Comment Report

Project Name:	2022-02 Modifications to TPL-001 and MOD-032 | Footnote 13.d SAR
Comment Period Start Date:	4/13/2023
Comment Period End Date:	5/12/2023
Associated Ballots:	

There were 34 sets of responses, including comments from approximately 101 different people from approximately 85 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

1. Do you agree with the proposed scope as described in the SAR? If you do not agree, or if you agree but have comments or suggestions for the project scope please provide your recommendation and explanation.

2. Provide any additional comments for the Standard Drafting Team to consider, if desired.

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
Midcontinent ISO, Inc.	Bobbi Welch	2	MRO,RF,SERC	ISO/RTO Council Standards Review Committee Project 2022-02 Modifications to TPL-001 Footnote 13d SAR	Ali Miremadi	CAISO	2	WECC
					Kennedy Meier	Electric Reliability Council of Texas, Inc.	2	Texas RE
					Helen Lainis	IESO	2	NPCC
					Kathleen Goodman	ISO-NE	2	NPCC
					Bobbi Welch	MISO	2	RF
					Gregory Campoli	New York Independent System Operator	2	NPCC
					Elizabeth Davis	PJM	2	RF
					Charles Yeung	SPP	2	MRO
Tacoma Public Utilities (Tacoma, WA)	Jennie Wike	1,3,4,5,6	WECC	Tacoma Power	Jennie Wike	Tacoma Public Utilities	1,3,4,5,6	WECC
					John Merrell	Tacoma Public Utilities (Tacoma, WA)	1	WECC
					John Nierenberg	Tacoma Public Utilities (Tacoma, WA)	3	WECC
					Hien Ho	Tacoma Public Utilities (Tacoma, WA)	4	WECC
					Terry Gifford	Tacoma Public Utilities (Tacoma, WA)	6	WECC
					Ozan Ferrin	Tacoma Public Utilities (Tacoma, WA)	5	WECC
MRO	Jou Yang	1,2,3,4,5,6	MRO	MRO NSRF	Bobbi Welch	Midcontinent ISO, Inc.	2	MRO
					Chris Bills	City of Independence, Power and Light Department	5	MRO

Fred Meyer	Algonquin Power Co.	3	MRO
Christopher Bills	City of Independence Power & Light	3,5	MRO
Larry Heckert	Alliant Energy Corporation Services, Inc.	4	MRO
Marc Gomez	Southwestern Power Administration	1	MRO
Matthew Harward	Southwest Power Pool, Inc. (RTO)	2	MRO
Bryan Sherrow	Board of Public Utilities	1	MRO
Terry Harbour	Berkshire Hathaway Energy - MidAmerican Energy Co.	1	MRO
Terry Harbour	MidAmerican Energy Company	1,3	MRO
Jamison Cawley	Nebraska Public Power District	1,3,5	MRO
Seth Shoemaker	Muscatine Power & Water	1,3,5,6	MRO
Michael Brytowski	Great River Energy	1,3,5,6	MRO
Shonda McCain	Omaha Public Power District	6	MRO
George E Brown	Pattern Operators LP	5	MRO
George Brown	Acciona Energy USA	5	MRO
Jaimin Patel	Saskatchewan Power Cooperation	1	MRO
Kimberly Bentley	Western Area Power Administration	1,6	MRO
Jay Sethi	Manitoba Hydro	1,3,5,6	MRO

					Michael Ayotte	ITC Holdings	1	MRO
Southern Company - Southern Company Services, Inc.	Pamela Frazier	1,3,5,6	MRO,RF,SERC,Texas RE,WECC	Southern Company	Matt Carden	Southern Company - Southern Company Services, Inc.	1	SERC
					Joel Dembowski	Southern Company - Alabama Power Company	3	SERC
					Jim Howell, Jr.	Southern Company - Southern Company Generation	5	SERC
					Ron Carlsen	Southern Company - Southern Company Generation	6	SERC
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	NPCC RSC	Gerry Dunbar	Northeast Power Coordinating Council	10	NPCC
					Alain Mukama	Hydro One Networks, Inc.	1	NPCC
					Deidre Altobell	Con Edison	1	NPCC
					Jeffrey Streifling	NB Power Corporation	1	NPCC
					Michele Tondalo	United Illuminating Co.	1	NPCC
					Stephanie Ullah-Mazzuca	Orange and Rockland	1	NPCC
					Quintin Lee	Eversource Energy	1	NPCC
					Michael Ridolfino	Central Hudson Gas & Electric Corp.	1	NPCC
					Randy Buswell	Vermont Electric Power Company	1	NPCC
					James Grant	NYISO	2	NPCC
					John Pearson	ISO New	2	NPCC

	England, Inc.		
Harishkumar Subramani Vijay Kumar	Independent Electricity System Operator	2	NPCC
Randy MacDonald	New Brunswick Power Corporation	2	NPCC
Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1	NPCC
David Burke	Orange and Rockland	3	NPCC
Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC
Salvatore Spagnolo	New York Power Authority	1	NPCC
Sean Bodkin	Dominion - Dominion Resources, Inc.	6	NPCC
David Kwan	Ontario Power Generation	4	NPCC
Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	1	NPCC
Glen Smith	Entergy Services	4	NPCC
Sean Cavote	PSEG	4	NPCC
Jason Chandler	Con Edison	5	NPCC
Tracy MacNicoll	Utility Services	5	NPCC
Shivaz Chopra	New York Power Authority	6	NPCC
Vijay Puran	New York State Department of Public Service	6	NPCC

					ALAN ADAMSON	New York State Reliability Council	10	NPCC
					David Kiguel	Independent	7	NPCC
					Joel Charlebois	AESI	7	NPCC
					John Hastings	National Grid	1	NPCC
					Michael Jones	National Grid USA	1	NPCC
Western Electricity Coordinating Council	Steven Rueckert	10		WECC	Steve Rueckert	WECC	10	WECC
					Phil O'Donnell	WECC	10	WECC

1. Do you agree with the proposed scope as described in the SAR? If you do not agree, or if you agree but have comments or suggestions for the project scope please provide your recommendation and explanation.

Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee Project 2022-02 Modifications to TPL-001 Footnote 13d SAR

Answer	No
Document Name	2022-02_UCF_SAR (TPL-001-5.1 Footnote 13d)_IRC SRC_05-11-23_FINAL.docx

Comment

The **ISO/RTO Council Standards Review Committee ("SRC")**[1] acknowledges that its members are not Protection System owners. Therefore, our comments concerning project scope go to: (1) assurance that BES reliability will not decrease as a result of implementing this proposal and (2) clarity and flexibility.

Assurance that BES reliability will be maintained

This proposal seeks to reduce the number of P5 contingencies studied under TPL-001 and thereby eliminates the requirement to initiate a corrective action plan for those contingencies that are unable to meet system performance requirements. Therefore, the SRC seeks assurance that this proposal will not reduce BES reliability. As control circuitry may include both monitored and non-monitored components, the overall Protection System design should ensure that the initiation of breaker failure protection is not disabled by a single component failure of the control circuitry which might be difficult to achieve when monitored components are excluded. Therefore, the exclusion of any non-redundant control circuitry components should be predicated on breaker failure protection remaining intact.

Clarity and flexibility

Should this project move forward, the project scope should be clarified. Currently, Footnote 13d describes which non-redundant components of a Protection System are to be considered in the Planning Assessment when defining P5 contingencies. Footnote 13d does *not* dictate the corrective action plan to be implemented when performance expectations are not met (e.g., the addition of unnecessary complexity suggested in the SAR). There are multiple options to mitigate any consequences resulting from these contingencies.

In addition, the scope as written locks the SDT into implementing a pre-determined approach. The SRC recommends the Project Scope be revised to both clarify intent and provide the SDT with the flexibility to consider a range of potential solutions. One way to do this is to revise the parenthetical to more closely mirror the language in TPL-001-5.1, Footnotes 13b and 13c where the exception is clearly identified as shown below:

Project Scope (*see* page 3)

Modify Footnote 13.d ***to expand the*** *exclusion* ***for*** *single control circuitry (including auxiliary relays and lockout relays) associated with protective functions [from the dc supply through and including the trip coil(s) of the circuit breakers or other interrupting devices, required for Normal Clearing],* ***to include*** *any non-redundant components* ***that are*** *both monitored and reported at a Control Center* ***provided breaker failure protection remains intact****."*

Finally, the Technical Rationale for TPL-001-5 must be updated to align with modifications to TPL-001, as page 9 currently includes the following assumption:

"Most, if not all, constituent parts of the control circuitry are generally unmonitored, may fail, and may remain undetected until periodic testing is conducted. … Single control circuitry should be considered a non-redundant component of a Protection System given that Delayed Fault Clearing, including significantly delayed remote end or backup clearing, is expected when the non-redundant auxiliary or lockout relay device within the single control circuitry fails."

[1] For purposes of these comments, the IRC SRC includes the following entities: CAISO (with the exception of our response to question 1), ERCOT

(with the exception of our responses to question 1), IESO, ISO-NE, MISO, NYISO, PJM and SPP.

Likes 0	
Dislikes 0	

Response

Darcy O'Connell - California ISO - 2

Answer	No
Document Name	

Comment

The scope as written locks the SDT into implementing a pre-determined approach. CAISO recommends the Project Scope be revised to both clarify intent and provide the SDT with the flexibility to consider a range of potential solutions.

In addition, the Technical Rationale for TPL-001-5 must be updated to align with modifications to TPL-001, as page 9 currently includes the following assumption:

"Most, if not all, constituent parts of the control circuitry are generally unmonitored, may fail, and may remain undetected until periodic testing is conducted. … Single control circuitry should be considered a non-redundant component of a Protection System given that Delayed Fault Clearing, including significantly delayed remote end or backup clearing, is expected when the non-redundant auxiliary or lockout relay device within the single control circuitry fails."

Likes 0	
Dislikes 0	

Response

Harishkumar Subramani Vijay Kumar - Independent Electricity System Operator - 2

Answer	No
Document Name	

Comment

This proposal seeks to reduce the number of P5 contingencies studied under TPL-001 and thereby eliminates the requirement to initiate a corrective action plan for those contingencies that are unable to meet system performance requirements.

Therefore, the proposed scope will reduce BES reliability. As control circuitry may include both monitored and non-monitored components, the overall Protection System design should ensure that the initiation of breaker failure protection is not disabled by a single component failure of the control circuitry which might be difficult to achieve when monitored components are excluded. Therefore, the exclusion of any non-redundant control circuitry components should be predicated on breaker failure protection remaining intact.

Finally, the SAR needs to be aligned with the assumption in the Technical Rationale for TPL-001-5 (page 9):

"Most, if not all, constituent parts of the control circuitry are generally unmonitored, may fail, and may remain undetected until periodic testing is conducted. … Single control circuitry should be considered a non-redundant component of a Protection System given that Delayed Fault Clearing, including significantly delayed remote end or backup clearing, is expected when the non-redundant auxiliary or lockout relay device within the single control circuitry fails."

Likes 0	
Dislikes 0	

Response

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

Answer	No
Document Name	

Comment

Assurance that BES reliability will be maintained

This proposal may result in a reduction in the number of P5 contingencies studied under TPL-001 and an associated reduction in the identification of contingencies that are unable to meet system performance requirements. Therefore, ERCOT seeks assurance that this proposal will not reduce BES reliability.

Clarity and flexibility

Should this project move forward, the project scope should be clarified. Currently, Footnote 13d describes non-redundant components of a Protection System that should be considered in the Planning Assessment when defining P5 contingencies. Footnote 13d does *not* dictate the corrective action plan to be implemented when performance expectations are not met (e.g., the addition of unnecessary complexity suggested in the SAR). There are multiple options to mitigate any consequences resulting from these contingencies.

In addition, the scope as written would lock the SDT into implementing a pre-determined approach. ERCOT recommends the Project Scope be revised to

a) allow the SDT to review the original intent of footnote 13d to ensure that intent is still applicable and is clearly conveyed, and

b) provide the SDT with the flexibility to consider a range of potential solutions based on the results of its review. As an example, one potential solution that the SDT might consider would be to clarify TPL-001-5.1, footnote 13d by revising the parenthetical in the footnote to more closely mirror the language used in the parentheticals in footnotes 13b and 13c.

Finally, the Technical Rationale for TPL-001-5 should be updated to align with any modifications made to TPL-001, as page 9 of the technical rationale currently includes the following assumption:

"[m]ost, if not all, constituent parts of the control circuitry are generally unmonitored, may fail, and may remain undetected until periodic testing is conducted. . . . Single control circuitry should be considered a non-redundant component of a Protection System given that Delayed Fault Clearing, including significantly delayed remote end or backup clearing, is expected when the non-redundant auxiliary or lockout relay device within the single control circuitry fails."

Likes 0	
Dislikes 0	

Response

Srikanth Chennupati - Entergy - Entergy Transmission - 1,3,5,6 - SERC

Answer	Yes
Document Name	

Comment

Entergy Recommends to NERC SDT to Provide Applicable Entities with at least 3 - 5 Years' timeframe to plan and implement necessary changes in the field to meet proposed TPL-001-5.1 Table 1 – Steady State & Stability Performance Footnotes (Planning Events and Extreme Events) footnote 13 d change.

Likes 0	
Dislikes 0	

Response

Jennie Wike - Tacoma Public Utilities (Tacoma, WA) - 1,3,4,5,6 - WECC, Group Name Tacoma Power

Answer	Yes
Document Name	

Comment

Tacoma Power is supportive of additional clarification to Footnote 13d. For example, it may be helpful to specify "trip coil circuit" in the footnote so that it's clear that entities are monitoring the circuit. However, Tacoma Power does not recommend expanding the Footnote 13d monitoring exception to the entire relay.

Below is a suggestion for the SDT on how this clarification could be incorporated into the footnote:

d. A single control circuitry (including auxiliary relays and lockout relays) associated with protective functions, from the dc supply through and including the trip coil(s) of the circuit breakers or other interrupting devices, required for Normal Clearing (the trip coil **circuit** may be excluded if it is both monitored and reported at a Control Center).

Likes 0	
Dislikes 0	

Response

Jou Yang - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer	Yes
Document Name	

Comment

Overall, the MRO NERC Standards Review Forum (MRO NSRF) agrees with the intent of the SAR; i.e. to expand the exclusion criteria under Footnote 13d.

That said, the MRO NSRF proposes the SAR be written to consider alternative options to achieve this same objective. To the extent the trip coil circuits are independent from the circuits that initiate breaker failure, it is unnecessary to evaluate a P5 contingency for a trip coil failure or failure of the associated DC trip circuit because such a failure would not prohibit the initiation of breaker failure. Technically a trip coil is not part of a relay or a relay protection scheme, but instead a part of the circuit breaker itself. Furthermore, the DC trip circuitry can be considered an extension of the breaker so long as the circuit that initiates breaker failure is completely independent. Given that there are redundant relays and the breaker failure initiation circuit is independent of the relay trip circuit, there is no reason for a single trip coil or associated DC circuit to trigger the evaluation of a P5 contingency, because such a failure would be covered under the P4 contingency that must be evaluated for any type of potential failure of the circuit breaker to trip and interrupt current.

With respect to monitoring, unlike a battery charger failure where there is some time to respond until the batteries are fully discharged, a failure of a non-redundant trip circuit would leave a gap in protection until such time as field crews could be dispatched to diagnose and correct the problem. Therefore, monitoring is not the best criteria from which to grant an exemption. Alternatively, as long as the DC breaker failure initiation circuit is independent of the DC trip circuit, the non-redundant DC trip circuit and associated trip coil should not trigger a P5 contingency.

Likes 0	
Dislikes 0	

Response

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

Answer	Yes
Document Name	

Comment

No comments.

Likes 0	

Dislikes 0	
Response	
Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO	
Answer	Yes
Document Name	
Comment	
Manitoba Hydro (MH) agrees with the scope of the SAR which aligns with what we have proposed back in 2018 when changes were made to footnote 13 under NERC Project 2015-10 Single Points of Failure TPL-001.	
Likes 0	
Dislikes 0	
Response	
Michelle Amarantos - APS - Arizona Public Service Co. - 1,3,5,6	
Answer	Yes
Document Name	
Comment	
AZPS agrees with the proposed scope of the SAR. AZPS supports the following comments that were submitted by EEI on behalf of their members: The issue identified in this SAR addresses an unforeseen problem within Footnote 13 that was originally developed in response to FERC Order 754. While the Project 2015-10 Standards Drafting Team (SDT) developed improvements to the TPL-001 Reliability Standard that will resolve many single point of failure issues, it placed unintended limits on entities. For example, Footnote 13d provides exception language for a single trip coil that is monitored and reported, it did not allow entities to also provide an exception for the wiring from the control house to the trip coil, which is also monitored and reported with that trip coil monitoring alarm. Additionally, the proposed changes that would be required by registered entities as the result of Footnote 13d, would be costly, inconsistent with the other parts of Footnote 13, and are unjustifiable considering the other exception language already allowed in Footnote 13 parts a, b & c.	
Likes 0	
Dislikes 0	
Response	
Ben Hammer - Western Area Power Administration - 1,6 - MRO,WECC	
Answer	Yes
Document Name	

Comment
WAPA agrees with the scope of the SAR and encourages the proposed addition to the existing Project 2022-02 Modifications to TPL-001 and MOD-032 drafting process.

Likes 0	
Dislikes 0	

Response

Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	Yes
Document Name	

Comment
CenterPoint Energy Houston Electric, LLC (CEHE) agrees with the proposed scope of the SAR and supports the comments as submitted by the Edison Electric Institute (EEI).

Likes 0	
Dislikes 0	

Response

Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF	
Answer	Yes
Document Name	

Comment
None.

Likes 0	
Dislikes 0	

Response

Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF	
Answer	Yes
Document Name	

Comment	
Southern Indiana Gas & Electric Company (SIGE) agrees with the proposed scope of the TPL-001-5.1 Footnote 13.d SAR and supports the comments as submitted by the Edison Electric Institute (EEI).	
Likes 0	
Dislikes 0	
Response	
Joseph Amato - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1,3	
Answer	Yes
Document Name	
Comment	
MidAmerican supports the MRO NSRF comments.	
Likes 0	
Dislikes 0	
Response	
Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF	
Answer	Yes
Document Name	
Comment	
The NAGF supports the proposed scope of the SAR.	
Likes 0	
Dislikes 0	
Response	
David Jendras Sr - Ameren - Ameren Services - 1,3,6	
Answer	Yes
Document Name	
Comment	

Ameren agrees with the scope of the SAR and agrees that a definition for DERs should be included.

Likes 0	
Dislikes 0	

Response

Alan Kloster - Evergy - 1,3,5,6 - MRO

Answer	Yes
Document Name	

Comment

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) for question #1.

Likes 0	
Dislikes 0	

Response

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

Answer	Yes
Document Name	

Comment

EEI supports the proposed scope in this SAR. The issue identified in this SAR addresses an unforeseen problem within Footnote 13 that was originally developed in response to FERC Order 754. While the Project 2015-10 Standards Drafting Team (SDT) developed improvements to the TPL-001 Reliability Standard that will resolve many single point of failure issues, it placed unintended limits on entities. For example, Footnote 13d provides exception language for a single trip coil that is monitored and reported, it did not allow entities to also provide an exception for the wiring from the control house to the trip coil, which is also monitored and reported with that trip coil monitoring alarm. Additionally, the proposed changes that would be required by registered entities as the result of Footnote 13d, would be costly, inconsistent with the other parts of Footnote 13, and are unjustifiable considering the other exception language already allowed in Footnote 13 parts a, b & c.

Likes 0	
Dislikes 0	

Response

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

Answer	Yes
Document Name	

Comment	
NPCC RSC agrees and supports the proposed scope as described in the SAR.	
Likes 0	
Dislikes 0	
Response	
Pamela Frazier - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
The purpose of the language "*Modifying the Footnote 13.d exception to apply to any monitored and reported components of the control circuitry to be consistent with Protection System design and operational functionality will allow the DP, GO, and TO to achieve the required transmission performance mandated by TPL-001-5.1 in a much more efficient manner*." is unclear since TPL-001 is only applicable to the TP and PC.	
Likes 0	
Dislikes 0	
Response	
Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC	
Answer	Yes
Document Name	
Comment	
One thing for consideration or claification for the need. The proposal is to expand the monitoring exception to the entire DC trip Circuit and not just the trip coil. Per part C. it already appplies to the DC source so it doessn't seem to make sence to omit the circuitry between the Source and the tirp coil.	
Likes 0	
Dislikes 0	
Response	
Daniel Gacek - Exelon - 1,3	
Answer	Yes
Document Name	

Comment	
Exelon supports the scope of the SAR and concurs with the comments submitted by the EEI.	
Likes 0	
Dislikes 0	
Response	
Stacy Engelmann - City of College Station - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thomas Foltz - AEP - 3,5,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Donna Wood - Tri-State G and T Association, Inc. - 1,3,5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Gary Trezza - Long Island Power Authority - 1 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Allie Gavin - International Transmission Company Holdings Corporation - 1 - MRO,RF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Lori Frisk - Allete - Minnesota Power, Inc. - 1	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Chantal Mazza - Hydro-Quebec (HQ) - 1 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Alain Mukama - Hydro One Networks, Inc. - 1,3	
Answer	
Document Name	
Comment	
Currently this SAR is focused on TPL-001-5 which is not applicable to Hydro One.	
Likes 0	
Dislikes 0	

Response

2. Provide any additional comments for the Standard Drafting Team to consider, if desired.	
Alain Mukama - Hydro One Networks, Inc. - 1,3	
Answer	
Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	
Daniel Gacek - Exelon - 1,3	
Answer	
Document Name	
Comment	
Exelon supports the concerns expressed in the comments submitted by the EEI.	
Likes 0	
Dislikes 0	
Response	
Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC	
Answer	
Document Name	
Comment	
No additional Comments.	
Likes 0	
Dislikes 0	
Response	

Pamela Frazier - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name Southern Company	
Answer	
Document Name	
Comment	
No further comments	
Likes 0	
Dislikes 0	
Response	
Marc Sedor - Seminole Electric Cooperative, Inc. - 1,3,4,5,6	
Answer	
Document Name	
Comment	
TPL-001-5.1 IRPWG SAR Recommend that a MW limit is included for the size of the equipment that will be required to be modeled. Will it follow the 75MW limit listed in the BES definition for generation facilities? TPL-001-5.1 SPIDERWG SAR Recommend defining a MW limit. Will it follow the 75MW limit listed in the BES definition for generation facilities? Would like some clarity on the statement “Planning Assessments should include DERs that can potentially impact Transmission System performance assessment”. This could be resolved in defining a MW limit as it pertains to the generation facilities size. MOD-032-1 SAR Recommend SAR define what is retail scale and utility scale. How low of a MW value is the team looking at with the retail scale reference, e.g., 75 MW?	
Likes 0	
Dislikes 0	
Response	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	
Document Name	
Comment	

While EEI supports the Scope of this SAR, we note that the technical expertise necessary to effectively address the concerns identified require protection system and associated control circuitry expertise. Unfortunately, the current proposed makeup of the Project 2022-02 SDT was developed to address different issues. Although we agree that the proposed makeup of SDT members is correct for the intended scope of the existing SARs, additional SDT members with the necessary expertise should be added to this SDT or this SAR should be separated out into a separate NERC project.

TPL-001-5.1 IRPWB SAR - Planning Coordinators, Transmission Planners, and Generator Owners of inverter-based resources

TPL-001-5.1 SPIDERWG SAR – Planning Coordinators and Transmission Planners, i.*e., the applicable entities for this standard. Additionally, Distribution Providers, Generator Owners, and DER aggregators participating in markets- i.e., not an applicable entity to this standard, would be useful to include.*

MOD-032-1 SAR - Transmission Planner, Planning Coordinator, Distribution Provider *While not a Functional Entity per the NERC Functional Model, the "MOD-032 Designees" that are designated by the ERO to develop interconnection-wide base cases (i.e., the Regional Entities), will also be affected by these changes and should be considered for appointment to the Standard Drafting Team.*

Likes 0	
Dislikes 0	

Response

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

Answer	
Document Name	

Comment

For this response, ERCOT joins the comments submitted by the ISO/RTO Council (IRC) Standards Review Committee (SRC) and adopts them as its own.

Likes 0	
Dislikes 0	

Response

Alan Kloster - Evergy - 1,3,5,6 - MRO

Answer	
Document Name	

Comment

Evergy supports and incorporates by reference the comments of the Edison Electric Institute for question #2.

Likes 0	
Dislikes 0	

Response

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF	
Answer	
Document Name	
Comment	
The NAGF has no additional comments.	
Likes 0	
Dislikes 0	

Response

Darcy O'Connell - California ISO - 2	
Answer	
Document Name	
Comment	
CAISO agrees with comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee with exception of Q1, where CAISO provided comments.	
Likes 0	
Dislikes 0	

Response

Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee Project 2022-02 Modifications to TPL-001 Footnote 13d SAR	
Answer	
Document Name	
Comment	
The SRC supports having the same SDT address this SAR as part of existing **Project 2022-02: Modifications to TPL-001-5 and MOD-032** to enhance the efficiency of the standards development process.	
Likes 0	
Dislikes 0	

Response
Joseph Amato - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1,3
Answer	
Document Name	
Comment
MidAmerican supports the MRO NSRF comments.
Likes 0	
Dislikes 0	
Response
Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF
Answer	
Document Name	
Comment
While Southern Indiana Gas & Electric Company (SIGE) supports the proposed scope, trip coil monitoring is typically done through microprocessor relay; this change could force upgrades to protection systems at an unknown scale. Additionally, SIGE supports the comments as submitted by the Edison Electric Institute (EEI).
Likes 0	
Dislikes 0	
Response
Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF
Answer	
Document Name	
Comment
None.
Likes 0	
Dislikes 0	
Response

Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
CEHE supports the additional comments submitted by the Edison Electric Institute (EEI) regarding the need for technical experts in protection systems to be included in the Standards Drafting team for this project.	
Likes 0	
Dislikes 0	
Response	
Ben Hammer - Western Area Power Administration - 1,6 - MRO,WECC	
Answer	
Document Name	2022-02_Unoffical Comment Form _SAR (TPL-001-5.1)_WAPA.docx
Comment	
WAPA suggests that the revised Footnote 13d language proposed in the SAR is unwieldy and difficult to apply. [Proposed in SAR, page 3 of 8] d. A single control circuitry (including auxiliary relays and lockout relays) associated with protective functions, from the dc supply through and including the trip coil(s) of the circuit breakers or other interrupting devices, required for Normal Clearing **(any non-redundant components of the control circuitry may be excluded if they are both monitored and reported at a Control Center).; START STRIKETHROUGH** (the trip coil may be excluded if it is both monitored and reported at a Control Center). **END STIKETHROUGH** After all, the intent of the SAR is to facilitate an exception for control circuity that contains non-redundant components if the control circuitry is monitored and reported, not to monitor and report each non-redundant component in the control circuitry. Therefore, WAPA proposes simpler language to be the revision to Footnote 13d: d. A single control circuitry (including auxiliary relays and lockout relays) associated with protective functions, from the dc supply through and including the trip coil(s) of the circuit breakers or other interrupting devices, required for Normal Clearing **(an exception is a single control circuitry that is both monitored and reported at a Control Center);** **START STRIKETHROUGH** (the trip coil may be excluded if it is both monitored and reported at a Control Center). **END STIKETHROUGH** This proposed language omits ambiguity and is more consistent with the prior subparts of Footnote 13.	
Likes 0	
Dislikes 0	
Response	

Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO	
Answer	
Document Name	
Comment	

Manitoba Hydro would like to recommend the following rephrasing to footnote 13 of Table 1 (new text in red, text to be removed was deleted).

13. For purposes of this standard, non-redundant components of a Protection System to consider are as follows:

c. A single station dc supply **and its dc distribution circuits** associated with protective functions required for Normal Clearing (an exception is a single station dc supply **and its dc distribution circuits** that are both monitored and reported at a Control Center for both low voltage and open circuit);

d. A single **trip** circuitry associated with protective functions, from the protection relay through and including the trip coil(s) of the circuit breakers or other interrupting devices, required for Normal Clearing (the trip **circuit and** coil may be excluded if both **are** monitored and reported at a Control Center)**;**

e. A single auxiliary tripping or lockout relay associated with protection tripping.

Rationale:

In footnote-13c, the proposed changes allow exceptions for DC Distribution and components of the trip circuit (if monitored) which are low probability items for failure. We would also like to propose to place auxiliary trip relays and lockout relays on their own line to make it 100% clear that they must be considered when classifying non-redundant component of a Protection System.

Likes 0	
Dislikes 0	
Response	

Andy Fuhrman - Minnkota Power Cooperative Inc. - 1,5 - MRO	
Answer	
Document Name	
Comment	

MPC supports comments submitted by the MRO NERC Standards Review Forum (NSRF).

Likes 0	
Dislikes 0	
Response	

Jou Yang - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	
Document Name	
Comment	

The MRO NERC Standards Review Forum (MRO NSRF) supports the proposed scope of this SAR and supports combining this SAR with existing Project 2022-02: Modifications to TPL-001-5 and MOD-032 to enhance the efficiency of the standards development process.

As the work associated with Footnote 13d may reach industry consensus more quickly than the balance of the project, SRC recommends the SDT consider balloting the Footnote 13d work separate from that described in the original SARs.

Finally, we agree that it is important to include Transmission Owner, Generator Owner and/or Distribution Provider representatives with Protection System expertise on the SDT, as owners of Protection System control circuitry. Although several of the prior SARs for Project 2022-02 sought to include DP and/or GO representation on the SDT, only the Footnote 13d SAR mentions the need to include a Transmission Owner (TO) representative (page 5). Therefore, we recommend the SDT consider the need to expand the team to include adequate representation.

- TPL-001-5 IRPWG SAR: Planning Coordinators, Transmission Planners, and Generator Owners of inverter-based resources.
- TPL-001 SPIDERWG SAR: Planning Coordinators and Transmission Planners, i.e. the applicable entities for this standard. Additionally, Distribution Providers, Generator Owners, and DER aggregators participating in markets- i.e. not an applicable entity to this standard, would be useful to include.
- MOD-032 SAR: Transmission Planner, Planning Coordinator, Distribution Provider.
- TPL-001-5 Footnote 13d SAR: Based on the scope of this SAR there would not be any changes to the applicability of TPL-001-5.1, which is applicable to the Planning Coordinator and Transmission Planner. However, it should be noted that Footnote 13 directly affects Protection System equipment that is the responsibility of the DP, GO, and TO.

Likes 0	
Dislikes 0	
Response	

Srikanth Chennupati - Entergy - Entergy Transmission - 1,3,5,6 - SERC	
Answer	
Document Name	
Comment	

None

Likes 0	
Dislikes 0	

Response