

Consideration of Comments

Project Name: 2007-17.4 PRC-005 FERC Order No. 803 Directive | PRC-005-6

Comment Period Start Date: 7/30/2015

Comment Period End Date: 9/16/2015

Associated Ballot: 2007-17.4 PRC-005 FERC Order No. 803 Directive PRC-005-6 IN 1 ST

There were 30 responses, including comments from approximately 108 different people from approximately 79 different companies representing 9 of the 10 Industry Segments as shown on the following pages.

All comments submitted can be reviewed in their original format on the project page.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Director of Standards, Howard Gugel (via email) or at (404) 446-9693.

Summary Consideration of Comments:

The PSMT SDT reviewed and responded to each comment received during the posting for Initial Ballot. The SDT made some clarifying or editorial changes to the standard and associated documents but no substantive revisions were made. Several commenters suggested editorial changes to the standard for consistency. These edits include:

- Revised the bulleting in Table 4-1 to accurately reflect the SDT's intent.
- Revised the headers in Tables 4-2(a), 4-2(b) and 4-3 to correct "sudden pressure relaying" to "automatic reclosing".
- Revised the use of "ac" and "dc" to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.
- Revised the Version History table to be more detailed regarding the revisions.
- Revised the third and fourth bullets in the definition of Automatic Reclosing for consistency by adding "or function(s)" as in the second bullet. This revision was also made to the Consideration of Directives document.

Several commenters suggested editorial changes to the Supplementary Reference and FQA document. These edits include:

- Added a “revision history” to the introductory paragraphs referencing the revisions made since development of the document for PRC-005-2.
- Revised the use of “ac” and “dc” to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.
- Corrected the reference from R3 to R5 in flowchart on page 21.
- Corrected the formatting of an FAQ regarding inclusion of IEEE function numbers to clearly indicate that the list is part of the question (Section 15.8.1).
- Clarified the FAQ to better describe the synchronism check function (Section 2.4.1).
- Clarified the definition of Automatic Reclosing to ensure it is consistent with IEEE definition 100 and added a Q/A in the FAQ document. (Section 2.4.1)

Commenters overwhelmingly agreed with the effort to streamline and consolidate the Implementation Plan. A few additional comments were submitted regarding content that are outside of the scope of the SAR for this project including the necessity for the standard and previously approved versions of the standard.

Questions

1. The PSMTSDT has proposed revising the definition of “Automatic Reclosing” and “Component Type” to address the FERC directive in Order 803. Do you agree that the proposed revised definitions? If not, please provide specific comments regarding the revision and any suggestions for alternatives to address the directive.
2. The PSMTSDT has added Table 4-3 to address maintenance activities and intervals for voltage sensing devices associated with supervisory relays. Do you agree with the proposed table? If not, please provide specific comments regarding the table and any suggestions for alternative language.
3. The PSMTSDT has made revisions to the Supplementary Reference and FAQ Document. Do you agree with the proposed revisions? If not, please provide specific comments regarding the revisions and any suggestions for alternative language.
4. The PSMTSDT has proposed combining the Implementation Plans for previous versions of PRC-005 (including PRC-005-3, PRC-005-3i, PRC-005-3ii, PRC-005-4 and PRC-005-5). Do you agree with the proposed Implementation Plan? If not, please provide specific comments regarding the Implementation Plan and any suggestions for alternative language.

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

1. The PSMTSDT has proposed revising the definition of “Automatic Reclosing” and “Component Type” to address the FERC directive in Order 803. Do you agree that the proposed revised definitions? If not, please provide specific comments regarding the revision and any suggestions for alternatives to address the directive.

John Fontenot - Bryan Texas Utilities - 1 -	
Selected Answer:	Yes
Meghan Ferguson - International Transmission Company Holdings Corporation On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1	
Selected Answer:	Yes
Barbara Kedrowski - WEC Energy Group, Inc. - 3,4,5 - RFC	
Selected Answer:	No
Answer Comment:	The SDT needs to add to the definition of automatic reclosing to differentiate it from manual reclosing. This could be a possible area of confusion with compliance auditors.
Response:	The SDT believes that the term Automatic Reclosing is sufficiently differentiated to not include manual reclosing.
Andrew Pusztai - American Transmission Company, LLC - 1 -	

Selected Answer:	Yes		
Thomas Foltz - AEP - 5 -			
Selected Answer:	Yes		
Jamison Dye - Bonneville Power Administration - 1,3,5,6 - WECC			
Selected Answer:	Yes		
Leonard Kula - Independent Electricity System Operator - 2 -			
Selected Answer:	Yes		
Emily Rousseau - MRO - 1,2,3,4,5,6 - MRO			
Group Name:	MRO-NERC Standards Review Forum (NSRF)		
Group Member Name	Entity	Region	Segments
Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6
Amy Casucelli	Xcel Energy	MRO	1,3,5,6
Chuck Lawrence	American Transmission Company	MRO	1
Chuck Wicklund	Otter Tail Power Company	MRO	1,3,

			5
Theresa Allard	Minnkota Power Cooperative, Inc	MRO	1,3,5,6
Dave Rudolph	Basin Electric Power Cooperative	MRO	1,3,5,6
Kayleigh Wilkerson	Lincoln Electric System	MRO	1,3,5,6
Jodi Jenson	Western Area Power Administration	MRO	1,6
Larry Heckert	Alliant Energy	MRO	4
Mahmood Safi	Omaha Public Utility District	MRO	1,3,5,6
Shannon Weaver	Midwest ISO Inc.	MRO	2
Mike Brytowski	Great River Energy	MRO	1,3,5,6
Brad Perrett	Minnesota Power	MRO	1,5
Scott Nickels	Rochester Public Utilities	MRO	4
Terry Harbour	MidAmerican Energy Company	MRO	1,3,5,6
Tom Breene	Wisconsin Public Service Corporation	MRO	3,4,5,6
Tony Eddleman	Nebraska Public Power District	MRO	1,3,5

Selected Answer: Yes

Gul Khan - Gul Khan On Behalf of: Rod Kinard, Oncor Electric Delivery, 1

Selected Answer: Yes

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

Selected Answer: Yes

Adam Padgett - TECO - Tampa Electric Co. - 1,3,4,5 - FRCC

Selected Answer: Yes

Randi Heise - Dominion - Dominion Resources, Inc. - 5 -

Group Name: Dominion - RCS

Group Member Name	Entity	Region	Segments
Larry Nash	Dominion Virginia Power	SERC	1
Louis Slade	Dominion Resources, Inc.	SERC	6
Connie Lowe	Dominion Resources, Inc.	RFC	3
Randi Heise	Dominion Resources, Inc,	NPCC	5

Selected Answer: Yes

Answer Comment: Dominion suggest that Version history 6 should be updated to be inclusive of the directive and read as; "Revised to add supervisory relays, the voltage sensing devices, and the associated control circuitry to Automatic Reclosing in accordance with the directives in FERC Order 803.

Response: The SDT agrees and has made the suggested editorial revision.

John Coggins - Salt River Project - 3 -	
Selected Answer:	Yes
Molly Devine - IDACORP - Idaho Power Company - 1 -	
Selected Answer:	Yes
Rachel Coyne - Texas Reliability Entity, Inc. - 10 -	
Selected Answer:	Yes
Answer Comment:	The definition of Automatic Reclosing is not definitive on the functional aspect (Sudden Pressure Relaying provides functional aspect) and just delineates what Components are included. Is that the standard drafting team’s intent? Does the use of the term “Automatic Reclosing” in Table 4-1 Maintenance Activities make sense without a functional aspect being defined?
Response: The SDT believes that the standard specific definition of Automatic Reclosing is sufficiently definitive as well as its use in Table 4-1.	
John Seelke - PSEG - 1,3,5,6 - NPCC,RFC	
Group Name:	PSEG

Group Member Name	Entity	Region	Segments
Joseph Smith	Public Service Electric and Gas	RFC	1
Jeffrey Mueller	Public Service Electric and Gas Co.	RFC	3
Tim Kucey	PSEG Fossil LLC	RFC	5
Karla Jara	PSEG Energy Resources & Trade LLC	RFC	6

Selected Answer: No

Answer Comment: We do not believe this standard is needed.

Response: This standard is developed explicitly to address directives from FERC Order 803. NERC is statutorily obligated to address the directives, either directly or via equally effective actions, and has determined that there are no equally effective alternatives.

Likes: 2 PSEG - Public Service Electric and Gas Co., 1, Smith Joseph
PSEG - PSEG Fossil LLC, 5, Kucey Tim

Dislikes: 0

Mike Smith - Manitoba Hydro - 1 -

Selected Answer: Yes

David Jendras - Ameren - Ameren Services - 3 -

Selected Answer: Yes

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RFC

Group Name: Duke Energy

Group Member Name	Entity	Region	Segments
Doug Hils	Duke Energy	RFC	1
Lee Schuster	Duke Energy	FRCC	3
Dale Goodwine	Duke Energy	SERC	5
Greg Cecil	Duke Energy	RFC	6

Selected Answer: No

Answer Comment: Duke Energy requests further clarification from the drafting team on the proposed definition of Automatic Reclosing. Is it the drafting team's intent that the definition should incorporate all closings that happen automatically, or just Automatic Reclosing relays? There are some scenarios where there is an automatic closing, but no relay is present. There are also some instances where a Supervisory relay is not supervising a reclosing relay, and just providing a close command itself. Would these Supervisory relays that do not supervise an Automatic Reclosing relay be in scope? We ask the drafting team to clarify the intent of the definition, chiefly whether all automatic closing, even in the event that a relay is not present, falls under the scope of this standard, as well as our concern

regarding the scope of Supervisory relays.

Response: The SDT notes that Automatic Reclosing includes automatic reclosing and not automatic closing. We have added part of IEEE Standard 100 definition to the Supplementary Reference and FAQ document as follows to add clarity: “Automatic reclosing equipment - Automatic equipment that provides for reclosing a switching device as desired after it has opened automatically under abnormal conditions.” See Section 2.4.1.

Chris Mattson - Tacoma Public Utilities (Tacoma, WA) - 5 -

Selected Answer: No

Answer Comment: Tacoma Power generally agrees with the revised definition of “Automatic Reclosing”; however, Tacoma Power recommends consistently using “supervisory relay(s)” or “supervisory relay(s) or function(s)” among the bulleted Component Types.

Response: The SDT agrees and has made the editorial revision.

Lee Pedowicz - Northeast Power Coordinating Council - 10 - NPCC

Group Name: NPCC--Project 2007-17.4 PRC-005 FERC Order No. 803 Directive - PRC-005-6

Group Member Name	Entity	Region	Segments
Alan Adamson	New York State Reliability Council, LLC	NPCC	10

David Burke	Orange and Rockland Utilities Inc.	NPCC	3
Greg Campoli	New York Independent System Operator	NPCC	2
Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10
Mark Kenny	Northeast Utilities	NPCC	1
Helen Lainis	Independent Electricity System Operator	NPCC	2
Rob Vance	New Brunswick Power Corporation	NPCC	9
Paul Malozewski	Hydro One Networks Inc.	NPCC	1
Bruce Metruck	New York Power Authority	NPCC	6
Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5
Brian Robinson	Utility Services	NPCC	8
Wayne Sipperly	New York Power Authority	NPCC	5
Edward Bedder	Orange and Rockland Utilities Inc.	NPCC	1
Michael Jones	National Grid	NPCC	1
Brian Shanahan	National Grid	NPCC	1
Glen Smith	Entergy Services, Inc.	NPCC	5
RuiDa Shu	Northeast Power Coordinating Council	NPCC	10
Connie Lowe	Dominion Resources Services, Inc.	NPCC	5
Guy Zito	Northeast Power Coordinating Council	NPCC	10
Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
Robert Pellegrini	The United Illuminating	NPCC	1

	Company		
Kathleen Goodman	ISO - New England	NPCC	2
Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1
Michael Forte	Consolidated Edison Co. of New York, Inc.	NPCC	1
Brian O'Boyle	Consolidated Edison Co. of New York, Inc.	NPCC	8
Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3
Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1

Selected Answer: Yes

Jennifer Losacco - NextEra Energy - Florida Power and Light Co. - 1 - FRCC

Selected Answer: Yes

Charles Yeung - Southwest Power Pool, Inc. (RTO) - 2 -

Group Name: IRC Standards Review Committee

Group Member Name	Entity	Region	Segments
Charles Yeung	SPP	SPP	2
Ben Li	IESO	NPCC	2
Greg Campoli	NYISO	NPCC	2

Mark Holman	PJM	RFC	2
Matt Goldberg	ISONE	NPCC	2
Lori Spence	MISO	MRO	2
Christina Bigelow	ERCOT	TRE	2
Ali Miremadi	CAISO	WEC C	2

Selected Answer: Yes

Answer Comment: Thank you for the clarification which addresses the SRC's comments on the SAR.

Response: Thank you for your support.

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - SPP

Group Name: SPP Standards Review Group

Group Member Name	Entity	Region	Segments
Shannon Mickens	Southwest Power Pool	SPP	2
Jason Smith	Southwest Power Pool	SPP	2
Karl Diekevers	Nebraska Public Power District	MRO	1,3,5
Allan George	Sunflower Electric Power Corporation	SPP	1
Robert Gray	Board of Public Utilities Kansas City, Kansas	SPP	3

Robert Hirschak	CLECO Corporation	SPP	1,3, 5,6
Stephanie Johnson	Westar Energy, Inc.	SPP	1,3, 5,6
James Nail	City of Independence, Missouri	SPP	3,5
Scott Williams	City Utilities of Springfield	SPP	1,4

Selected Answer: Yes

Ben Engelby - ACES Power Marketing - 6 -

Group Name: ACES Standards Collaborators - PRC-005 Project

Group Member Name	Entity	Region	Segments
Amber Skillern	East Kentucky Power Cooperative	SERC	1,3
Shari Heino	Brazos Electric Power Cooperative, Inc.	TRE	1,5
Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	RFC	1
Mike Brytowski	Great River Energy	MRO	1,3, 5,6
Ellen Watkins	Sunflower Electric Power Corporation	SPP	1
Ryan Strom	Buckeye Power, Inc.	RFC	4
Ginger Mercier	Prairie Power, Inc.	SERC	1,3
Lucia Beal	Southern Maryland Electric Cooperative	RFC	3

Selected Answer: Yes

Answer Comment: The definition change is consistent with the FERC directive in Order 803.

Response: Thank you for your support.

**Oshani Pathirane - Oshani Pathirane On Behalf of: Paul Malozewski, Hydro One Networks, Inc., 1, 3
Payam Farahbakhsh, Hydro One Networks, Inc., 1, 3**

Selected Answer: Yes

Answer Comment: With respect to requirements 4.2.7.1 and 4.2.7.2, automatic reclosing relays addressed are subject to an exemption if the owner of the equipment could demonstrate that a close-in three-phase fault present for twice the normal clearing time (capturing a minimum trip-close-trip time delay) does not result in a total loss of gross generation in the Interconnection exceeding the gross capacity of the largest relevant BES generating unit where the Automatic Reclosing is applied. However, Hydro One Networks Inc. would like to suggest that the SDT consider indicating the timelines for demonstrating the above applicability. For example, additional detail on what would trigger a system review, or intervals in which the system review should be performed, could be explicitly stated within the body of the standard.

Response: Your suggestion relates to previously-approved content, and is outside the scope of the SAR for this revision.



2. The PSMTSDT has added Table 4-3 to address maintenance activities and intervals for voltage sensing devices associated with supervisory relays. Do you agree with the proposed table? If not, please provide specific comments regarding the table and any suggestions for alternative language.

John Fontenot - Bryan Texas Utilities - 1 -

Selected Answer: Yes

Meghan Ferguson - International Transmission Company Holdings Corporation On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1

Selected Answer: No

Answer Comment: The note on Table 4-3 needs to be updated with the correct information and table reference.

Currently, the Note on Table 4-3 reads: *“Note: In cases where **Components of Sudden Pressure Relaying** are common to Components listed in **Table 1-5**, the Components only need to be tested once during a distinct maintenance interval.”*

The Note on Table 4-3 should be re-worded as: *“Note: In cases where **Automatic Reclosing Components** are common to Components listed in **Table 1-3**, the Components only need to be tested once during a distinct maintenance interval.”*

Response: The SDT agrees and has made the editorial change.

<p>Andrew Pusztai - American Transmission Company, LLC - 1 -</p> <p>Selected Answer: Yes</p>											
<p>Thomas Foltz - AEP - 5 -</p> <p>Selected Answer: Yes</p>											
<p>Jamison Dye - Bonneville Power Administration - 1,3,5,6 - WECC</p> <p>Selected Answer: Yes</p>											
<p>Leonard Kula - Independent Electricity System Operator - 2 -</p> <p>Selected Answer: Yes</p>											
<p>Emily Rousseau - MRO - 1,2,3,4,5,6 - MRO</p> <p>Group Name: MRO-NERC Standards Review Forum (NSRF)</p> <table border="1"> <thead> <tr> <th>Group Member Name</th> <th>Entity</th> <th>Region</th> <th>Segments</th> </tr> </thead> <tbody> <tr> <td>Joe Depoorter</td> <td>Madison Gas & Electric</td> <td>MRO</td> <td>3,4,5,6</td> </tr> </tbody> </table>				Group Member Name	Entity	Region	Segments	Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6
Group Member Name	Entity	Region	Segments								
Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6								

Amy Casucelli	Xcel Energy	MRO	1,3,5,6
Chuck Lawrence	American Transmission Company	MRO	1
Chuck Wicklund	Otter Tail Power Company	MRO	1,3,5
Theresa Allard	Minnkota Power Cooperative, Inc	MRO	1,3,5,6
Dave Rudolph	Basin Electric Power Cooperative	MRO	1,3,5,6
Kayleigh Wilkerson	Lincoln Electric System	MRO	1,3,5,6
Jodi Jenson	Western Area Power Administration	MRO	1,6
Larry Heckert	Alliant Energy	MRO	4
Mahmood Safi	Omaha Public Utility District	MRO	1,3,5,6
Shannon Weaver	Midwest ISO Inc.	MRO	2
Mike Brytowski	Great River Energy	MRO	1,3,5,6
Brad Perrett	Minnesota Power	MRO	1,5
Scott Nickels	Rochester Public Utilities	MRO	4
Terry Harbour	MidAmerican Energy Company	MRO	1,3,5,6
Tom Breene	Wisconsin Public Service Corporation	MRO	3,4,5,6
Tony Eddleman	Nebraska Public Power District	MRO	1,3,5

Selected Answer: Yes

<p>Gul Khan - Gul Khan On Behalf of: Rod Kinard, Oncor Electric Delivery, 1</p> <p>Selected Answer: Yes</p>																					
<p>Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP</p> <p>Selected Answer: Yes</p>																					
<p>Adam Padgett - TECO - Tampa Electric Co. - 1,3,4,5 - FRCC</p> <p>Selected Answer: Yes</p>																					
<p>Randi Heise - Dominion - Dominion Resources, Inc. - 5 -</p> <p>Group Name: Dominion - RCS</p> <table border="1"> <thead> <tr> <th>Group Member Name</th> <th>Entity</th> <th>Region</th> <th>Segments</th> </tr> </thead> <tbody> <tr> <td>Larry Nash</td> <td>Dominion Virginia Power</td> <td>SERC</td> <td>1</td> </tr> <tr> <td>Louis Slade</td> <td>Dominion Resources, Inc.</td> <td>SERC</td> <td>6</td> </tr> <tr> <td>Connie Lowe</td> <td>Dominion Resources, Inc.</td> <td>RFC</td> <td>3</td> </tr> <tr> <td>Randi Heise</td> <td>Dominion Resources, Inc,</td> <td>NPCC</td> <td>5</td> </tr> </tbody> </table> <p>Selected Answer: Yes</p> <p>Answer Comment: Dominion also suggests Table 1-1 (redline version page 18 of</p>		Group Member Name	Entity	Region	Segments	Larry Nash	Dominion Virginia Power	SERC	1	Louis Slade	Dominion Resources, Inc.	SERC	6	Connie Lowe	Dominion Resources, Inc.	RFC	3	Randi Heise	Dominion Resources, Inc,	NPCC	5
Group Member Name	Entity	Region	Segments																		
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Connie Lowe	Dominion Resources, Inc.	RFC	3																		
Randi Heise	Dominion Resources, Inc,	NPCC	5																		

	<p>41), 1st bullet be revised from “Ac measurements” to read as AC measurements..</p> <p>Response: We have revised the use of “ac” and “dc” to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.</p>
<p>John Coggins - Salt River Project - 3 -</p> <p>Selected Answer:</p>	<p>Yes</p>
<p>Molly Devine - IDACORP - Idaho Power Company - 1 -</p> <p>Selected Answer:</p>	<p>Yes</p>
<p>Rachel Coyne - Texas Reliability Entity, Inc. - 10 -</p> <p>Selected Answer:</p> <p>Answer Comment:</p>	<p>No</p> <p>1. Texas RE inquires as to why the standard drafting team choose 12 years for this Component Type. In general, in most, not all, of the previous Tables provided for maintenance activities of any unmonitored relay had a 6 Calendar Year Minimum Maintenance Interval.</p> <p>Texas RE noticed Maintenance Activities of Table 4-1 are not consistent (e.g.- Row 1 states “Verify that settings are as specified” but Row 2 states “Verify: Settings are as specified” (in bullets) but the format is backwards for the</p>

“Operation of the relay inputs...” statement in both rows.

2. Additional clarity may be needed between the Table 4-1 additions and Table 4-3. In Table 4-1 there is a Component Attribute for supervisory relays that essentially states a 12 Calendar Year Maximum Maintenance Interval for supervisory relays that have “AC measurements are continuously verified by comparison to an independent AC measurement source, with alarming for excessive error (See Table 2).” In Table 4-3 “Voltage sensing devices that are connected to microprocessor supervisory relays with AC measurements that are continuously verified by comparison of sensing input value, as measured by the microprocessor relay, to an independent AC measurement source, with alarming for unacceptable error or failure. (See Table 2)” has no periodic maintenance specified. Texas RE is concerned it appears an entity is required to do the “Maintenance Activity” described in Table 4-1 (“Verify acceptable measurement of power system input values.”) within 12 Calendar Years on the relays but is not required to do any Maintenance Activity on the voltage sensing devices.

Response:

- 1. The SDT notes that Table 4-3 is similar to the unmonitored maintenance activities in Table 1-3. This is why the 12-year maintenance interval was chosen. We have also corrected the bullet format in Table 4-1.**
- 2. The SDT notes that Table 4-3 does not prescribe relay maintenance of voltage sensing devices and is consistent with Table 1-3.**

John Seelke - PSEG - 1,3,5,6 - NPCC,RFC

Group Name: PSEG

Group Member Name	Entity	Region	Segments
Joseph Smith	Public Service Electric and Gas	RFC	1
Jeffrey Mueller	Public Service Electric and Gas Co.	RFC	3
Tim Kucey	PSEG Fossil LLC	RFC	5
Karla Jara	PSEG Energy Resources & Trade LLC	RFC	6

Selected Answer: No

Answer Comment: We do not believe this standard is needed.

Response: This standard is developed explicitly to address directives from FERC Order 803. NERC is statutorily obligated to address the directives, either directly or via equally effective actions, and has determined that there are no equally effective alternatives.

Likes: 2 PSEG - Public Service Electric and Gas Co., 1, Smith Joseph
PSEG - PSEG Fossil LLC, 5, Kucey Tim

Dislikes: 0

Mike Smith - Manitoba Hydro - 1 -

Selected Answer:	Yes																				
David Jendras - Ameren - Ameren Services - 3 -																					
Selected Answer:	Yes																				
Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RFC																					
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Group Member Name	Entity	Region	Segments																		
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Lee Schuster	Duke Energy	FRCC	3																		
Dale Goodwine	Duke Energy	SERC	5																		
Greg Cecil	Duke Energy	RFC	6																		
Selected Answer:	Yes																				
Answer Comment:	Duke Energy is unsure of the necessity of inserting the note: "Note: In cases where Components of Sudden Pressure Relaying are common to Components listed in Table 1-5, the Components only need to be tested once during a distinct maintenance interval" to Table 4-3. It doesn't appear that the note is applicable to this Table. We recommend that the drafting team consider only including the Note on tables where it is best applicable.																				
Response: The SDT has corrected the erroneous reference to Table 1-5. It should have been Table 1-3.																					

Chris Mattson - Tacoma Public Utilities (Tacoma, WA) - 5 -

Selected Answer: Yes

Answer Comment: In Tables 4-2(a), 4-2(b), and 4-3, "Sudden Pressure Relaying" should be changed to "Automatic Reclosing."

Response: Thank you. The SDT agrees that the header blocks are incorrect and have made the associated editorial changes.

Lee Pedowicz - Northeast Power Coordinating Council - 10 - NPCC

Group Name: NPCC--Project 2007-17.4 PRC-005 FERC Order No. 803 Directive - PRC-005-6

Group Member Name	Entity	Region	Segments
Alan Adamson	New York State Reliability Council, LLC	NPCC	10
David Burke	Orange and Rockland Utilities Inc.	NPCC	3
Greg Campoli	New York Independent System Operator	NPCC	2
Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10

Mark Kenny	Northeast Utilities	NPCC	1
Helen Lainis	Independent Electricity System Operator	NPCC	2
Rob Vance	New Brunswick Power Corporation	NPCC	9
Paul Malozewski	Hydro One Networks Inc.	NPCC	1
Bruce Metruck	New York Power Authority	NPCC	6
Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5
Brian Robinson	Utility Services	NPCC	8
Wayne Sipperly	New York Power Authority	NPCC	5
Edward Bedder	Orange and Rockland Utilities Inc.	NPCC	1
Michael Jones	National Grid	NPCC	1
Brian Shanahan	National Grid	NPCC	1
Glen Smith	Entergy Services, Inc.	NPCC	5
RuiDa Shu	Northeast Power Coordinating Council	NPCC	10
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Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
Robert Pellegrini	The United Illuminating Company	NPCC	1
Kathleen Goodman	ISO - New England	NPCC	2
Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1
Michael Forte	Consolidated Edison Co. of New York, Inc.	NPCC	1

Brian O'Boyle	Consolidated Edison Co. of New York, Inc.	NPCC	8
Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3
Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1

Selected Answer: Yes

Jennifer Losacco - NextEra Energy - Florida Power and Light Co. - 1 - FRCC

Selected Answer: Yes

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - SPP

Group Name: SPP Standards Review Group

Group Member Name	Entity	Region	Segments
Shannon Mickens	Southwest Power Pool	SPP	2
Jason Smith	Southwest Power Pool	SPP	2
Karl Diekevers	Nebraska Public Power District	MRO	1,3,5
Allan George	Sunflower Electric Power Corporation	SPP	1
Robert Gray	Board of Public Utilities Kansas City, Kansas	SPP	3
Robert Hirchak	CLECO Corporation	SPP	1,3,

			5,6
Stephanie Johnson	Westar Energy, Inc.	SPP	1,3,5,6
James Nail	City of Independence, Missouri	SPP	3,5
Scott Williams	City Utilities of Springfield	SPP	1,4

Selected Answer: Yes

Ben Engelby - ACES Power Marketing - 6 -

Group Name: ACES Standards Collaborators - PRC-005 Project

Group Member Name	Entity	Region	Segments
Amber Skillern	East Kentucky Power Cooperative	SERC	1,3
Shari Heino	Brazos Electric Power Cooperative, Inc.	TRE	1,5
Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	RFC	1
Mike Brytowski	Great River Energy	MRO	1,3,5,6
Ellen Watkins	Sunflower Electric Power Corporation	SPP	1
Ryan Strom	Buckeye Power, Inc.	RFC	4
Ginger Mercier	Prairie Power, Inc.	SERC	1,3
Lucia Beal	Southern Maryland Electric Cooperative	RFC	3

Selected Answer:

Yes

Answer Comment:

1. We identified a minor grammatical error in Table 1-1.
 1. There is inconsistent capitalization of the acronym "AC" in the first bullet, which lists both "Ac" and "AC".
 2. We ask the drafting team to clarify in Table 4-1 the phrase "with preceding row attributes," as the format of the table is unclear whether the reference is to all of the monitored microprocessor reclosing relays and supervisory relays, including Table 2, or just the supervisory relays with waveform sampling three or more times per power cycle. The format of each table carrying over the header from the previous page makes the phrase "with preceding row attributes" unclear.
 3. We appreciate the drafting team providing clarity in the note of Table 4-3 for cases where Components of Sudden Pressure Relaying are common to Components listed in Table 1-5, the Components only need to be tested once during a distinct maintenance interval.

Response:

1. **We have revised the use of "ac" and "dc" to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.**
2. **The SDT believes that "the preceding row" is sufficiently clear to indicate one individual preceding row in the table. Otherwise, the SDT would have stated, "all preceding rows".**
3. **Thank you for your support.**

Oshani Pathirane - Oshani Pathirane On Behalf of: Paul Malozewski, Hydro One Networks, Inc., 1, 3
Payam Farahbakhsh, Hydro One Networks, Inc., 1, 3

Selected Answer: No

Answer Comment: Hydro One Networks Inc. would like to suggest that, the wording of the title bar's note be changed to read, "In cases where ***Automatic Reclosing Components*** are common to Components listed in ***Tables 1-3 and 1-5***, the Components only need to be tested once during a distinct maintenance interval."

Hydro One Networks Inc. would also like to suggest that Tables 4-2(a) and 4-2(b) title bars' notes also be revised to read, "Automatic Reclosing Components", instead of "Sudden Pressure Relaying"

Response: Thank you. The SDT agrees that the header blocks are incorrect and we have made the associated editorial changes.

3. The PSMTSDT has made revisions to the Supplementary Reference and FAQ Document. Do you agree with the proposed revisions? If not, please provide specific comments regarding the revisions and any suggestions for alternative language.

John Fontenot - Bryan Texas Utilities - 1 -	
Selected Answer:	Yes
Meghan Ferguson - International Transmission Company Holdings Corporation On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1	
Selected Answer:	Yes
Andrew Pusztai - American Transmission Company, LLC - 1 -	
Selected Answer:	Yes
Answer Comment:	However, in the draft standard, the terms, “AC” and “DC” are capitalized. However, in the FAQ Document, “ac” and “dc” are lower case. ATC recommends using capitalization (or lack thereof) related to “AC” and “DC” consistently in both the standard and the FAQ Document.
Response: We have revised the use of “ac” and “dc” to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.	

<p>Thomas Foltz - AEP - 5 -</p> <p>Selected Answer: Yes</p>																											
<p>Jamison Dye - Bonneville Power Administration - 1,3,5,6 - WECC</p> <p>Selected Answer: Yes</p>																											
<p>Leonard Kula - Independent Electricity System Operator - 2 -</p> <p>Selected Answer: Yes</p>																											
<p>Emily Rousseau - MRO - 1,2,3,4,5,6 - MRO</p> <p>Group Name: MRO-NERC Standards Review Forum (NSRF)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Group Member Name</th> <th style="text-align: left;">Entity</th> <th style="text-align: left;">Region</th> <th style="text-align: left;">Segments</th> </tr> </thead> <tbody> <tr> <td>Joe Depoorter</td> <td>Madison Gas & Electric</td> <td>MRO</td> <td>3,4,5,6</td> </tr> <tr> <td>Amy Casucelli</td> <td>Xcel Energy</td> <td>MRO</td> <td>1,3,5,6</td> </tr> <tr> <td>Chuck Lawrence</td> <td>American Transmission Company</td> <td>MRO</td> <td>1</td> </tr> <tr> <td>Chuck Wicklund</td> <td>Otter Tail Power Company</td> <td>MRO</td> <td>1,3,5</td> </tr> <tr> <td>Theresa Allard</td> <td>Minnkota Power Cooperative,</td> <td>MRO</td> <td>1,3,</td> </tr> </tbody> </table>				Group Member Name	Entity	Region	Segments	Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6	Amy Casucelli	Xcel Energy	MRO	1,3,5,6	Chuck Lawrence	American Transmission Company	MRO	1	Chuck Wicklund	Otter Tail Power Company	MRO	1,3,5	Theresa Allard	Minnkota Power Cooperative,	MRO	1,3,
Group Member Name	Entity	Region	Segments																								
Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6																								
Amy Casucelli	Xcel Energy	MRO	1,3,5,6																								
Chuck Lawrence	American Transmission Company	MRO	1																								
Chuck Wicklund	Otter Tail Power Company	MRO	1,3,5																								
Theresa Allard	Minnkota Power Cooperative,	MRO	1,3,																								

	Inc		5,6
Dave Rudolph	Basin Electric Power Cooperative	MRO	1,3,5,6
Kayleigh Wilkerson	Lincoln Electric System	MRO	1,3,5,6
Jodi Jenson	Western Area Power Administration	MRO	1,6
Larry Heckert	Alliant Energy	MRO	4
Mahmood Safi	Omaha Public Utility District	MRO	1,3,5,6
Shannon Weaver	Midwest ISO Inc.	MRO	2
Mike Brytowski	Great River Energy	MRO	1,3,5,6
Brad Perrett	Minnesota Power	MRO	1,5
Scott Nickels	Rochester Public Utilities	MRO	4
Terry Harbour	MidAmerican Energy Company	MRO	1,3,5,6
Tom Breene	Wisconsin Public Service Corporation	MRO	3,4,5,6
Tony Eddleman	Nebraska Public Power District	MRO	1,3,5

Selected Answer: Yes

Gul Khan - Gul Khan On Behalf of: Rod Kinard, Oncor Electric Delivery, 1

Selected Answer: Yes

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

<p>Selected Answer: Yes</p>																				
<p>Adam Padgett - TECO - Tampa Electric Co. - 1,3,4,5 - FRCC</p> <p>Selected Answer: Yes</p>																				
<p>Randi Heise - Dominion - Dominion Resources, Inc. - 5 -</p> <p>Group Name: Dominion - RCS</p> <table border="1"> <thead> <tr> <th>Group Member Name</th> <th>Entity</th> <th>Region</th> <th>Segments</th> </tr> </thead> <tbody> <tr> <td>Larry Nash</td> <td>Dominion Virginia Power</td> <td>SERC</td> <td>1</td> </tr> <tr> <td>Louis Slade</td> <td>Dominion Resources, Inc.</td> <td>SERC</td> <td>6</td> </tr> <tr> <td>Connie Lowe</td> <td>Dominion Resources, Inc.</td> <td>RFC</td> <td>3</td> </tr> <tr> <td>Randi Heise</td> <td>Dominion Resources, Inc,</td> <td>NPCC</td> <td>5</td> </tr> </tbody> </table> <p>Selected Answer: Yes</p>	Group Member Name	Entity	Region	Segments	Larry Nash	Dominion Virginia Power	SERC	1	Louis Slade	Dominion Resources, Inc.	SERC	6	Connie Lowe	Dominion Resources, Inc.	RFC	3	Randi Heise	Dominion Resources, Inc,	NPCC	5
Group Member Name	Entity	Region	Segments																	
Larry Nash	Dominion Virginia Power	SERC	1																	
Louis Slade	Dominion Resources, Inc.	SERC	6																	
Connie Lowe	Dominion Resources, Inc.	RFC	3																	
Randi Heise	Dominion Resources, Inc,	NPCC	5																	
<p>John Coggins - Salt River Project - 3 -</p> <p>Selected Answer: Yes</p>																				
<p>Molly Devine - IDACORP - Idaho Power Company - 1 -</p> <p>Selected Answer: Yes</p>																				

Rachel Coyne - Texas Reliability Entity, Inc. - 10 -

Selected Answer:

Answer Comment:

Texas RE noticed some references to version four of PRC-005, which could cause confusion:

- Page four in the first paragraph, “PRC-005-4 would apply to this equipment”; and
- Page Five in the FAQ section regarding Distribution Provider.

On page 20 of the Supplementary document there is a reference to CBM that appears incorrect (“if the condition of the device is continuously monitored (CBM).”)

Response:

1. The SDT has reviewed the introductory section and revised it to address your comments.
2. The reference to CBM has been removed.

John Seelke - PSEG - 1,3,5,6 - NPCC,RFC

Group Name: PSEG

Group Member Name	Entity	Region	Segments
Joseph Smith	Public Service Electric and Gas	RFC	1

Jeffrey Mueller	Public Service Electric and Gas Co.	RFC	3
Tim Kucey	PSEG Fossil LLC	RFC	5
Karla Jara	PSEG Energy Resources & Trade LLC	RFC	6

Selected Answer: No

Answer Comment: We do not believe this standard is needed.

Response: This standard is developed explicitly to address directives from FERC Order 803. NERC is statutorily obligated to address the directives, either directly or via equally effective actions, and has determined that there are no equally effective alternatives.

Likes: 2 PSEG - Public Service Electric and Gas Co., 1, Smith Joseph
PSEG - PSEG Fossil LLC, 5, Kucey Tim

Dislikes: 0

Mike Smith - Manitoba Hydro - 1 -

Selected Answer: Yes

David Jendras - Ameren - Ameren Services - 3 -

Selected Answer: Yes

Chris Mattson - Tacoma Public Utilities (Tacoma, WA) - 5 -

Selected Answer:

Answer Comment: On page 24 of the redlined version of the Supplementary Reference and FAQ, the bottom box in the flowchart should show R5, not R3.

Response: You are correct. We have revised accordingly.

Lee Pedowicz - Northeast Power Coordinating Council - 10 - NPCC

Group Name: NPCC--Project 2007-17.4 PRC-005 FERC Order No. 803 Directive - PRC-005-6

Group Member Name	Entity	Region	Segments
Alan Adamson	New York State Reliability Council, LLC	NPCC	10
David Burke	Orange and Rockland Utilities Inc.	NPCC	3
Greg Campoli	New York Independent System Operator	NPCC	2
Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10
Mark Kenny	Northeast Utilities	NPCC	1
Helen Lainis	Independent Electricity System Operator	NPCC	2

Rob Vance	New Brunswick Power Corporation	NPCC	9
Paul Malozewski	Hydro One Networks Inc.	NPCC	1
Bruce Metruck	New York Power Authority	NPCC	6
Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5
Brian Robinson	Utility Services	NPCC	8
Wayne Sipperly	New York Power Authority	NPCC	5
Edward Bedder	Orange and Rockland Utilities Inc.	NPCC	1
Michael Jones	National Grid	NPCC	1
Brian Shanahan	National Grid	NPCC	1
Glen Smith	Entergy Services, Inc.	NPCC	5
RuiDa Shu	Northeast Power Coordinating Council	NPCC	10
Connie Lowe	Dominion Resources Services, Inc.	NPCC	5
Guy Zito	Northeast Power Coordinating Council	NPCC	10
Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
Robert Pellegrini	The United Illuminating Company	NPCC	1
Kathleen Goodman	ISO - New England	NPCC	2
Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1
Michael Forte	Consolidated Edison Co. of New York, Inc.	NPCC	1
Brian O'Boyle	Consolidated Edison Co. of New York, Inc.	NPCC	8
Peter Yost	Consolidated Edison Co. of New	NPCC	3

	York, Inc.		
Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1

Selected Answer: No

Answer Comment: Suggest a clarification in the definition of a synchronizing or synchronism check relay (Sync-Check - 25) as shown below:

“A synchronizing device that produces an output that supervises closure of a circuit breaker between two circuits whose voltages are within prescribed limits of magnitude and within the prescribed phase angle **for the prescribed time**. It may or may not include voltage or speed control. A sync-check relay permits the paralleling of two circuits that are within prescribed (usually wider) limits of voltage magnitude and phase angle **for the prescribed time**.”

Response: The SDT agrees, and has made the associated editorial change.

Likes: 1 Pathirane Oshani On Behalf of: Paul Malozewski, Hydro One Networks, Inc., 1, 3, Payam Farahbakhsh

Dislikes: 0

Jennifer Losacco - NextEra Energy - Florida Power and Light Co. - 1 - FRCC

Selected Answer: Yes

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - SPP

Group Name: SPP Standards Review Group

Group Member Name	Entity	Region	Segments
Shannon Mickens	Southwest Power Pool	SPP	2
Jason Smith	Southwest Power Pool	SPP	2
Karl Diekevers	Nebraska Public Power District	MRO	1,3,5
Allan George	Sunflower Electric Power Corporation	SPP	1
Robert Gray	Board of Public Utilities Kansas City, Kansas	SPP	3
Robert Hirchak	CLECO Corporation	SPP	1,3,5,6
Stephanie Johnson	Westar Energy, Inc.	SPP	1,3,5,6
James Nail	City of Independence, Missouri	SPP	3,5
Scott Williams	City Utilities of Springfield	SPP	1,4

Selected Answer: Yes

Ben Engelby - ACES Power Marketing - 6 -

Group Name: ACES Standards Collaborators - PRC-005 Project

Group Member Name	Entity	Region	Segment
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		on	ments
Amber Skillern	East Kentucky Power Cooperative	SERC	1,3
Shari Heino	Brazos Electric Power Cooperative, Inc.	TRE	1,5
Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	RFC	1
Mike Brytowski	Great River Energy	MRO	1,3, 5,6
Ellen Watkins	Sunflower Electric Power Corporation	SPP	1
Ryan Strom	Buckeye Power, Inc.	RFC	4
Ginger Mercier	Prairie Power, Inc.	SERC	1,3
Lucia Beal	Southern Maryland Electric Cooperative	RFC	3

Selected Answer: Yes

Answer Comment:

1. We generally agree with the document, but question the need for listing PRC-005, PRC-008, PRC-011, and PRC-017 in the introduction. This only creates confusion and will need to be revised when these standards are retired. The implementation plan already covers these changes. The introduction should explain the various FERC orders and the rationale for adding additional equipment to the scope of this standard. While we understand that the supplementary reference is not mandatory nor enforceable, it should be drafted in a way that does not require constant updates or maintenance for each new version of the standard.

2. On page 98, the newly added FAQ regarding the parts of the control circuitry that need to be verified should clarify that the numbers listed in the bullets are IEEE device numbers. Also, the format of this question makes it appear that all of the bullets are applicable and need to be verified. The reader must get to the final sentence before they find that three of the six bullets do not need verification. We ask the SDT to reword this question by removing the bullets and clarifying that IEEE device numbers 79, 25, and 27 or 59 would need to be verified while IEEE device numbers 79/ON, 52, and 86 do not.

3. We identified inconsistent capitalization for “AC,” “DC,” and “VAR”. The standard capitalizes these words while the technical reference does not. We recommend that the supplemental reference matches the same usage and capitalization as the standard.

Response:

- 1. The SDT believes that it is necessary to carry this forth, in order to continue to emphasize that PRC-008, PRC-011, and PRC-017 are in force until fully superseded by PRC-005-2 or successor standard.**
- 2. The list of relays is actually part of the question and should have been in bold, italic text. This has been corrected.**
- 3. The SDT has revised the Supplementary Reference to assure consistent use of the terms. We have revised the use of “ac” and “dc” to be consistent throughout the standard and Supplementary Reference and FAQ document per the NERC Style Guide.**

Oshani Pathirane - Oshani Pathirane On Behalf of: Paul Malozewski, Hydro One Networks, Inc., 1, 3

Payam Farahbakhsh, Hydro One Networks, Inc., 1, 3

Selected Answer: Yes

4. The PSMTSDT has proposed combining the Implementation Plans for previous versions of PRC-005 (including PRC-005-3, PRC-005-3i, PRC-005-3ii, PRC-005-4 and PRC-005-5). Do you agree with the proposed Implementation Plan? If not, please provide specific comments regarding the Implementation Plan and any suggestions for alternative language.

John Fontenot - Bryan Texas Utilities - 1 -

Selected Answer: Yes

Meghan Ferguson - International Transmission Company Holdings Corporation On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1

Selected Answer: Yes

Andrew Puztai - American Transmission Company, LLC - 1 -

Selected Answer: Yes

Thomas Foltz - AEP - 5 -

Selected Answer: Yes

Jamison Dye - Bonneville Power Administration - 1,3,5,6 - WECC

Selected Answer: Yes

Leonard Kula - Independent Electricity System Operator - 2 -

Selected Answer: Yes

Emily Rousseau - MRO - 1,2,3,4,5,6 - MRO

Group Name: MRO-NERC Standards Review Forum (NSRF)

Group Member Name	Entity	Region	Segments
Joe Depoorter	Madison Gas & Electric	MRO	3,4,5,6
Amy Casucelli	Xcel Energy	MRO	1,3,5,6
Chuck Lawrence	American Transmission Company	MRO	1
Chuck Wicklund	Otter Tail Power Company	MRO	1,3,5
Theresa Allard	Minnkota Power Cooperative, Inc	MRO	1,3,5,6
Dave Rudolph	Basin Electric Power Cooperative	MRO	1,3,5,6
Kayleigh Wilkerson	Lincoln Electric System	MRO	1,3,5,6
Jodi Jenson	Western Area Power	MRO	1,6

	Administration		
Larry Heckert	Alliant Energy	MRO	4
Mahmood Safi	Omaha Public Utility District	MRO	1,3, 5,6
Shannon Weaver	Midwest ISO Inc.	MRO	2
Mike Brytowski	Great River Energy	MRO	1,3, 5,6
Brad Perrett	Minnesota Power	MRO	1,5
Scott Nickels	Rochester Public Utilities	MRO	4
Terry Harbour	MidAmerican Energy Company	MRO	1,3, 5,6
Tom Breene	Wisconsin Public Service Corporation	MRO	3,4, 5,6
Tony Eddleman	Nebraska Public Power District	MRO	1,3, 5

Selected Answer: No

Answer Comment: The NSRF suggest the following up date as we believe it was a cut and paste error.

Tables 4-2(a), 4-2(b) and 4-3 have a note contained within the header that needs to be corrected. The note states “Note: In cases where Components of **Sudden Pressure Relaying** are common to Components listed in Table...”

The notes in these tables should be changed from Sudden Pressure Relaying to Automatic Reclosing.

Response: Thank you. The SDT agrees that the header blocks are incorrect and have made the associated editorial changes.

<p>Gul Khan - Gul Khan On Behalf of: Rod Kinard, Oncor Electric Delivery, 1</p>	
<p>Selected Answer:</p>	<p>Yes</p>
<p>Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC,SPP</p>	
<p>Selected Answer:</p>	<p>Yes</p>
<p>Answer Comment:</p>	<p>We strongly support the consolidation of the various PRC-005 Implementation Plans and believe this effort will eliminate much confusion and provide for a much more manageable change process.</p>
<p>Response: Thank you for your support.</p>	
<p>Adam Padgett - TECO - Tampa Electric Co. - 1,3,4,5 - FRCC</p>	
<p>Selected Answer:</p>	<p>Yes</p>
<p>Answer Comment:</p>	<p>Eliminating multiple revisions of this standard will facilitate improved understandability of the standard while reducing the potential for errors in implementing the standard.</p>
<p>Response: Thank you for your support.</p>	

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

Group Name: Southern Company

Group Member Name	Entity	Region	Segments
Robert A. Schaffeld	Southern Company Services, Inc.	SERC	1
R. Scott Moore	Alabama Power Company	SERC	3
William D. Shultz	Southern Company Generation	SERC	5
John J. Ciza	Southern Company Generation and Energy Marketing	SERC	6

Selected Answer:

Answer Comment: Southern Company supports the proposed implementation plan but, as noted early, feel that the the enforcement date of the already approved PRC-005-3 should immediately be placed on hold in order to coincide with the approval of this version of PRC-005.

Response: FERC, in their recent approval of PRC-005-4 in Order 813, rejected this proposal. The SDT has requested that NERC include a proposal in its petition for PRC-005-6 to accomplish a streamlined implementation plan.

Randi Heise - Dominion - Dominion Resources, Inc. - 5 -

Group Name: Dominion - RCS

Group Member Name	Entity	Region	Segments
Larry Nash	Dominion Virginia Power	SERC	1
Louis Slade	Dominion Resources, Inc.	SERC	6
Connie Lowe	Dominion Resources, Inc.	RFC	3
Randi Heise	Dominion Resources, Inc,	NPCC	5

Selected Answer: Yes

John Coggins - Salt River Project - 3 -

Selected Answer: Yes

Molly Devine - IDACORP - Idaho Power Company - 1 -

Selected Answer: Yes

Answer Comment: With the number of revisions, keeping track is becoming a full time job.

Response: Thank you for your support. – FERC, in their recent approval of PRC-005-4 in Order 813, rejected a proposal to simplify the implementation plan. The SDT has requested that NERC include a proposal in its petition for PRC-005-6 to accomplish a streamlined implementation plan.

Rachel Coyne - Texas Reliability Entity, Inc. - 10 -

Selected Answer: No

Answer Comment:

1. Texas RE understands registered entities need time to implement standards, but the extended timeframes for testing and maintenance of the components in the series of standards listed above is too long. If registered entities are aware of the future need they should already be working to identify the Components (and associated maintenance schedules). Texas RE is concerned there would be significant reliability risk if a registered entity was not maintaining a list of the relays it has implemented and when testing was completed on those implemented relays. The extended timeframe, now possibly beyond 2030, could lead to misinterpretations and inconsistencies in registered entities practices and could impact auditing.

Texas RE made the following additional observations:

2. • There does not appear to be consistent use and applicability of relay types associated with term “relay” (e.g. In Table 4-1 there is a distinction made in Row 1 (page 34) between “microprocessor relays” and “non-microprocessor relays” AND “microprocessor supervisory relays”.) This could lead to confusion. If there is a “non-microprocessor supervisory relay” does an entity need to “Test and, if necessary calibrate”? It appears that verification requirements will apply to reclosing and supervisory relays and an additional requirement for microprocessor supervisory relays has been added. Is that the intent? In Row 2, no distinction is made (i.e. “Verify: Settings are as specified” will apply to both reclosing relays and supervisory relays);

3. • Section 1.3 “Compliance Monitoring and Assessment Processes” does not follow the Standards template; and

4. • In Table 3 “Ac” at the beginning of a sentence on page 32 needs capitalized Page 18 Table 1-1 has similar issue).

Commented [SC1]: Verify correct template is in use.

Response: CWR –

1. The SDT believes that the lengthy implementation plan is necessary for entities to have a sustainable maintenance program. While entities MAY begin to implement the requirements in advance of regulatory approvals, they are under no obligation to do so.
2. The SDT has reviewed and made clarifying edits to the first two bullets to include “reclosing or supervisory”.
3. NERC will review and assure that the relevant template is followed.
4. This error has been corrected.

John Seelke - PSEG - 1,3,5,6 - NPCC,RFC

Group Name: PSEG

Group Member Name	Entity	Region	Segments
Joseph Smith	Public Service Electric and Gas	RFC	1
Jeffrey Mueller	Public Service Electric and Gas Co.	RFC	3
Tim Kucey	PSEG Fossil LLC	RFC	5
Karla Jara	PSEG Energy Resources & Trade	RFC	6

	LLC		
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Selected Answer: No

Answer Comment: We do not believe this standard is needed.

Response: This standard is developed explicitly to address directives from FERC Order 803. NERC is statutorily obligated to address the directives, either directly or via equally effective actions, and has determined that there are no equally effective alternatives.

Likes: 2 PSEG - Public Service Electric and Gas Co., 1, Smith Joseph
PSEG - PSEG Fossil LLC, 5, Kucey Tim

Dislikes: 0

Mike Smith - Manitoba Hydro - 1 -

Selected Answer: No

Answer Comment: Manitoba Hydro disagrees with the imposed maintenance requirements introduced in PRC-005-6 through the merging of developed maintenance requirements from PRC-005-4.

Manitoba Hydro disagrees with the 6 calendar year maximum maintenance interval proposed in Table 5, relating to sudden pressure relays. Manitoba Hydro has never seen evidence that maintaining sudden pressure relays will in any way prevent instability, cascading outages, or islanding. If such evidence or peer-reviewed publications exist, please share them. Without

such evidence, enforcing this maintenance falls outside of NERC’s mandate. Moreover, the System Protection and Control Subcommittee (SPCS) errs in believing that it is “more important to base intervals for fault pressure relaying on similar Protection System Components than transformer maintenance intervals.” (p 105 of the “PRC-005-4 Supplementary Reference and FAQ – October 2014”). Justification for this perspective is that maintaining sudden pressure relays necessitates transformer outages, which is not the case with most other protection system component maintenance. To avoid unnecessary reliability risks from these transformer outages, sudden pressure relay maintenance should be based on the transformer maintenance intervals, which in Manitoba Hydro’s case greatly exceeds six years.

As proposed, PRC-005-6 is mandating a reduction in the availability of equipment (transformers), reducing the reliability of the BES during these maintenance forced outages, without providing any additional security to the BES. The maintenance frequency appears to be arbitrarily aligned with maintenance intervals of other protective systems, which do not require outages or impose notable reliability risks to the BES during such maintenance.

Response: Sudden pressure relays were added in previously approved PRC-005-4; any additional consideration of these devices is out of scope for PRC-005-6.

David Jendras - Ameren - Ameren Services - 3 -

Selected Answer: Yes

Colby Bellville - Duke Energy - 1,3,5,6 - FRCC,SERC,RFC

Group Name: Duke Energy

Group Member Name	Entity	Region	Segments
Doug Hils	Duke Energy	RFC	1
Lee Schuster	Duke Energy	FRCC	3
Dale Goodwine	Duke Energy	SERC	5
Greg Cecil	Duke Energy	RFC	6

Selected Answer: Yes

Answer Comment: Duke Energy is supportive of the proposal to combine the Implementation Plans for all of the listed versions of PRC-005. Based on the approaching effective date of PRC-005-3, we encourage that the proposal to combine all Implementation Plans be considered and approved prior to PRC-005-3 effective date.

Response: Thank you for your support. FERC, in their recent approval of PRC-005-4 in Order 813, rejected suggestions to combine the implementation plans. The SDT has requested that NERC include a proposal in its petition for PRC-005-6 to accomplish a streamlined implementation plan.

Chris Mattson - Tacoma Public Utilities (Tacoma, WA) - 5 -

Selected Answer: Yes

Lee Pedowicz - Northeast Power Coordinating Council - 10 - NPCC

Group Name: NPCC--Project 2007-17.4 PRC-005 FERC Order No. 803
Directive - PRC-005-6

Group Member Name	Entity	Region	Segments
Alan Adamson	New York State Reliability Council, LLC	NPCC	10
David Burke	Orange and Rockland Utilities Inc.	NPCC	3
Greg Campoli	New York Independent System Operator	NPCC	2
Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10
Mark Kenny	Northeast Utilities	NPCC	1
Helen Lainis	Independent Electricity System Operator	NPCC	2
Rob Vance	New Brunswick Power Corporation	NPCC	9
Paul Malozewski	Hydro One Networks Inc.	NPCC	1
Bruce Metruck	New York Power Authority	NPCC	6
Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10
David Ramkalawan	Ontario Power Generation, Inc.	NPCC	5
Brian Robinson	Utility Services	NPCC	8
Wayne Sipperly	New York Power Authority	NPCC	5
Edward Bedder	Orange and Rockland Utilities	NPCC	1

	Inc.		
Michael Jones	National Grid	NPCC	1
Brian Shanahan	National Grid	NPCC	1
Glen Smith	Entergy Services, Inc.	NPCC	5
RuiDa Shu	Northeast Power Coordinating Council	NPCC	10
Connie Lowe	Dominion Resources Services, Inc.	NPCC	5
Guy Zito	Northeast Power Coordinating Council	NPCC	10
Silvia Parada Mitchell	NextEra Energy, LLC	NPCC	5
Robert Pellegrini	The United Illuminating Company	NPCC	1
Kathleen Goodman	ISO - New England	NPCC	2
Kelly Dash	Consolidated Edison Co. of New York, Inc.	NPCC	1
Michael Forte	Consolidated Edison Co. of New York, Inc.	NPCC	1
Brian O'Boyle	Consolidated Edison Co. of New York, Inc.	NPCC	8
Peter Yost	Consolidated Edison Co. of New York, Inc.	NPCC	3
Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1
Si Truc Phan	Hydro-Quebec TransEnergie	NPCC	1

Selected Answer: Yes

Jennifer Losacco - NextEra Energy - Florida Power and Light Co. - 1 - FRCC

Selected Answer: Yes

Jason Smith - Southwest Power Pool, Inc. (RTO) - 2 - SPP

Group Name: SPP Standards Review Group

Group Member Name	Entity	Region	Segments
Shannon Mickens	Southwest Power Pool	SPP	2
Jason Smith	Southwest Power Pool	SPP	2
Karl Diekevers	Nebraska Public Power District	MRO	1,3,5
Allan George	Sunflower Electric Power Corporation	SPP	1
Robert Gray	Board of Public Utilities Kansas City, Kansas	SPP	3
Robert Hirchak	CLECO Corporation	SPP	1,3,5,6
Stephanie Johnson	Westar Energy, Inc.	SPP	1,3,5,6
James Nail	City of Independence, Missouri	SPP	3,5
Scott Williams	City Utilities of Springfield	SPP	1,4

Selected Answer: Yes

Answer Comment: The proposed implementation plan and request by NERC to align the implementations seem to address prior concerns with the staggered and confusing implementation dates. Thank you for the effort.

Response: Thank you for your support.

Ben Engelby - ACES Power Marketing - 6 -

Group Name: ACES Standards Collaborators - PRC-005 Project

Group Member Name	Entity	Region	Segments
Amber Skillern	East Kentucky Power Cooperative	SERC	1,3
Shari Heino	Brazos Electric Power Cooperative, Inc.	TRE	1,5
Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	RFC	1
Mike Brytowski	Great River Energy	MRO	1,3,5,6
Ellen Watkins	Sunflower Electric Power Corporation	SPP	1
Ryan Strom	Buckeye Power, Inc.	RFC	4
Ginger Mercier	Prairie Power, Inc.	SERC	1,3
Lucia Beal	Southern Maryland Electric Cooperative	RFC	3

Selected Answer: Yes

Answer Comment: We believe that unless there is an urgent reliability gap, revisions to PRC-005 should be limited to no more than once per year. Frequent modifications to these requirements can have detrimental effects on electric system reliability due to rushed standards development and the possibility of

inadequately reviewed relay test plans.

While we agree with the approach in the current implementation plan, we question the process of having multiple versions that have resulted in the conundrum that we face today. Each effective version of PRC-005 should supersede all previous versions and include all current requirements for clarity. We understand and appreciate that there are varied implementation dates for different requirements, but maintaining multiple versions is cumbersome, burdensome, and creates risk that a requirement is missed. We believe confusion would be alleviated if the NERC Standards Department had a policy of requiring each standard revision have a whole number for the next applicable version. For example, if PRC-005-2 is to be superseded, then PRC-005-2 would be retired and PRC-005-“3” would take precedence. We strongly urge NERC to discontinue the practice of creating sub-sets with standard versions, such as “PRC-005-2(i)”.

Response: Thank you for your support. As you note, there has been considerable standard development activity on PRC-005, and the SDT likewise hopes that need for frequent revisions will abate.

End of Report