overall protection systems and protection system settings for those systems that could possibly impact the protection system interface at the GO/TO interconnection.2. We also agree with

Organization	Yes or No	Question 1 Comment
		proposed change #4. The proposal of revising R9 to clarify that all the agreements do not have to discuss each element of R9 is helpful for nuclear generators that have multiple agreements with transmission entities. This proposed revision may also be helpful for any GO/GOP's that have obligations in agreements that are necessary to meet a sub-requirement of NUC-001 R9 to meet an NPIR with nuclear generators or transmission entities. This allows the agreement to cover only what is applicable to the specific entity and removes the responsibility to document unnecessary elements of R9 in cases where the entity involved in the agreement does not perform all the functions required of R9. For example, an agreement between the blackstart facility and the associated NPGO and/or TO could be required documentation necessary to meet R9.2.2 if the blackstart facility is identified as a facility necessary for meeting an NPIR. This blackstart facility would not be required to include in the agreement documentation of other R9 subrequirements such as R9.4.1, provision of communication between the NPGO and Transmission Entities, if it had been established that the NPGO will communicate with the TO and not directly with the blackstart generator. Therefore the amendment to the standard would allow agreements to meet the NPIR to be limited to only the relevant R9 subrequirements of the applicable entity. Currently, the standard is written ambiguously and an auditor could interpret that all R9 requirements must be included in an agreement regardless if the entity is required or even cable to perform the function as stated in R9.
Florida Municipal Power Agency	Yes	Yes, FMPA agrees with the overall recommendation to "REVISE" NUC-001-2 Standard, however, it does not appear the changes proposed are properly reflected and coordinated between the three applicable documents, (1) Five-Year Review Recommendation to Revise NUC-001-2, (2) the SAR and (3) Redlined version of NUC-001-2. Examples of these are in responses to Questions #2-4 of the Comment Form.
Northeast Power Coordinating Council	Yes	

Organization	Yes or No	Question 1 Comment
SERC OC Review Group	Yes	
Dominion	Yes	
DTE Electric	Yes	
Duke Energy	Yes	
PSEG	Yes	
American Electric Power	Yes	
Independent Electricity System Operator	Yes	
Westar Energy	Yes	
Exelon and its' affiliates	Yes	
City of Austin dba Austin Energy	Yes	
Pepco Holdings Inc	Yes	



2. Do you agree that NUC-001-2 should be revised?

Summary Consideration: Please see the Summary Consideration above, which includes the FYRT's response to comments in this section.

Organization	Yes or No	Question 2 Comment
Organization	Question 2	Question 2 Comments:
MRO NERC Stanrdards Review Forum	Yes	Yes, however, the NSRF is concerned that the Redlined copy of NUC-001-2 does not reflect all the changes being addressed in the Five-Year Review Recommendation to Revise NUC-001-2 document nor in the SAR. (For details, see response to Questions #3 and #4.
ACES Standards Collaborators	Yes	We generally agree with the proposed revisions. However, we would like the Five Year Review Team to consider the "Standards Independent Experts Review Project," which stated that the NUC standards were considered to be "steady state" with high content and quality scores. With this feedback, we recommend that this project receive a low priority ranking if it is determined that these proposed revisions meet the threshold of creating a new standards development project.
NAGF Standards Review Team	Yes	Given the compliance uncertainties now that "Protection Systems" is a formalized definition in NERC's glossary intended for PRC-005 maintenance and testing intervals, it is necessary to exclude the use of this term from the standard. The NUC-001 standard would allow for PRC-005 standard creep and could find nuclear generators and transmission owners in double jeopardy under the standards NUC-001 R7, R8 and PRC-005 for any "Protection System" related potential violations.

Organization	Yes or No	Question 2 Comment
Duke Energy	Yes	Duke Energy agrees with the changes made by the 5-year Review Team.
Florida Municipal Power Agency	Yes	Yes, however FMPA is concerned that the Redlined copy of NUC-001-2 does not reflect all the changes being addressed in the Five-Year Review Recommendation to Revise NUC-001-2 document nor in the SAR. (For details, see response to Questions #3 and #4.
NextEra Energy	Yes	NextEra generally agrees with the revisions to NUC-001-2; however, NextEra does not find that there is an immediate need to make the changes, which are minor, and, therefore, requests that any SAR or propsoed revisions to NUC-001-2 be given a low priority in the Standards development process.
Northeast Power Coordinating Council	Yes	
SERC OC Review Group	Yes	
Dominion	Yes	
DTE Electric	Yes	
PSEG	Yes	
American Electric Power	Yes	
Westar Energy	Yes	
Exelon and its' affiliates	Yes	
City of Austin dba Austin Energy	Yes	

Organization	Yes or No	Question 2 Comment
Pepco Holdings Inc	Yes	
Independent Electricity System Operator		We do not feel strongly one way or the other since many of the proposed changes are intended to add clarity without much material impact on the intent of the standard or compliance implications other than the removal of the term "Protection Systems" from R7 and R8. We can support a revision at this time via the usual standard development process or the Errata process, or to simply keep it the same with a declaration that the standard has been reviewed and found to be valid and appropriate for another 5 years or when changes occur that warrant a revision.
Consolidated Edison Co. of NY, Inc.		See reply to Question 4

3. A draft SAR and redline of NUC-001-2 showing the proposed recommended revisions to the Requirements of NUC-001-2 have been posted with the Nuclear Plant Interface Coordination (Project 2012-13) Five-Year Review Team (FYRT) Draft Recommendation. If you agree that NUC-001-2 should be revised, do you agree that the redlined NUC-001-2 standard posted with the SAR is an effective and reasonable implementation of that recommendation? Please note that if the recommendation to revise NUC-001-2 is made in the final recommendation and accepted by the Standards Committee, any changes will be made through the formal standards development process.

Summary Consideration: Please see the Summary Consideration above, which includes the FYRT's response to comments in this section.

Organization	Yes or No	Question 3 Comment
MRO NERC Stanrdards Review Forum	No	We believe there are recommendations not addressed in the Redline that are listed in the SAR Information. They are the following and should be noted somehow in the Redline:1.) Bullet #6, Modify the VSL and VRF Matrices to conform to NERC Guidelines2.) Bullet #9, Add Time Horizons to each RequirementIncluded within NUC-001-2 Section E is a definition of Nuclear Plant Licensing Requirements (NPLR) which is also defined in the NERC Glossary of Terms Used in Reliability Standards. The two do not match nor do we believe that NPLR needs to be defined within the Standard. Note - Five-Year Review Recommendation to Revise NUC-001-2, Additional Questions Considered by the FYRT, addresses Clarity (No. 2) which lists several improvements. Under this, Item #5 recommends inserting "affecting the NPIRs" to R9.4.1, which is currently just "affecting NPIRs". Need to make the two match.Note - Five-Year Review Recommendation to Revise NUC-001-2, Additional Questions Considered by the FYRT, addresses Compliance Elements (No. 4) which recommends inserting "actual and proposed" before the textchanges to Nuclear Plant Design in Measures 7 and 8, as used for R7 and R8, respectively. These changes are not shown in the Redline copy of NUC-001-2.
Florida Municipal Power Agency	No	FMPA believes there are recommendations not addressed in the Redline that are listed in the SAR Information. They are the following and should be noted somehow

Organization	Yes or No	Question 3 Comment
		in the Redline:1.) Bullet #6, Modify the VSL and VRF Matrices to conform to NERC Guidelines2.) Bullet #9, Add Time Horizons to each Requirement
Consolidated Edison Co. of NY, Inc.	No	See reply to Question 4
ACES Standards Collaborators	Yes	The SAR and the redlined standard provide a reasonable approach to the revision. As stated earlier, if it is determined that NUC-001 should be revised, we recommend this project receive a low priority based on the Industry Expert Review report that concluded that the NUC standards are considered to be "steady state" with high content and quality scores.
Dominion	Yes	M5, M7 and M8 need to be updated to reflect changes made in R5, R7 and R8.
Independent Electricity System Operator	Yes	We generally support the marked changes. It is comforting to know that "any changes will be made through the formal standards development process" as this is important that standard changes be managed by the established formal process.
Northeast Power Coordinating Council	Yes	
NAGF Standards Review Team	Yes	
SERC OC Review Group	Yes	
DTE Electric	Yes	
Duke Energy	Yes	
PSEG	Yes	
American Electric Power	Yes	

Organization	Yes or No	Question 3 Comment
Westar Energy	Yes	
Exelon and its' affiliates	Yes	
City of Austin dba Austin Energy	Yes	
Pepco Holdings Inc	Yes	

4. If you have any other comments on the Five-Year Review Recommendation to Revise or the SAR that you have not already mentioned above, please provide them here:

Summary Consideration: Please see the Summary Consideration above, which includes the FYRT's response to comments in this section.

Organization	Question 4 Comment
Florida Municipal Power Agency	FMPA has the following additional recommendations/comments:1.) The following terms, used in the NUC-001 Standard, should be considered as new defined terms for the NERC Glossary of Terms used in Reliability Standards:a. The term "Protective Relay Setpoints" used several times in the Standard should be clarified since identified as a subset of a "Protection System".2.) The SAR does not list "Nuclear Plant Generator Operators" (NPGOs) as part of the applicable Reliability Functions, however, is clearly listed in Section 4. Applicability of the NUC-001-2 Standard.3.) The Reliability and Market Interface Principles No. 5 should also be checked, as applicable, for this SAR since Requirement R9.4 of NUC-001-2 addresses communications.4.) The Five-year Review identified changes within the NUC-001-2 Redline in Section E, Regional Differences; however, Regional Variances was marked as N/A in the SAR. FMPA believes that there should be something in the SAR to address the Canadian (CANDU) Nuclear Power Plant design basis which coincide with the changes made to NUC-001-2 and address Canadian jurisdictional differences.
Dominion	Five-Year Review Recommendation; Page 4, Question 4; the comment to Question 4 is in conflict with the answer, "Yes". The comment supports a "NO" response based on the comments provided. Dominion believes that the formatting of this standard does require a change in order to include the text of the Measure subsequent to the text of the related Requirement. Better alignment between Requirement and Measure is needed for R5/M5; specifically R5"operate the nuclear plant to meet the NPIRs" and M5"operated consistent with the Agreements"Better alignment between Requirement and Measure is needed for R7/M7; specifically R7"ability of the electric system to meet the NPIRs" and M7"ability of the Transmission Entities to meet the NPIRs"Better alignment between Requirement and Measure is needed for R8/M8; Specifically R8"ability of the electric

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	system to meet the NPIR" and M8" ability of the Nuclear Plant Generator Operator to meet
	the NPIRs"While the proposed red-line seeks to remedy Version 2.1 errata change (i.e.
	Capitalization of Protection System) Dominion agrees with the SAR suggestion to "make
	errata changes where warranted," provided that such errata change does not change the
	intent of the standard as was previously done with Version 2.1.
ACES Standards Collaborators	(1) We believe the proposed changes to R7 and R8 (deleting lowercase "protection systems"
ACES Startagras Comasorators	and adding "protective setpoints" and "relay setpoints") creates ambiguity and confusion.
	What is the drafting team trying distinguish by using different terms such as relay setpoint
	and protective setpoint? This proposed revision may create additional confusion. We suggest
	using the same example for both requirements, adding clarity for each example, or leaving
	the requirements as currently worded.(2) Thank you for the opportunity to comment.
City of Austin dba Austin Energy	Austin Energy (AE) believes the response to Q4 in the NUC Five-Year Review
City of Austin and Austin Energy	Recommendation should be "No" to match the narrative response provided to that question.
Duke Energy	Duke Energy believes that the term "electric systems" should be changed to Bulk Electric
Dance Energy	System (BES) to better align this standard and requirements with the NERC Glossary of
	Terms. However, if this is not the proper definition, we seek clarification from the 5-year
	Review Team on the term "electric systems" used in NUC-001.NUC-001 should address
	coordination, between the Nuclear Plant Generator Operator and the applicable
	Transmission Entities, of power system design & operation required to support nuclear site
	emergency preparedness/response. Transmission entities need to ensure they are not doing
	things that purposely disable facilities relied on to mitigate site events.
DTE Electric	No additional comments
MRO NERC Stanrdards Review Forum	Please consider the following additional recommendations/comments:1.) The following
	terms, used in the NUC-001 Standard, should be considered as new defined terms for the
	NERC Glossary of Terms used in Reliability Standards:a. The term "electric system" is used
	numerous times throughout the Standard and not defined.b. The term "Protective Relay
	Setpoints" used several times in the Standard should be defined since identified as a subset
	of a "Protection System".2.) The SAR does not list "Nuclear Plant Generator Operators"
	(NPGOs) as part of the applicable Reliability Functions, however, is clearly listed in Section 4.
	Applicability of the NUC-001-2 Standard.3.) The Reliability and Market Interface Principles

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	No. 5 should also be checked, as applicable, within the SAR since Requirement R9.4 of NUC-001-2 clearly addresses communications.4.) The Five-year Review identified changes within the NUC-001-2 Redline in Section E, Regional Differences; however, Regional Variances was marked as N/A in the SAR. We believe that there should be something in the SAR to address the Canadian (CANDU) Nuclear Power Plant design basis which coincide with the changes made to NUC-001-2 and address Canadian jurisdictional differences.
SERC OC Review Group	SAR: We recommend consideration of adding "Resource Planner" to the "Reliability Functions" section due to the importance of area generation in providing offsite power. The 5YR Review Team is requested to review to ensure that there are no redundant standards. An example may be EOP-005-2, R1.2 and NUC-001-2, R9.3.5. NUC-001-2: We recommend the 5YR Review Team consider removing R9.4.5 as training is already covered in PER-005 standard. Further, the group recommends that M5, M7 & M8 should be updated to reflect the changes to the requirements. Additionally, we recommend the 5YR Review Team review to ensure that the NPLR definition in the standard is consistent with the Glossary. The comments expressed herein represent a consensus of the views of the above named members of the SERC OC Review Group only and should not be construed as the position of the SERC Reliability Corporation, or its board or its officers.
Independent Electricity System Operator	This is perhaps preemptive or premature but there are draft standards recently posted that propose effective dates and implementation plan that may conflict with the Ontario regulation with respect to making NERC standards effective in Ontario. We therefore kindly remind the SDT to ensure that in the Effective Dates Section of the standard, as well as in the implementation plan, to clearly state that:In those jurisdictions where regulatory approval is required, this standard shall become effective on the xxx day of the yyy calendar quarter after applicable regulatory approval, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities. In those jurisdictions where no regulatory approval is required, this standard shall become effective on the xxx day of the yyy calendar quarter after Board of Trustees approval.
Consolidated Edison Co. of NY, Inc.	We are concerned that material changes in the NUC-001 Standard requirements could lead to continent-wide revisions of the individual plant Nuclear Plant Interface Requirements (NPIR) agreements. Knowing that there is FERC action underway to retire Requirement 9.1,

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	we recommend leaving this Standard essentially as is. Two minor changes recommended are: o R7. Change "(e.g., protective setpoints)" to "(including protective setpoints)". o R8. Change "(e.g., relay setpoints)" to "(including relay setpoints)".
Exelon and its' affiliates	While reviewing the Draft, Exelon feels that R9 needs to be reworded. The requirement is applicable to NPGO and applicable Transmission Entities but the comment regarding "the Agreements, in aggregate, must address all R9 elements." Is something that Transmission Entities cannot control or implement. Exelon believes if the wording really applies only to the NPGO as they have the "Agreements, in aggregate", not the Transmission Entities. Either make the "in aggregate" statement separate and only applicable to the NPGO or state that the Transmission Entities will approve the Agreement with NPGO that includes applicable R9 items.

END OF REPORT