

## Comment Report

**Project Name:** 2023-07 Transmission Planning Performance Requirements for Extreme Weather | Draft 2  
**Comment Period Start Date:** 7/16/2024  
**Comment Period End Date:** 8/22/2024  
**Associated Ballots:** 2023-07 Transmission Planning Performance Requirements for Extreme Weather Implementation Plan AB 2 OT  
2023-07 Transmission Planning Performance Requirements for Extreme Weather TPL-008-1 AB 2 ST

There were 74 sets of responses, including comments from approximately 191 different people from approximately 118 companies representing 10 of the Industry Segments as shown in the table on the following pages.

## Questions

- 1. The drafting team (DT) updated the Requirements in chronological order. Do you agree with the proposed TPL-008-1 Reliability Standard Requirement layout? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 2. The DT updated Requirements R1 – R2 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R1-R2? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 3. The DT updated Requirements R3 – R5 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R3-R5? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 4. The DT updated Requirements R6 – R8 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R6-R8? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 5. The DT updated Requirement R9 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirement R9? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 6. The DT updated Requirement R10 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirement R10? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 7. The DT split out Table 1 into parts for better readability. Do you agree with the updated layout of Table 1? If you do not agree, please provide your recommendation and technical justification.**
- 8. The DT believes proposed modifications in TPL-008-1 provide entities with flexibility to meet the reliability objectives in a cost-effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for improvement to enable more cost-effective approaches, please provide your recommendation and, if appropriate, technical or procedural justification.**
- 9. Provide any additional comments for the standard drafting team to consider, including the provided technical rationale document, if desired.**

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
MRO	Anna Martinson	1,2,3,4,5,6	MRO	MRO Group	Shonda McCain	Omaha Public Power District (OPPD)	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jamison Cawley	Nebraska Public Power District	1,3,5	MRO
					Jay Sethi	Manitoba Hydro (MH)	1,3,5,6	MRO
					Husam Al-Hadidi	Manitoba Hydro (System Performance)	1,3,5,6	MRO
					Kimberly Bentley	Western Area Power Administration	1,6	MRO
					Jaimin Patal	Saskatchewan Power Corporation (SPC)	1	MRO
					George Brown	Pattern Operators LP	5	MRO
					Larry Heckert	Alliant Energy (ALTE)	4	MRO
					Terry Harbour	MidAmerican Energy Company (MEC)	1,3	MRO
					Dane Rogers	Oklahoma Gas and Electric (OG&E)	1,3,5,6	MRO
					Seth Shoemaker	Muscatine Power & Water	1,3,5,6	MRO
					Michael Ayotte	ITC Holdings	1	MRO
					Andrew Coffelt	Board of Public Utilities-Kansas (BPU)	1,3,5,6	MRO
Peter Brown	Invenergy	5,6	MRO					

					Angela Wheat	Southwestern Power Administration	1	MRO
					Bobbi Welch	Midcontinent ISO, Inc.	2	MRO
					Joshua Phillips	Southwest Power Pool	2	MRO
					Patrick Tuttle	Oklahoma Municipal Power Authority	4,5	MRO
Dominion - Dominion Resources, Inc.	Barbara Marion	5		Dominion	Victoria Crider	Dominion	3	NA - Not Applicable
					Barbara Marion	Dominion	5	NA - Not Applicable
					Sean Bodkin	Dominion	6	NA - Not Applicable
					Steven Belle	Dominion	1	NA - Not Applicable
Midcontinent ISO, Inc.	Bobbi Welch	2	MRO,RF,SERC	ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2	Ali Miremadi	CAISO	2	WECC
					Kennedy Meier	Electric Reliability Council of Texas, Inc.	2	Texas RE
					Helen Lainis	IESO	2	NPCC
					Keith Jonassen	ISO-NE	2	NPCC
					Bobbi Welch	MISO	2	RF
					Gregory Campoli	New York Independent System Operator	2	NPCC
					Charles Yeung	SPP	2	MRO
					Elizabeth Davis	PJM	2	RF
Western Power Pool	Chelsea Loomis	NA - Not Applicable	WECC	WPP Consortium of Engineers	Guiha Wang	BC Hydro	NA - Not Applicable	WECC
					Berhanu Tesema	BPA	NA - Not Applicable	WECC
					Christopher Lamb	CHPD	NA - Not Applicable	WECC
					Laryn Brinkman	CHPD	NA - Not Applicable	WECC
					Zach Zornes	CHPD	NA - Not Applicable	WECC

					Stephen Longmuir	IPCO	NA - Not Applicable	WECC
					Jessica Boatwright	NWMT	NA - Not Applicable	WECC
					Daniel Baye	PAC	NA - Not Applicable	WECC
					Rachit Aurora	PSE	NA - Not Applicable	WECC
					Nima Miri	SCL	NA - Not Applicable	WECC
					Rob Jones	SCL	NA - Not Applicable	WECC
					Ken Che	SNPD	NA - Not Applicable	WECC
					Tuan Dang	SNPD	NA - Not Applicable	WECC
					Ben Hutchins	WPP	NA - Not Applicable	WECC
Santee Cooper	Chris Wagner	1		Santee Cooper	Rene' Free	Santee Cooper	1,3,5,6	SERC
					Christie Pope	Santee Cooper	1,3,5,6	SERC
Public Utility District No. 1 of Chelan County	Joyce Gundry	3		CHPD	Rebecca Zahler	Public Utility District No. 1 of Chelan County	5	WECC
					Joyce Gundry	Public Utility District No. 1 of Chelan County	3	WECC
					Diane Landry	Public Utility District No. 1 of Chelan County	1	WECC
					Robert Witham	Public Utility District No. 1 of Chelan County	6	WECC
FirstEnergy - FirstEnergy Corporation	Mark Garza	4		FE Voter	Julie Severino	FirstEnergy - FirstEnergy Corporation	1	RF
					Aaron Ghodooshim	FirstEnergy - FirstEnergy Corporation	3	RF

					Robert Loy	FirstEnergy - FirstEnergy Solutions	5	RF
					Mark Garza	FirstEnergy-FirstEnergy	1,3,4,5,6	RF
					Stacey Sheehan	FirstEnergy - FirstEnergy Corporation	6	RF
Southern Company - Southern Company Services, Inc.	Pamela Hunter	1,3,5,6	SERC	Southern Company	Matt Carden	Southern Company - Southern Company Services, Inc.	1	SERC
					Joel Dembowski	Southern Company - Alabama Power Company	3	SERC
					Ron Carlsen	Southern Company - Southern Company Generation	6	SERC
					Leslie Burke	Southern Company - Southern Company Generation	5	SERC
Black Hills Corporation	Rachel Schuldt	6		Black Hills Corporation - All Segments	Micah Runner	Black Hills Corporation	1	WECC
					Josh Combs	Black Hills Corporation	3	WECC
					Rachel Schuldt	Black Hills Corporation	6	WECC
					Carly Miller	Black Hills Corporation	5	WECC
					Sheila Suurmeier	Black Hills Corporation	5	WECC
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
					Deidre Altobell	Con Edison	1	NPCC
					Michele Tondalo	United Illuminating Co.	1	NPCC

Stephanie Ullah-Mazzuca	Orange and Rockland	1	NPCC
Michael Ridolfino	Central Hudson Gas & Electric Corp.	1	NPCC
Randy Buswell	Vermont Electric Power Company	1	NPCC
James Grant	NYISO	2	NPCC
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
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
David Kiguel	Independent	7	NPCC
Joel Charlebois	AESI	7	NPCC

					Joshua London	Eversource Energy	1	NPCC
					Jeffrey Streifling	NB Power Corporation	1,4,10	NPCC
					Joel Charlebois	AESI	7	NPCC
					John Hastings	National Grid	1	NPCC
					Erin Wilson	NB Power	1	NPCC
					James Grant	NYISO	2	NPCC
					Michael Couchesne	ISO-NE	2	NPCC
					Kurtis Chong	IESO	2	NPCC
					Michele Pagano	Con Edison	4	NPCC
					Bendong Sun	Bruce Power	4	NPCC
					Carvers Powers	Utility Services	5	NPCC
					Wes Yeomans	NYSRC	7	NPCC
					Chantal Mazza	Hydro Quebec	1	NPCC
					Nicolas Turcotte	Hydro Quebec	2	NPCC
Dominion - Dominion Resources, Inc.	Sean Bodkin	6		Dominion	Victoria Crider	Dominion Energy	3	NA - Not Applicable
					Sean Bodkin	Dominion Energy	6	NA - Not Applicable
					Steven Belle	Dominion Energy	1	NA - Not Applicable
					Barbara Marion	Dominion Energy	5	NA - Not Applicable
Shannon Mickens	Shannon Mickens		MRO,SPP RE,WECC	SPP RTO	Shannon Mickens	Southwest Power Pool Inc.	2	MRO
					Mia Wilson	Southwest Power Pool Inc.	2	MRO
					Eddie Watson	Southwest Power Pool Inc.	2	MRO
					Erin Cullum	Southwest Power Pool Inc.	2	MRO
					Jonathan Hayes	Southwest Power Pool Inc.	2	MRO



					Jeff McDiarmid	Southwest Power Pool Inc.	2	MRO
					Scott Jordan	Southwest Power Pool Inc	2	MRO
					Lottie Jones	Southwest Power Pool Inc.	2	MRO
					Sherri Maxey	Southwest Power Pool Inc.	2	MRO
					Josh Phillips	Southwest Power Pool Inc.	2	MRO
Western Electricity Coordinating Council	Steven Rueckert	10		WECC	Steve Rueckert	WECC	10	WECC
					Curtis Crews	WECC	10	WECC
Tim Kelley	Tim Kelley		WECC	SMUD and BANC	Nicole Looney	Sacramento Municipal Utility District	3	WECC
					Charles Norton	Sacramento Municipal Utility District	6	WECC
					Wei Shao	Sacramento Municipal Utility District	1	WECC
					Foung Mua	Sacramento Municipal Utility District	4	WECC
					Nicole Goi	Sacramento Municipal Utility District	5	WECC
					Kevin Smith	Balancing Authority of Northern California	1	WECC

1. The drafting team (DT) updated the Requirements in chronological order. Do you agree with the proposed TPL-008-1 Reliability Standard Requirement layout? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.

**Long Island Power Authority**

Answer Yes

Document Name (if an attachment is provided by submitter)

**Comment**

Submitter's comments

Likes 0 # of other submitters who agree with these comments

Dislikes 0 # of other submitters who disagree with these comments

**Response**

(Drafting team's response to submitter's comments)

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

Answer No

Document Name

**Comment**

The MRO NERC Standards Review Forum (NSRF) recommends the following changes to the order of the requirements:

- R8 should be moved up. The standard needing to be met once every five years should be right up front.
- R2 and R4 need to be together as they describe the cases. They should also clearly denote both power flow and dynamics benchmark and sensitivity cases need to be constructed.

Please see the process flow proposed in Attachment A to these comments which illustrates a logical flow.

Likes 1 Scott Brame, N/A, Brame Scott

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

Answer No

Document Name

**Comment**

Energy supports and incorporates by reference the comments of the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 1

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer**

No

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

Tri-State supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO**

**Answer**

No

**Document Name**

**Comment**

It's unclear to SPP how the "chronological order" helps the success of the proposed standard to move forward. Industry has identified too many unresolved issues with the proposed requirements to make any type of determination. For example, the drafting team has not provided any resolution or vision on how the industry will use the NERC (ERO) approved library since it has not been created at this time.

Moreover, the drafting team has not provided any tangible solutions/details in reference to joint coordination with neighboring entities as well as appropriate data collection via MOD-032 to build quality models to conduct this assessment and produce quality results.

SPP recommends that the drafting team provides clarity/tangible solutions via technical documentation to help industry get a better understanding on NERC's expectations for this standard.

Likes 0

Dislikes 0

### Response

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

No

**Document Name**

**Comment**

The chronological order is immaterial at this time. The issues outlined in the subsequent comments need to be addressed before the chronological order of requirements can be determined.

Likes 0

Dislikes 0

### Response

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

**Answer**

No

**Document Name**

**Comment**

CenterPoint Energy Houston Electric, LLC (CEHE) disagrees with the proposed standard overall and definition of an "Extreme Temperature Assessment". Clarification on what "extreme heat" and "extreme cold temperature" and details on the meaning of benchmark events are needed.

CEHE has identified a few issues related to the Electric Reliability Organization (ERO) library. First, there is little information on the overall reliability benefit of the standard and details of exactly what the library will contain, how it will get populated, or which forms of data will be kept. Second, there is no requirement that authorizes the upkeep and ongoing maintenance of said library. Third, using one extreme heat benchmark, and one extreme cold benchmark, as approved by the ERO, ignores local extreme temperature events, and may exclude entities who may experience micro weather events. Extreme Temperature Assessments should include regional and significant local events. It is not clear who in the ERO approves and maintains a library of benchmarked events, or how this process is done for transparency. It is difficult to support or agree with the proposed language if the ERO has not made the library available and defined "Extreme Temperature Assessment" criteria or defined benchmark event criteria. CEHE would like

clarification on the benchmark events, and further clarification on criteria to determine this responsibility. CEHE believes the PC should assume the responsibility to provide these system wide studies, since TPs already provide BPS data to the PC. The approved library of benchmark events is currently not available to Transmission Planners (TPs), therefore, CEHE cannot support any of the proposed requirements as written.

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**

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

**Answer**

Yes

**Document Name**

**Comment**

FirstEnergy has no concerns with the order of the requirements.

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**Answer**

Yes

**Document Name**

**Comment**

Exelon agrees with the proposed TPL-008-1 Reliability Standard Requirement layout.

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

None

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name Black Hills Corporation - All Segments**

**Answer**

Yes

**Document Name**

**Comment**

Black Hills Corporation has no concerns with the updated chronological order of the requirements.

Likes 0

Dislikes 0

**Response**

**Richard Vendetti - NextEra Energy - 5**

**Answer**

Yes

**Document Name**

**Comment**

NextEra is not concerned with the order of the requirements.

Likes 0

Dislikes 0

**Response**

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

**Answer** Yes

**Document Name**

**Comment**

EEl is not concerned with the order of the requirements.

Likes 0

Dislikes 0

**Response**

**Selene Willis - Edison International - Southern California Edison Company - 5**

**Answer** Yes

**Document Name**

**Comment**

Please see comments from EEI

Likes 0

Dislikes 0

**Response**

**Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson**

**Answer** Yes

**Document Name**

**Comment**

Our comments still haven't been addressed. "Extreme heat and extreme cold temperatures hasn't been defined." We would prefer to see some percentile-based definition or other quantifiable requirement.

Likes 0

Dislikes 0

**Response**

**Kinte Whitehead - Exelon - 3**

**Answer** Yes

**Document Name**

**Comment**

Exelon agrees with the proposed TPL-008-1 Reliability Standard Requirement layout.

Likes 0

Dislikes 0

**Response**

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer** Yes

**Document Name**

**Comment**

While ISO-NE believes that the Standard as written includes the requirements needed, there are areas in which the Standard Requirements could be combined or moved around, such as moving R8 earlier as a requirement describing how often a process should be completed is typically included as early as possible within the Standard.

Recommendation: Make R8, R2, and adjusting the rest accordingly.

ISO-NE recommends that the SDT review areas where Requirements could be combined to simplify or clarify the flow of requirements. TPL-007 is an example of how out of order requirements can confuse the industry, which required a flowchart in the technical rationale to illustrate the order in which requirements are performed.

Likes 0

Dislikes 0

**Response**

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer** Yes

**Document Name**

**Comment**



ITC does not have any concerns with the order of the requirements.

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer**

Yes

**Document Name**

**Comment**

PGAE agrees with the chronological order of the proposed TPL-008-1.

Likes 0

Dislikes 0

**Response**

**Robert Blackney - Edison International - Southern California Edison Company - 1**

**Answer**

Yes

**Document Name**

**Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

**Response**

**Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Jeffrey Streifling - NB Power Corporation - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Thomas Foltz - AEP - 5**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 1

Snohomish County PUD No. 1, 3, Chaney Holly

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer** Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name WPP Consortium of Engineers</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

**Response**

Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

**Response**

Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

**Response**

Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO

Answer Yes

Document Name

**Comment**

Likes 0

Dislikes 0

**Response****Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Zahid Qayyum - New York Power Authority - 5****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response**

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

**Answer** Yes

**Document Name**

**Comment**

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**

Likes 0

Dislikes 0

**Response**

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

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

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Robert Follini - Avista - Avista Corporation - 3**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Kevin Conway - Western Power Pool - 4**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer** Yes

**Document Name**



**Comment**

Likes 0

Dislikes 0

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

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Helen Lainis - Independent Electricity System Operator - 2****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF****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**

**Mike Magruder - Avista - Avista Corporation - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Tondalo - United Illuminating Co. - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response****Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Teresa Krabe - Lower Colorado River Authority - 5****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response**

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

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Shafer - New York State Electric & Gas (NYSEG) - 6**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Ben Hammer - Western Area Power Administration - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

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

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	

Likes 0

Dislikes 0

**Response**

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer**

**Document Name**

**Comment**

No comment

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer**

**Document Name**

**Comment**

PJM recommends the following changes to the order of the requirements:

R8 should be moved up. The standard needing to be met once every five years should be right up front.

R2 and R4 need to be together as they describe the cases. They should also clearly denote that both power flow and dynamics benchmark and sensitivity cases need to be constructed.

Likes 0

Dislikes 0

**Response**

**2. The DT updated Requirements R1 – R2 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R1-R2? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**

<b>Long Island Power Authority</b>	
Answer	No
Document Name	(if an attachment is provided by submitter)
<b>Comment</b>	
<p>The text of Requirement #2 mentions “benchmark library, approved and maintained by the Electric Reliability Organization (ERO)”.</p> <p>Similar to Attachment 1 of TPL-007-4, we recommend that the final version of the standard include an attachment that contains details of the extreme heat and extreme cold benchmark events, or at least some mention of the public facing library (site) to be created by Q4 2024 (as mentioned in the TPL-008 webinar in July 2024) and maintained by NERC. Ideally, stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.</p>	
Likes 0	# of other submitters who agree with these comments
Dislikes 0	# of other submitters who disagree with these comments
<b>Response</b>	
(Drafting team’s response to submitter’s comments)	

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

Answer	No
Document Name	
<b>Comment</b>	
<p>(R1) No issue.</p> <p>(R2) R2 requirements refer to the benchmark library, approved and maintained by the ERO. However, Draft of ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance (July 2004) states “ERO Enterprise staff will develop and maintain a library of benchmark weather events (herein as the Weather Event Library) to be used by Planning Coordinators and Transmission Planners for TPL-008-1 studies.” Consider aligning nomenclature “benchmark library” and “Weather Event Library” in these two documents so there is no confusion as documents advance.</p> <p>(R2) R2 states that each responsible entity shall select extreme events from the library; however, it does not specify should they choose from the benchmark events(s) that NERC will submit to FERC in December 2024 (and every five years after that, e.g., 2029, 2034), or any event from the NERC’s “live” Weather Event</p>	



Library that will go through updated from 2025 – 2029 as described in the Draft ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance.

(R2) R2 states that selection should be from “the benchmark library, approved and maintained by the ERO.” NERC should be more specific about who will approve the library in the ERO. Draft ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance states that “NERC will form an ERO Enterprise Review Panel (review panel) comprised of not less than four (4) total individuals from the applicable Regional Entities and NERC” to review entity-created benchmark events. Should the same review panel review all benchmark temperature event(s) from the library, including those developed by ERO? We suggest to replacing the text “approved and maintained by the Electric Reliability Organization (ERO)” with “approved and maintained by the Electric Reliability Organization (ERO) Enterprise Review Panel”.

Likes 0

Dislikes 0

### Response

**Robert Blackney - Edison International - Southern California Edison Company - 1**

**Answer**

No

**Document Name**

**Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

### Response

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer**

No

**Document Name**

**Comment**

NERC entities operate transmission and generation assets across an enormous service territory and a variety of weather conditions. Every entity has its own unique “extreme weather condition(s)” to manage. PG&E would like to better understand the benefits of using a centralized benchmark library (still under development) over localized weather condition assessments.

Likes 0

Dislikes 0

### Response

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer** No

**Document Name**

**Comment**

The SDT should choose either the PC or TP to be responsible for R1. By allowing the responsible party to be either the TP or PC, the two parties may not agree on all terms or there may result a reliability gap. Seminole would like clarification on which responsibilities will belong to the Planning Coordinator and Transmission Planner. Seminole would like a longer implementation timeline of R2,R3,R4,R5,R6, R7, R8, R9, R10, R11

Likes 0

Dislikes 0

**Response**

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

**Answer** No

**Document Name**

**Comment**

CEHE agrees with EEI comments, we continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, and as of this draft we continue to only have only superficial insights into this library. Moreover, the ERO was directed to set a framework with this Reliability Standard that included specific bounds by which the industry could conduct their extreme weather assessments. Yet, TPL-008-1 still does not contain any specific boundary limits that could guide responsible entities in their Extreme Weather Assessments or otherwise limit what might be contained or added to the Extreme Weather Event Library, now or in the future. For these reasons we ask that the DT set clear bounds that guide these Extreme Weather Assessments and set boundaries for any future changes to the Extreme Weather Event Library.

Likes 0

Dislikes 0

**Response**

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer** No

**Document Name**

**Comment**

- ITC believes R2 should be assigned to the Planning Coordinator within the standard. To ITC the assignment of R2 to the Planning Coordinator would seem to make the work of the standard flow in a more cohesive manner. To ITC the events should be chosen by the PC and such that they fit within the process being developed by the PC in R3.

- The standard has the ERO identifying the weather events in the benchmark library. Is the ERO the correct entity to perform this work?
  - The ERO is not an entity that is auditable. What happens if their work product is completed late? Also, will the entity identified to develop the benchmark weather events provide entities the opportunity to comment on the identified events?

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer**

No

**Document Name**

**Comment**

OPG supports NPCC Regional Standards Committee’s comments:

Like Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.

Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.

Likes 0

Dislikes 0

**Response**

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

No

**Document Name**

**Comment**

Comments provided to the previous draft suggested adding the “maintaining models” to the wording for R1 as that is an important joint responsibility for the PC and TP to do in support of the assessment. The modifications in draft 2 do not address this concern.

The modifications to R2 in this draft did not improve the overall requirement from draft 1. It is understood the ERO is tasked with developing and maintaining a benchmark events library for use by the responsible entity in the required assessment. It is not clear what the events will ultimately be and how the benchmark events library is to be maintained and updated. The SDT should define and clarify the process for maintaining the benchmark library. GTC also recommends that the PC & TP be involved in the development and/or approval of the benchmark events.

Likes 0

Dislikes 0

**Response**

**Kinte Whitehead - Exelon - 3**

**Answer** No

**Document Name**

**Comment**

R1 – Exelon does not have any objections to the proposed language for Requirement R1.

R2 – Exelon believes it is not appropriate to assign the Electric Reliability Organization (ERO) responsibility within the standard requirement that directly impacts the compliance to the standard requirement. There is a compliance risk to the directly assigned entity if the ERO fails to uphold its responsibility to maintain the database. We suggest coordinating this the way MMWG is coordinated through ERAG in the Eastern Interconnection.

Additionally, Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

**Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO**

**Answer** No

**Document Name**

**Comment**

SPP has several concerns in reference to Requirement R2. The first concern focuses on the timing horizon of the study. As we reviewed draft 2, it was unclear if the assessment was intended for a near-term or long-term (six to ten year) horizon. In our review of TPL-001-5, Requirement R2 addresses both near and long-term assessments. Can we make the same assumption for TPL-008?

We recommend that the drafting team provide some clarity on the time horizon of the study for TPL-008. In the case the drafting team has the same intention for this standard as that of TPL-001-5, we recommend that they structure language like TPL-001-5 (i.e. 2.1, and 2.5).

As for the second concern, it is unclear in TPL-008 how the steady state and stability models (base case R4) will translate the benchmarked events (R2) into the models. At this point, there is no guidance on how to accomplish this goal of developing this type of models as well as conducting an assessment to produce quality results.

SPP recommends the drafting team takes into consideration coordinating with the NERC RSTC and their liaisons to help develop a guideline that will address uncharted territory applicable to the model build of this process.

The third and final concern relates to the expectations for the responsible entities to conduct an assessment from a library that does not currently exist.

We understand that EPRI is working with NERC to construct the library to support the requirement's effort. However, we will find it difficult for the responsible entities to support this requirement while there is no data to review. At this point, there is no official library data available for the responsible entities to conduct an assessment as well as compare those results with other entities to ensure quality results have been produced.

SPP recommends that the drafting team coordinate with NERC staff and ensure that the library has been finalized before moving forward with this requirement. It will be difficult to convince industry to support this effort when there are still too many unresolved issues at this point.

Likes 0

Dislikes 0

**Response**

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer** No

**Document Name**

**Comment**

Benchmark library that is used for the Assessment may be better maintained at a Regional level.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

Tri-State supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer** No

**Document Name**

**Comment**

LCRA TSC agrees with other comments in that we would like to see the PCs maintain the benchmark event data for the applicable region rather than the data and library being entirely at one location under NERC control.

Likes 0

Dislikes 0

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

**Answer**

No

**Document Name**

**Comment**

Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.

Likes 0

Dislikes 0

**Response****Teresa Krabe - Lower Colorado River Authority - 5**

**Answer**

No

**Document Name**

**Comment**

LCRA agrees with other comments in that we would like to see the PCs maintain the benchmark event data for the applicable region rather than the data and library being entirely at one location under NERC control.

Likes 0

Dislikes 0

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

**Answer**

No

**Document Name**

**Comment**

Based on the sample benchmark information and assumed footprints of TPs/PCs, there could be situations where multiple Extreme Temperature Assessments may be needed to fully cover the risks posed. With the re-assessments required “at least once every five calendar years” should it be expected that identification of individual and joint responsibilities should occur for each Extreme Temperature Assessment and re-assessment? Would suggest removing the “or between departments of a vertically integrated system” as that would seem extremely limited in terms of actions needed to perform an Extreme Temperature Assessment. If Company A is a PC and a TP the individual and joint responsibilities are assigned to Company A from a compliance perspective. Requirement R2, as written, allows flexibility for PCs and TPs to select events best fitting their profile. The PCs will have to use some judgement in Requirement R3 to coordinate individual TP events with the event selected by the PC.

Likes 0

Dislikes 0

**Response**

**Selene Willis - Edison International - Southern California Edison Company - 5**

**Answer** No

**Document Name**

**Comment**

Please see comments from EEI

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

EEI has no concerns with the updated Requirement R1. However, we continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, and as of this draft we continue to only have superficial insights into this library. Moreover, the ERO was directed to set a framework with this Reliability Standard that included specific bounds by which the industry could conduct their extreme weather assessments. Yet, TPL-008-1 still does not contain any specific boundary limits that could guide responsible entities in their Extreme Weather Assessments or otherwise limit what might be contained or added to the Extreme Weather Event Library, now or in the future. For these reasons we ask that the DT set clear bounds that guide these Extreme Weather Assessments and set boundaries for any future changes to the Extreme Weather Event Library. To address this concern, we suggest the following change in boldface below, but have intentionally left the specific boundaries to be set by the DT:

R.2 Each responsible entity, as identified in Requirement R1, shall select at least one extreme heat benchmark temperature event and at least one extreme cold benchmark temperature event for completing the Extreme Temperature Assessment. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

**2.1 Utilize metrological data that includes at least 20 years of historical data (or as determined by the DT), up to no less than two years prior to the year the Extreme Temperature Assessment is started.**

**2.2 Reflect extreme temperature conditions with a specified probability of (As determined by the DT) within the responsible entity's area.**

**2.3 Align extreme weather temperatures with those specified by all adjacent Planning Coordinators and Transmission Planners areas.**

Likes 0

Dislikes 0

### Response

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer**

No

**Document Name**

**Comment**

Ameren agrees with and supports EEI's comments.

Likes 0

Dislikes 0

### Response

**Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF**

**Answer**

No

**Document Name**

[TPL-008 Q2 Response.docx](#)

**Comment**

PPL NERC Registered Affiliates agree with the general feedback provided by EEI. Throughout our responses we have provided additional, specific feedback in an effort to assist the DT's work. We appreciate the work of the DT to address feedback received for R1-R2. We recommend changes in the attached document to improve upon the revisions.

Likes 0

Dislikes 0

### Response



<b>Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Southern Company agrees with EEI's comment.</p> <p>Additionally, the R2 and M2 language should be revised to extreme heat/cold temperature benchmark event for consistency with other mentions of 'temperature benchmark events', as opposed to 'benchmark temperature events'. This verbiage should be propagated consistently through the standard.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Junji Yamaguchi - Hydro-Quebec (HQ) - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>1. Similar to Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.</p> <p>2. Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Richard Vendetti - NextEra Energy - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>NextEra supports EEI's comments</p>	

EEL has no concerns with the updated Requirement R1. However, we continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, and as of this draft we continue to only have only superficial insights into this library. Moreover, the ERO was directed to set a framework with this Reliability Standard that included specific bounds by which the industry could conduct their extreme weather assessments. Yet, TPL-008-1 still does not contain any specific boundary limits that could guide responsible entities in their Extreme Weather Assessments or otherwise limit what might be contained or added to the Extreme Weather Event Library, now or in the future. For these reasons we ask that the DT set clear bounds that guide these Extreme Weather Assessments and set boundaries for any future changes to the Extreme Weather Event Library. To address this concern, we suggest the following change in boldface below, but have intentionally left the specific boundaries to be set by the DT:

R.2 Each responsible entity, as identified in Requirement R1, shall select at least one extreme heat benchmark temperature event and at least one extreme cold benchmark temperature event, **from the benchmark library, approved and maintained by the Electric Reliability Organization (ERO)**, for completing the Extreme Temperature Assessment. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

**2.1 Utilize metrological data that includes at least 20 years of historical data (or as determined by the DT), up to no less than two years prior to the year the Extreme Temperature Assessment is started.**

**1.2 Reflect extreme temperature conditions with a specified probability of (As determined by the DT) within the responsible entity's area.**

**1.3 Align extreme weather temperatures with those specified by all adjacent Planning Coordinators and Transmission Planners areas.**

Likes 0

Dislikes 0

### Response

**Kevin Conway - Western Power Pool - 4**

**Answer**

No

**Document Name**

**Comment**

Would like to see a more concrete Benchmark Event Library functioning.

Likes 0

Dislikes 0

### Response

**Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper**

**Answer**

No

**Document Name**

**Comment**

For R2, Santee Cooper is concerned with the extreme heat and cold benchmark temperature being selected from a benchmark library that is approved and maintained by the Electric Reliability Organization (ERO). This may be better coordinated, assessed and planned at the Regional level. Being able to access and review the library before approving the requirement would be helpful.

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer** No

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer** No

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 2

Likes 0

Dislikes 0

**Response**

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

**Answer** No

**Document Name**

**Comment**

There are concerns over the CAP as well as ambiguity in R2.

Likes 0

Dislikes 0

**Response****Donald Lock - Talen Generation, LLC - 5**

**Answer**

No

**Document Name**

**Comment**

Focusing exclusively on temperature will not get the job done; combinations of weather threats must be studied. What made Winter Storm Uri so destructive was that it began with an ice storm, taking-out the wind fleet of northern Texas, followed by a deep freeze with high winds, then a wind drought. The Polar Vortex of 2014 was preceded by drenching rain, which soaked insulation and made generation units vulnerable to the combination of low temperatures and high winds that followed.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

SMUD supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name Black Hills Corporation - All Segments**

**Answer**

No

**Document Name**

**Comment**

Black Hills Corporation has no concerns with the updated requirement R1 language. However, Black Hills Corporation has concerns with requirement R2 and echoes the comments developed by EEI, which are in italics below. Black Hills Corporation is concerned with the limited visibility and subsequent review by industry of the benchmark library being developed by the ERO.

*'[W]e continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, and as of this draft we continue to only have only superficial insights into this library. Moreover, the ERO was directed to set a framework with this Reliability Standard that included specific bounds by which the industry could conduct their extreme weather assessments. Yet, TPL-008-1 still does not contain any specific boundary limits that could guide responsible entities in their Extreme Weather Assessments or otherwise limit what might be contained or added to the Extreme Weather Event Library, now or in the future. For these reasons we ask that the DT set clear bounds that guide these Extreme Weather Assessments and set boundaries for any future changes to the Extreme Weather Event Library. To address this concern, we suggest the following change in boldface below, but have intentionally left the specific boundaries to be set by the DT:*

*R.2 Each responsible entity, as identified in Requirement R1, shall select at least one extreme heat benchmark temperature event and at least one extreme cold benchmark temperature event (remove: **from the benchmark library, approved and maintained by the Electric Reliability Organization (ERO)**), for completing the Extreme Temperature Assessment. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]*

**2.1 Utilize metrological data that includes at least 20 years of historical data (or as determined by the DT), up to no less than two years prior to the year the Extreme Temperature Assessment is started.**

**2.1. Reflect extreme temperature conditions with a specified probability of (As determined by the DT) within the responsible entity's area.**

**2.2. Align extreme weather temperatures with those specified by all adjacent Planning Coordinators and Transmission Planners areas.'**

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**

**Comment**

It is difficult to evaluate this requirement without a functioning Benchmark Event Library or a far more explicit description of what will be included in the library.

Likes 0

Dislikes 0

**Response**

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton****Answer** No**Document Name****Comment**

Oncor would like to ensure transparency in how the benchmark events are developed, chosen, calculated, and maintained. We agree with other's comments in that we would like to see the PCs maintain the benchmark event data for the applicable region rather than the data and library being entirely at one location under NERC control. This approach would likely make the data more transparent and accessible to the affected utilities than having a sole central repository at NERC for all regions of the country. In addition, the PC is likely to have more specific knowledge about effective methods of tuning and modifying the cases than NERC staff.

Likes 0

Dislikes 0

**Response****Daniel Gacek - Exelon - 1****Answer** No**Document Name****Comment**

R1 – Exelon does not have any objections to the proposed language for Requirement R1.

R2 – Exelon believes it is not appropriate to assign the Electric Reliability Organization (ERO) responsibility within the standard requirement that directly impacts the compliance to the standard requirement. There is a compliance risk to the directly assigned entity if the ERO fails to uphold its responsibility to maintain the database. We suggest coordinating this the way MMWG is coordinated through ERAG in the Eastern Interconnection.

Additionally, Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response****Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC****Answer** No**Document Name****Comment**

Like Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.

Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

**Comment**

The MRO NSRF supports some of the revisions and proposes modifications to others as detailed below.

**R1.** The MRO NSRF supports the SDT's decision to shorten the language to "completing."

**R2.** R2 and R4 need to be adjacent to each other as they both describe necessary cases. One should not have to read through R6 to know dynamic cases are also required.

Likes 1

Scott Brame, N/A, Brame Scott

Dislikes 0

### Response

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

**Answer**

No

**Document Name**

**Comment**

Dominion Energy supports EEI comments

Likes 0

Dislikes 0

### Response

**Zahid Qayyum - New York Power Authority - 5**

**Answer** No

**Document Name**

**Comment**

&bull; NYPA Disagrees with R2 stating ‘benchmark library, approved and maintained by the Electric Reliability Organization (ERO)’. We believe that for greater effectiveness and suitability, the responsibility for maintaining and updating the library should be emphasized at the regional entity level rather than the ERO to better incorporate regional variability.

&bull; Is the use of “category P0” to describe normal system condition in R1 appropriate, given that it includes both benchmark and extreme events, which are not typically considered normal operating conditions?

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

FirstEnergy supports EEI’s comments which state:

EEI has no concerns with the updated Requirement R1. However, we continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, and as of this draft we continue to only have superficial insights into this library. We also do not agree that ERO responsibilities and obligations need to be stated in the Requirement. To address this concern, we suggest the following change in boldface below:

R.2 Each responsible entity, as identified in Requirement R1, shall select at least one extreme heat benchmark temperature event and at least one extreme cold benchmark temperature event, from the **Extreme Weather Event Library**, for completing the Extreme Temperature Assessment.  
[Violation Risk Factor: High] [Time Horizon: Long-term Planning]

2.1 Utilize metrological data that includes at least 20 years of historical data (or as determined by the DT), up to no less than two years prior to the year the Extreme Temperature Assessment is started.

2.2 Reflect extreme temperature conditions with a specified probability of (As determined by the DT) within the responsible entity’s area.

2.3 Align extreme weather temperatures with those specified by all adjacent Planning Coordinators and Transmission Planners areas.



Likes 0

Dislikes 0

**Response**

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

**Answer**

No

**Document Name**

**Comment**

Duke Energy agrees with and recommends implementation of EEI comments. Additionally, the standard language ERO developed benchmark library should be deleted and the concept of an entity standardized benchmark library should be developed, maintained, and remain with local or regional responsible entities (e.g., TP/PC).

Likes 0

Dislikes 0

**Response**

**Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5**

**Answer**

No

**Document Name**

**Comment**

Like Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.

Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.

Likes 0

Dislikes 0

**Response**

**Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova**

**Answer**

No

<b>Document Name</b>	
<b>Comment</b>	
Comments:	
<p>1. Similar to Attachment 1 of TPL-007-4, we suggest that the standard includes an Attachment 1 that contains a list or examples of the extreme heat and extreme cold benchmark events. This is required to avoid confusion because stakeholders need to know how and what assessments they need to ensure applicability to their region when the standard is posted for approval.</p> <p>2. Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and provide flexibility for Canadian jurisdictions to make appropriate changes to the ERO benchmark library.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
(R1) No issues.	
(R2) Due to R2 referencing a benchmark library that is not currently accessible, and therefore not fully understood, we are unable to express support for this requirement. We recommend making accessible the benchmark temperature event library prior to seeking concurrence on a dependent requirement.	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p><b>For R2:</b> Technical Rationale states that “The ERO will maintain a library of benchmark events and develop a process to incorporate additional events proposed by responsible entities.” The standard does not provide any mechanism for responsible entities to propose events or collaborate on the review or approval process. As we commented before, this gives the ERO the ability to change compliance requirements at will (by changing or removing approved benchmark events) without going through any of the usual industry collaboration process. This standard should have a requirement for the</p>	

ERO to coordinate with Planning Coordinators to identify the benchmark events, or require the Planning Coordinators to collectively identify benchmark events in collaboration with the ERO and have the ERO simply provide a place to host the information.

Likes 0

Dislikes 0

**Response**

**Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name** WPP Consortium of Engineers

**Answer**

No

**Document Name**

**Comment**

Would like to see a more concrete Benchmark Event Library functioning.

Likes 0

Dislikes 0

**Response**

**Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF**

**Answer**

No

**Document Name**

**Comment**

While the drafting team made adjustments in an attempt to address concerns with the proposed benchmark library, R2 continues to leave this standard and the extreme temperature events open to broad adjustment without guaranteed stakeholder input. NERC has outlined a draft weather event development and maintenance process; however, this is a draft, and there is currently no process outlined for stakeholders to challenge the validity of benchmark events. Stakeholders cannot vote to approve R2 to TPL-008 because this will create an undefined, unchecked path for changes to the extreme temperature events, that are required to be assessed and planned for, without guaranteed stakeholder input and opportunity to challenge changes to benchmark events.

Likes 0

Dislikes 0

**Response**

**Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1**

**Answer**

No

**Document Name**

Comment	
<p>There should be an emphasis on Regional, not ERO. Not required for ERO to maintain this library, such libraries are better maintained at the Regional level. For smaller utilities, not sure how they are using the same criteria for Extreme Temperature Assessment.</p>	
Likes 2	Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie
Dislikes 0	
Response	
<p><b>Jeffrey Streifling - NB Power Corporation - 1</b></p>	
Answer	No
Document Name	
Comment	
<p>Like Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.</p> <p>Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.</p>	
Likes 0	
Dislikes 0	
Response	
<p><b>Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza</b></p>	
Answer	No
Document Name	
Comment	
<p>1. Similar to Attachment 1 of TPL-007-4, we suggest that the standard includes an attachment that contains the extreme heat and extreme cold benchmark events. This is needed because stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.</p> <p>2. Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian entities to make appropriate changes to the ERO benchmark library.</p>	
Likes 0	

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer** Yes

**Document Name**

**Comment**

PJM supports the IRC SRC comments.

Likes 0

Dislikes 0

**Response**

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

**Answer** Yes

**Document Name**

**Comment**

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

Likes 0

Dislikes 0

**Response**

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**

**Answer** Yes

**Document Name**

**Comment**

**R1.** The ISO/RTO Council Standards Review Committee (SRC)[\[1\]](#) supports the SDT’s decision to shorten the language to “completing.”

[\[1\]](#) For purposes of these comments, the IRC SRC includes the following entities: CAISO (except for our response re: Part 9.2 to question 5), ERCOT, IESO (except for our response to question 5 in its entirety), ISO-NE, MISO, NYISO, PJM and SPP.

Likes 0

Dislikes 0

**Response**

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer** Yes

**Document Name**

**Comment**

ISO-NE recommends that the SDT review areas where Requirements could be combined to simplify or clarify the flow of requirements. TPL-007 is an example of how out of order requirements can confuse the industry, which required a flowchart in the technical rationale to illustrate the order in which requirements are performed.

While ISO-NE appreciates the Benchmark Event Example, many concerns that the industry has regarding this standard and the studies that would be required could be alleviated by the SDT/NERC providing a list of the Benchmark Temperature Events that would be available to choose from and what parameters are included for each event. It is difficult for areas to determine what would be required and to agree to perform studies on specific events without the list of events to choose from for the studies.

In the specific Benchmark Event Example, ISO-NE did not experience a cold weather event so there is no value in studying that particular event.

ISO-NE requests that a list of Benchmark Events be provided prior to any final Ballot on the TPL-008 Standard.

In addition, the requirements to coordinate between PCs could cause a burden on PCs if their neighbors choose to study a different Benchmark Event. For example, the Benchmark Event Example of Winter Storm Elliot would not be an event ISO-NE would choose as it did not have a significant impact on the ISO-NE area; However, PJM as the PC may choose to study it. If ISO-NE chooses the January 1998 Ice Storm, what effect would that have on NYISO which is adjacent to both ISO-NE and PJM? Do they now have to coordinate with both for the separate studies? What if NYISO chooses to study Polar Vortex in 2014?

Or, are we required to agree on a singular event to be studied? A line would need to be drawn somewhere. As in the case above, PJM wouldn't benefit from studying the 1998 Ice Storm and ISO-NE wouldn't benefit from studying Winter Storm Elliot. If so, some PCs may need to create model data for multiple Benchmark Events. In addition to possibly having to address multiple Events, some PCs may choose a different year (Year 6 through Year 10) within the Long-Term Planning Horizon, which further increases the burden associated with coordinating studies between the PCs.

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer** Yes

**Document Name**

**Comment**

We understand the urgency of these modifications directed by FERC in Order No. 896 and agree to the proposed modifications made by the standard drafting team. However, it is challenging to agree due to not knowing the benchmarks to be set by NERC.

Likes 0

Dislikes 0

### Response

**Helen Lainis - Independent Electricity System Operator - 2**

**Answer**

Yes

**Document Name**

**Comment**

We understand from the SDT that the ERO is currently working on Canadian benchmarks. It is very important that Canadian benchmarks are considered within the ERO benchmark library so that we can appropriately assess.

Likes 0

Dislikes 0

### Response

**Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO**

**Answer**

Yes

**Document Name**

**Comment**

We don't see any extreme temperature events identified for Canadian provinces. We assume NERC will reach out to applicable PCs/TPs to get the initial list of benchmark events prior to December 2024 to prepare the benchmark list for the first five years (according to the draft ERO Enterprise Process document for TPI-008-1).

Likes 0

Dislikes 0

### Response

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Ben Hammer - Western Area Power Administration - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Shafer - New York State Electric & Gas (NYSEG) - 6**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**



Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michele Tondalo - United Illuminating Co. - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Mike Magruder - Avista - Avista Corporation - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Robert Follini - Avista - Avista Corporation - 3

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Thomas Foltz - AEP - 5****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC****Answer****Document Name****Comment**

As there are still unknowns regarding the Benchmark Event Library, BPA cannot make a determination on R2 at this time. Once BPA can review the library, and attend the planned NERC training, BPA can review and provide more meaningful comments/feedback.

Likes 0

Dislikes 0

**Response****Gary Trezza - Long Island Power Authority - 1 - NPCC****Answer****Document Name****Comment**

The text of Requirement #2 mentions “benchmark library, approved and maintained by the Electric Reliability Organization (ERO)”.

Similar to Attachment 1 of TPL-007-4, we recommend that the final version of the standard include an attachment that contains details of the extreme heat and extreme cold benchmark events, or at least some mention of the public facing library (site) to be created by Q4 2024 (as mentioned in the TPL-008 webinar in July 2024) and maintained by NERC. Ideally, stakeholders should have the opportunity to review the list of events and understand how they apply to their region, and what assessments they would need to conduct ahead of being asked to approve this standard.

Likes 0

Dislikes 0

**Response**



**3. The DT updated Requirements R3 – R5 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R3-R5? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**

<b>Long Island Power Authority</b>	
Answer	Yes
Document Name	(if an attachment is provided by submitter)
<b>Comment</b>	
<p>Requirement #5 mentions having criteria for acceptable System steady state voltage limits, post-Contingency voltage deviations, and applicable Facility Ratings.</p> <p>Is it the intent that entities will also have to have (and document) applicable thermal criteria for completing the Extreme Temperature Assessment? For example, allowing for the possible use of STE facility ratings post-contingency?</p> <p>In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?</p>	
Likes 0	# of other submitters who agree with these comments
Dislikes 0	# of other submitters who disagree with these comments
<b>Response</b>	
(Drafting team’s response to submitter’s comments)	
<b>Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza</b>	
Answer	No
Document Name	
<b>Comment</b>	
<p>We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC similar to the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	

**Jeffrey Streifling - NB Power Corporation - 1****Answer** No**Document Name****Comment**

We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC like the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.

Likes 0

Dislikes 0

**Response****Thomas Foltz - AEP - 5****Answer** No**Document Name****Comment**

AEP is concerned by the phrase “at least one of the following conditions” within R4.2, as temperature would conceivably impact all three conditions specified: “Generation”, “Real and reactive forecasted Load”, and “Transfers.” It follows then that using only one of these conditions could result in an analysis that might not capture all potential reliability issues. AEP believes the Technical Rationale could benefit from additional insight regarding the recommended conditions that might be considered for ensuring a high-quality analysis. AEP recommends revising the Technical Rationale document accordingly.

AEP recommends to the SDT that care be taken to ensure that the obligations related to sensitivity cases align with the directives issued in FERC Order 1920.

Likes 0

Dislikes 0

**Response****Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1****Answer** No**Document Name****Comment**

Need to define "other designated study entities" listed in R3. "Other designated study entities" is an unclear term. R5 Risk factor should be Medium to match TPL 001-5. The significant level of coordination needed for the standard will be a concern, particularly for small utilities.

Likes 2

Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer**

No

**Document Name**

**Comment**

R3: Base Case should include known outages.

Likes 0

Dislikes 0

### Response

**Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name WPP Consortium of Engineers**

**Answer**

No

**Document Name**

**Comment**

"other designated study entities" is unclear. R5 Risk factor should be Medium to match TPL 001-5. Concern that level of coordination needed to effect the standard will be significant, particularly for "smaller" entities.

Likes 0

Dislikes 0

### Response

**Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC**

**Answer**

No

**Document Name**

**Comment**

(R3) We recommend that R3 be updated to suggest that “designated study entities” are to be identified as part of the PC developed coordination process and only required to be coordinated with if included in the PC developed process. Otherwise, the term “designation” may suggest (1) the benchmark cases will designate entities, (2) entities other than the PC may designate a study entity, or (3) they may self-identify. It is unclear how the designation process will occur and the scale of entities to be possibly included.

(R4.2) We do not agree that R4.2, which requires an increasingly more extreme scenario for purposes of a sensitivity analysis, is credible. This is especially true for longer term planning horizons when generation additions and retirements, along with transmission configuration changes and new technologies to be deployed are less detailed.

(R5) No issues.

Likes 0

Dislikes 0

### Response

**Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova**

**Answer**

No

**Document Name**

**Comment**

Comments:

We are concerned that the R3-R4 requirements necessitate a coordination effort by each PC very similar to the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? Please clarify. If so, it does not seem feasible to develop consistent wide-area cases by each PC when a PC can select its own unique events. We note that R4.1 also gives the flexibility for adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. This undertaking must be simple and straightforward.

Likes 0

Dislikes 0

### Response

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer**

No

**Document Name**

**Comment**

CHPD believes the updates made to R3 through R5 were very good, with a couple concerns remaining. The statement ‘and other designated study entities’, is unclear. What is a study entity? Who is doing the designating? Due to non-clarity, it is recommended NERC provide clarity here or remove this language.



In addition, an R5 concern is the VRF for the limits criteria is 'High' as proposed in TPL-008, while the same type of limits requirement has a VRF of 'Medium' in TPL-001-5 R5. It is requested the VRF for TPL-008 R5 be similarly set as 'Medium' for consistency.

Likes 1 Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

#### Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO

Answer No

Document Name

### Comment

Manitoba Hydro does not think there is a need to perform additional sensitivity studies as per R 4.2. We think R4.1 is sufficient to develop base cases capturing the sensitivity of generation, load, and transfers for extreme temperature events.

Likes 0

Dislikes 0

### Response

#### Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

### Comment

BPA believes "other designated study entities" in R3 is unclear.

R4.1 – BPA recommends deleting the sentence "The rationale for the year selected for evaluation shall be available as supporting information" as it is unclear what type(s) of rationale would be required. BPA views this as a potential for undue compliance burden on industry and will create difficulty when providing compliance evidence artifacts."

BPA recommends the R5 Risk Factor should be set to Medium to match TPL 001-5. BPA is concerned that the level of coordination needed is not well defined and will be very difficult for smaller entities.

Likes 0

Dislikes 0

### Response

Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5

Answer No

Document Name

Comment

We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC like the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

FirstEnergy supports EEI's comments which state:

EEI no concerns with the updated Requirement R1. However, we continue to have concerns with Requirement R2 because this requirement relies on an ERO developed benchmark library that is being developed without industry review and approval, including the deadlines for the review of the Extreme Temperature Assessments by adjacent PCs and TPs. To address our concerns, we offer the following in boldface for consideration:

R3. Each Planning Coordinator shall develop and implement a process for **developing** benchmark planning cases, using the selected benchmark temperature events identified in Requirement R2. **The process shall include:** [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]

**3.1. Seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in the responsibility entity's area based on the extreme temperature conditions identified in Requirement R2.**

**3.2.1 Processes for requesting seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers from the adjacent entity's area based on the extreme temperature conditions identified in Requirement R2 that obligate the adjacent PC & TP to respond within 6 months of the request.**

**3.2.2 Obligation to respond to notify any affected Planning Coordinators and Transmission Planners of any concerns within 120 days of receipt of the data supplied.**

**3.2.3 An additional 60 shall also be allotted to the responsible Planning Coordinator to resolve any issues or concerns cited by the adjacent Planning Coordinator or Transmission Planner.**

Likes 0

Dislikes 0

Response

**Zahid Qayyum - New York Power Authority - 5**

**Answer** No

**Document Name**

**Comment**

NYPA believes the term used in R3 “other designated study entities” is vague and requires clarification from the SDT for better understanding. The significant level of coordination is needed for this Standard may be a concern, particularly for small utilities.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

The MRO NSRF’s most significant concerns involve requirements R3 and R4 as detailed below.

**The Coordination Effort Required for Consistent, Wide-Area Cases Negates the Benefit of Choosing a Unique Benchmark Event**

**R3.** While the MRO NSRF agrees the proposed language, “*among adjacent* impacted Planning Coordinator(s), Transmission Planner(s), and other designated study entities,” is an improvement over the prior language because it clarifies how far an entity must reach beyond its footprint to satisfy the requirement.

That said, the MRO NSRF still has significant concerns regarding the number of studies which must be performed, particularly when a Planning Coordinator (PC) selects a benchmark temperature event that is different from that of its adjacent PC(s). In that situation, each benchmark temperature event may necessitate a significant coordination effort, similar to what is done to develop the MMWG base case for the Eastern Interconnection.

If that’s the case, it doesn’t seem feasible to develop consistent, wide-area cases when each PC can select unique events. We also note that R4.1 gives each entity the freedom to choose a different year for the long-term horizon, which could further exacerbate the number of cases that must be developed to comply with the coordination process under R3.

To address this concern, the MRO NSRF recommends a governing body identify the scenarios. Extreme temperature events will typically extend beyond the footprint of a single Planning Coordinator. To avoid putting the PCs in a position where they are required to agree on a scenario, a year and the sensitivity to be studied, NERC or other (e.g. ERAG) should identify the extreme heat and extreme cold temperature events to be studied. This is necessary for consistent modeling results across adjacent planning entities. Also, as a benchmark temperature event may extend across several

planning areas, the governing body must take this into consideration when determining which extreme heat and extreme cold temperature events are to be studied so that no planning entity is assigned more than one of each.

**R4.** MRO NSRF supports the proposed language (“data consistent with that provided in accordance with the MOD-032 standard”) and does not see a need to update MOD-032 at this time; however, depending upon what data the benchmark temperature event requires to perform the study, this may need to be revisited.

**Part 4.1** MRO NSRF supports Part 4.1 and views the benchmark temperature event as a “base case sensitivity” to that performed under TPL-001.

**Part 4.2** Is there an opportunity to “bake” sensitivities into the benchmark temperature event?

**R5.** MRO NSRF supports the addition of “*and applicable Facility Ratings*” considering the need to comply with FERC Order 881 and Ambient Adjusted Ratings in the near future. MRO NSRF is also exploring this further with its member TOs.

Likes 1	Scott Brame, N/A, Brame Scott
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Dislikes 0	
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**Response**

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

<b>Answer</b>	No
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<b>Document Name</b>	
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**Comment**

We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC like the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.

Likes 0	
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Dislikes 0	
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**Response**

**Daniel Gacek - Exelon - 1**

<b>Answer</b>	No
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<b>Document Name</b>	
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**Comment**

There is nothing in the standard enforcing that PCs and TPs need to coordinate and share data between themselves to build the cases in R4. This may need to be a stand-alone requirement. “Each responsible entity shall coordinate and cooperate with other responsible entities to create the benchmark planning Cases.”

R3 – The last sentence needs clarification. Propose to change it to “This process shall include documentation of assumptions that consider seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers to represent the selected benchmark temperature events.”

R4 – No concerns from Exelon.

R5 – No concerns from Exelon.

Additionally, Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer**

No

**Document Name**

**Comment**

For R3, Oncor agrees with the idea that the PC should have the responsibility for coordinating and developing benchmark planning cases.

For R4, “Each responsible entity...” could be replaced with language that is similar to R3, and it would instead read “Each Planning Coordinator...”  
 Oncor also asks whether language can be added to ensure that entities can take credit for studies that are run as part of the Sensitivity analysis, rather than running those studies again as part of the assessment to be conducted under TPL-001? For example, the Extreme Temperature Assessment could take the place of the sensitivity analysis required within the TPL-001 assessment for both the steady state and stability analyses. Moreover, if the Extreme Temperature Assessment is essentially a type of sensitivity analysis already, Oncor would advise removing R4.2 because this would create a sensitivity case based on a sensitivity case.

For R5, Oncor urges its comment from R4, particularly because the PC would develop and maintain the criteria for acceptable System steady state voltage limits and post-Contingency voltage deviations.

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**

**Comment**

The term “other designated study entities” is unclear.

R5 Risk factor should be Medium to match TPL-001-5.

The level of coordination needed to comply with the standard will be significant, particularly for “smaller” entities.

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name** Black Hills Corporation - All Segments

**Answer**

No

**Document Name**

**Comment**

Black Hills Corporation has no concerns with the updated language for requirements R4 and R5. Black Hills Corporation has concerns with R3 and aligns with the comments (below in italics) made by EEI with regards to requirement R3.

*'Requirement R3 does not provide sufficient clarity for the processes or expectations for coordination between adjacent Planning Coordinators and Transmission Planners, including the deadlines for the review of the Extreme Temperature Assessments by adjacent PCs and TPs. To address our concerns, we offer the following in boldface for consideration:*

*R3. Each Planning Coordinator shall develop and implement a process for **developing** (remove: **coordinating the development of**) benchmark planning cases, using the selected benchmark temperature events identified in Requirement R2. **The process shall include: (remove: , among adjacent impacted Planning Coordinator(s). Transmission Planner(s), and other designated study entities, within an Interconnection. This process shall include seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers to represent the selected benchmark temperature events.)** [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*

***3.1. Seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in the responsibility entity's area based on the extreme temperature conditions identified in Requirement R2.***

***3.2.1 Processes for requesting seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers from the adjacent entity's area based on the extreme temperature conditions identified in Requirement R2 that obligate the adjacent PC & TP to respond within 6 months of the request.***

***3.2.2 Obligation to respond to notify any affected Planning Coordinators and Transmission Planners of any concerns within 120 days of receipt of the data supplied.***

***3.2.3 An additional 60 shall also be allotted to the responsible Planning Coordinator to resolve any issues or concerns cited by the adjacent Planning Coordinator or Transmission Planner.'***

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

SMUD supports the comments submitted by the MRO NSRF regarding Requirement R4, Part 4.2 and recommends that Part 4.2 be removed in its entirety.

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer** No

**Document Name**

**Comment**

PCs can model benchmark events only if having valid sensitivity factors for temperature, wind speed and precipitation. They do not presently have this information, and TPL-008-1 makes no suggestions in this respect other than that they refer to, "other sources as needed." These sources are non-existent.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer** No

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 3

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer** No

**Document Name**

**Comment**

ATC appreciates the additional clarity added to the relationship between R3 and R4.

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

**Kevin Conway - Western Power Pool - 4**

**Answer** No

**Document Name**

**Comment**

“other designated study entities” is unclear. R5 Risk factor should be Medium to match TPL 001-5. Concern that level of coordination needed to effect the standard will be significant, particularly for “smaller” entities.

Likes 0

Dislikes 0

**Response**

**Richard Vendetti - NextEra Energy - 5**

**Answer** No

**Document Name**

**Comment**

NextEra supports EEI's comments

EEI does not have concerns with the updated proposed Requirements for R4 and R5, however, Requirement R3 does not provide sufficient clarity for the processes or expectations for coordination between adjacent Planning Coordinators and Transmission Planners, including the deadlines for the



review of the Extreme Temperature Assessments by adjacent PCs and TPs. To address our concerns, we offer the following in boldface for consideration:

R3. Each Planning Coordinator shall develop and implement a process for **developing coordinating the development of** benchmark planning cases, using the selected benchmark temperature events identified in Requirement R2. **The process shall include: , among adjacent impacted Planning Coordinator(s). Transmission Planner(s), and other designated study entities, within an Interconnection. This process shall include seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers to represent the selected benchmark temperature events.** [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]

**3.1. Seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in the responsibility entity's area based on the extreme temperature conditions identified in Requirement R2.**

**3.2.1 Processes for requesting seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers from the adjacent entity's area based on the extreme temperature conditions identified in Requirement R2 that obligate the adjacent PC & TP to respond within 6 months of the request.**

**3.2.2 Obligation to respond to notify any affected Planning Coordinators and Transmission Planners of any concerns within 120 days of receipt of the data supplied.**

**3.2.3 An additional 60 shall also be allotted to the responsible Planning Coordinator to resolve any issues or concerns cited by the adjacent Planning Coordinator or Transmission Planner.**

Likes 0

Dislikes 0

### Response

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer**

No

**Document Name**

**Comment**

We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC similar to the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.

Likes 0

Dislikes 0

### Response

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

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Southern Company appreciates the inclusion of 'among adjacent' as well as the clarification of what impacts will be considered in the development of benchmark planning cases in R3; however, the expectations of coordination need further definition along with clarifying the timeline of coordination with adjacent entities to prevent other entities from causing compliance risk.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Helen Lainis - Independent Electricity System Operator - 2</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>We support NPCC TFCP comments. We are concerned that the coordination effort required for consistent, wide-area cases negates the benefit of choosing a unique benchmark event. Specifically, we are concerned regarding the number of studies which must be performed, particularly when a Planning Coordinator (PC) selects a benchmark temperature event that is different from that of its adjacent PC(s). In that situation, each benchmark temperature event may necessitate a significant coordination effort, similar to what is done to develop the MMWG base case for the Eastern Interconnection. It does not seem feasible to develop consistent, wide-area cases when each PC can select unique events.</p> <p>Consequently, we recommend that NERC/Regional Entities/ERAG to identify the scenarios, and the extreme heat and extreme cold temperature events to be studied so that no planning entity is assigned more than one of each.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	

Regarding Requirement R3, the DT has made improvements in this Requirement, but the language still fails to provide the flexibility necessary for a responsible entity to get the required cases built in a timely and practical manner. There are two primary issues for which we provide recommendations to provide more flexibility.

First, there is no specification or bounds on the type of data that represents the benchmark event. Is it a single temperature for the adjacent entity's entire region? Is it sub-zip-code level temperature data? Again, the DT must include more specifics in the standard about the framework and criteria of benchmark temperature events.

Second, there is no flexibility to make technically justified assumptions. These will be necessary for this process to be completed effectively. Consider a case with a local cold front. The responsible entity and all adjacent entities are experiencing increased load and potentially some lost generation. Thus, they have a collective power deficit. How is this model going to solve? The power must be imported from somewhere. The DT should solve these issues by allowing the responsible entity to make technically justified assumptions for non-adjacent areas. To continue the example above, if the entity is in the northeast United States, it may reasonably assume power will be imported from the southern United States. It is not necessary to coordinate with all entities to determine what imports will be available. As noted above, the impact of adjusting specific assets is diluted relative to electrical distance.

The two issues above would be appropriately addressed in the Requirement R2 and R3 proposed in the last question. Requirement R3 is repeated here:

R3. Each responsible entity, as identified in Requirement R1, shall develop a process for developing benchmark planning cases to represent the benchmark temperature events selected in Requirement R2. The process shall include:

3.1. Seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in the responsibility entity's area based on the temperature conditions identified in Requirement R2 Part 2.2.

3.2. Coordination with adjacent Planning Coordinators and Transmission Planners to make seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers and in their areas based on the temperature conditions identified in Requirement R2 Part 2.3.

3.3. Technical rationale and methods for approximating seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in other areas of the Interconnection.

Finally, it is not clear who "other designated study entities" are. This should be removed or clarified by the DT (this phrase was removed in the suggested language above).

Regarding Requirement R4, this format is improved from the first draft. However, it is recommended that the DT clarify in Part 4.2 that only one sensitivity case is required for each benchmark temperature event. Suggested modification to the first sentence: "**At least one s[S]ensitivity case[s] for each benchmark planning case developed in Requirement R4 Part 4.1** to demonstrate the impact..."

The DT should also add a requirement specifying how much time adjacent entities have to submit data to a requestor. Suppose an entity starts its Extreme Temperature Assessment six months before its due date. They request data from a neighbor and the neighbor does not provide the requested data until 9 months later. Is the responsible entity to blame for not providing enough time? Or did the adjacent entity take too long?

Likes	0
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Dislikes	0
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### Response

Michele Tondalo - United Illuminating Co. - 1

Answer	No
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Document Name	
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**Comment**

In R3 it is not clear what this coordination between PCs is expected to result in, in particular how are adjacent regions that select different extreme events expected to reconcile differences?

In R4.1, it is unclear what is establishing Category P0 as the normal System Condition in Table 1.

Likes 0

Dislikes 0

**Response**

**Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez**

**Answer**

No

**Document Name**

**Comment**

Define Table 1 for requirement 4.1. Recommend clarifying on case selection for requirement R4.

Likes 0

Dislikes 0

**Response**

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer**

No

**Document Name**

**Comment**

Ameren would like clarity on why R4.2 does not include Transmission. In addition, Ameren agrees with and supports EEI's comments.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

EEI does not have concerns with the updated proposed Requirements for R4 and R5, however, Requirement R3 does not provide sufficient clarity for the processes or expectations for coordination between adjacent Planning Coordinators and Transmission Planners, including the deadlines for the review of the Extreme Temperature Assessments by adjacent PCs and TPs. To address our concerns, we offer the following in boldface for consideration:

R3. Each Planning Coordinator shall develop and implement a process for **developing** benchmark planning cases, using the selected benchmark temperature events identified in Requirement R2. **The process shall include:** [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]

**3.1. Seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in the responsibility entity's area based on the extreme temperature conditions identified in Requirement R2.**

**3.2.1 Processes for requesting seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers from the adjacent entity's area based on the extreme temperature conditions identified in Requirement R2 that obligate the adjacent PC & TP to respond within 6 months of the request.**

**3.2.2 Obligation to respond to notify any affected Planning Coordinators and Transmission Planners of any concerns within 120 days of receipt of the data supplied.**

**3.2.3 An additional 60 shall also be allotted to the responsible Planning Coordinator to resolve any issues or concerns cited by the adjacent Planning Coordinator or Transmission Planner.**

Likes	0
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Dislikes	0
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**Response**

**Selene Willis - Edison International - Southern California Edison Company - 5**

<b>Answer</b>	No
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<b>Document Name</b>	
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**Comment**

Please see comments from EEI

Likes	0
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Dislikes	0
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**Response**

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

<b>Answer</b>	No
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<b>Document Name</b>	
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**Comment**

Is the coordination process expected to call out which year of “one of the years in the Long-Term Transmission Planning Horizon” is to be used? Or is every year in the Long-Term Planning Horizon a coordinated effort? Or does each TP and PC select their own year (which would likely lead to possible misleading overall results)?

Likes 0

Dislikes 0

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

**Answer**

No

**Document Name**

**Comment**

Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.

Likes 0

Dislikes 0

**Response****Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson**

**Answer**

No

**Document Name**

**Comment**

R4, states that the sensitivity analysis shall include, at a minimum, changes to one of the following conditions: Generation; Real and reactive forecasted Load; or Transfers. RF believes that the assessment should consider all of the listed conditions as opposed to only one. In the Feb 2021 Southwest event, the load was higher and the generation lower than expected(<https://www.ercot.com/news/february2021>). Likewise, in the Dec 2022 Elliott event, PJM load was significantly higher (10,000MW) while generation outages were significantly above baseline (<https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/20230717-winter-storm-elliott-event-analysis-and-recommendation-report.ashx>).

Likes 0

Dislikes 0

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

**Answer**

No

<b>Document Name</b>	
<b>Comment</b>	
Tri-State supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Michele Shafer - New York State Electric &amp; Gas (NYSEG) - 6</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
In R4.1, it is unclear what is establishing Category P0 as the normal System Condition in Table 1.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
The "other designated study entities" mentioned in R3 need to be defined. The phrase "other designated study entities" is unclear.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	

SPP raises concerns regarding the coordination among neighboring entities impacted by Requirement R3. We understand that this coordination extends to all Planning Coordinators, including those outside the event area, potentially leading to unnecessary administrative burdens. Moreover, there is the concern of including/translating the seasonal and temperature dependent adjustments in the models. As we state in the previous question, there is no guidance on how to accomplish this goal of developing this type of models as well as conducting an assessment to produce quality results.

SPP recommends the drafting team takes into consideration coordinating with the NERC RSTC and their liaisons to help develop a guideline that will address uncharted territory applicable to the neighbor coordinating and model building process.

Regarding Requirement R4 and the use of the MOD-032 Standard for data collection, SPP questions its suitability for assessing Inverter-Based, Distributed Energy, and Energy Storage Resources, given unresolved project directives.

At this point, SPP recommends that the drafting team coordinates with the drafting team Project 2022-02 (which includes MOD-032 efforts). This coordination will ensure that the appropriate data request requirements are addressed as this will contribute the quality results from all associated assessments.

Likes 0

Dislikes 0

### Response

**Kinte Whitehead - Exelon - 3**

**Answer**

No

**Document Name**

**Comment**

There is nothing in the standard enforcing that PCs and TPs need to coordinate and share data between themselves to build the cases in R4. This may need to be a stand-alone requirement. "Each responsible entity shall coordinate and cooperate with other responsible entities to create the benchmark planning Cases."

R3 – The last sentence needs clarification. Propose to change it to "This process shall include documentation of assumptions that consider seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers to represent the selected benchmark temperature events."

R4 – No concerns from Exelon.

R5 – No concerns from Exelon.

Additionally, Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

### Response

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**



<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>R3:</p> <ul style="list-style-type: none"> <li>• Replace “Each Planning Coordinator shall” with “Each responsible entity, as identified in Requirement R1, shall”. This may require supplemental wording edits in the requirement.</li> <li>• The inclusion of “other designated study entities” is not clear.</li> <li>• The SDT should consider combining this requirement with R4.</li> <li>• Requiring each PC to coordinate the development of benchmark planning cases among “adjacent impacted” entities “within an Interconnection” is potentially a massive amount of workload as benchmark events may be significantly different between these entities. It is not reasonable for the PC or TP to have responsibility for coordinating models outside of their respective planning areas.</li> </ul> <p>R4:</p> <ul style="list-style-type: none"> <li>• The SDT should consider combining this requirement with R3.</li> </ul> <p>R5:</p> <ul style="list-style-type: none"> <li>• The recently adopted NERC Glossary term, System Voltage Limits, should be referenced in this requirement instead of the outdated wording “System steady state voltage limits”. “...shall have criteria for acceptable System Voltage Limits for performing the Extreme Temperature Assessment...”</li> <li>• Since this requirement appears to refer to steady-state voltage, the post contingency voltage deviation portion of the existing requirement should be removed. The resultant steady-state voltage level being outside of acceptable high and low limits is the point of concern. For example, if a low voltage criterion is 0.92 p.u., then voltages below this limit would violate this particular criterion regardless of whether the beginning voltage was 0.95 p.u., 0.98 p.u., or any other voltage level.</li> <li>• The inclusion of Facility Ratings in the requirement is not clear and does not offer an improvement over the previous draft. Since this standard is modeling so much of its wording and the attached table after TPL-001, the performance criteria regarding ratings, voltage, &amp; stability should be similarly referenced in this standard. Note that “Performance Requirements” is more generally referred to in this draft’s R9 which could easily refer to the suggested inclusion in the table. As it stands, “Performance Requirements” referred to in this draft is not clearly defined.</li> </ul>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Constantin Chitescu - Ontario Power Generation Inc. - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>OPG supports NPCC Regional Standards Committee’s comments:</p> <p>We are concerned that the R3-R4 requirements may necessitate a significant coordination effort by each PC like the MMWG base case development for the Eastern Interconnection for each of the extreme weather events. Was this the intent of R3-R4? If so, it does not seem feasible to develop</p>	

consistent wide-area cases when each PC can select unique events. We note that R4.1 gives the freedom for individual adjacent entities to choose a different year for the long-term horizon, which could result in the requirement to develop even more cases. However, we agree with R5.

Likes 0

Dislikes 0

### Response

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer**

No

**Document Name**

**Comment**

The requirements to coordinate between PCs could cause a burden on PCs if their neighbors choose to study a different Benchmark Event. For example, the Benchmark Event Example of Winter Storm Elliot would not be an event ISO-NE would choose as it did not have a significant impact on the ISO-NE area; However, PJM as the PC may choose to study it. If ISO-NE chooses the January 1998 Ice Storm, what effect would that have on NYISO which is adjacent to both ISO-NE and PJM? Do they now have to coordinate with both for the separate studies? What if NYISO chooses to study Polar Vortex in 2014?

Or, are we required to agree on a singular event to be studied? A line would need to be drawn somewhere. As in the case above, PJM wouldn't benefit from studying the 1998 Ice Storm and ISO-NE wouldn't benefit from studying Winter Storm Elliot. If so, some PCs may need to create model data for multiple Benchmark Events. In addition to possibly having to address multiple Events, some PCs may choose a different year (Year 6 through Year 10) within the Long-Term Planning Horizon, which further increases the burden associated with coordinating studies between the PCs.

Likes 0

Dislikes 0

### Response

**Ben Hammer - Western Area Power Administration - 1**

**Answer**

No

**Document Name**

**Comment**

WAPA has concerns regarding the number of studies which must be performed, particularly when a Planning Coordinator (PC) selects a benchmark temperature event that is different from that of its adjacent PC(s). In that situation, each benchmark temperature event may necessitate a significant coordination effort.

WAPA recommends a governing body identify the scenarios. Extreme temperature events will typically extend beyond the footprint of a single Planning Coordinator. To avoid putting the PCs in a position where they are required to agree on a scenario, a year and the sensitivity to be studied, NERC or other (e.g. ERAG) should identify the extreme heat and extreme cold temperature events to be studied. This is necessary for consistent modeling results across adjacent planning entities. Also, as a benchmark temperature event may extend across several planning areas, the governing body must

take this into consideration when determining which extreme heat and extreme cold temperature events are to be studied so that no planning entity is assigned more than one of each.

Likes 0

Dislikes 0

### Response

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer**

No

**Document Name**

**Comment**

Does the DT believe the existing MOD-032 includes the ability for both the TP and PCs to be able to obtain the information necessary from generators? ITC understands the FERC requirement to perform a sensitivity study. ITC does believe the scope of work required for the sensitivity study should be revised to make it more meaningful and so that it does provide a reliability benefit.

Likes 0

Dislikes 0

### Response

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

**Answer**

No

**Document Name**

**Comment**

CEHE agrees with EEI comments, requirement R3 does not provide sufficient clarity for the processes or expectations for coordination between adjacent Planning Coordinators and Transmission Planners, including the deadlines for the review of the Extreme Temperature Assessments by adjacent PCs and TPs.

Likes 0

Dislikes 0

### Response

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**

**Answer**

No

**Document Name**

**Comment**

The SRC's most significant concerns involve requirement R3 as detailed below.

### The Coordination Effort Required for Consistent, Wide-Area Cases Negates the Benefit of Choosing a Unique Benchmark Event

**R3.** The SRC agrees the proposed language, “*among adjacent* impacted Planning Coordinator(s), Transmission Planner(s), and other designated study entities, within an Interconnection” is an improvement over the prior language because it clarifies how far an entity must reach beyond its footprint to satisfy the requirement.

That said, the SRC still has significant concerns regarding the number of studies that must be performed, particularly when a Planning Coordinator (PC) selects a benchmark temperature event that is different from that of its adjacent PC(s). In that situation, each benchmark temperature event may necessitate a significant coordination effort, similar to what is done to develop the MMWG base case for the Eastern Interconnection.

If that's the case, it doesn't seem feasible to develop consistent, wide-area cases when each PC can select unique events. We also note that R4.1 gives each entity the freedom to choose a different year for the long-term horizon, which could further exacerbate the number of cases that must be developed to comply with the coordination process under R3.

To address this concern, the SRC recommends a neutral third party identify the scenarios for Interconnections with more than one PC. Extreme temperature events in such Interconnections will typically extend beyond the footprint of a single Planning Coordinator. To avoid putting the PCs in a position where they are required to agree on a scenario, a year and the sensitivity to be studied, NERC or some other entity (e.g. Eastern Interconnection Reliability Assessment Group, ERAG) should identify the extreme heat and extreme cold temperature events to be studied. This is necessary to ensure consistent modeling results across adjacent planning entities within an Interconnection. Also, as a benchmark temperature event may extend across several planning areas, the neutral third party must take this into consideration when determining which extreme heat and extreme cold temperature events are to be studied so that no planning entity is assigned more than one of each.

**R4.** SRC supports the proposed language (“data consistent with that provided in accordance with the MOD-032 standard”) and does not see a need to update MOD-032 at this time; however, depending upon what data the benchmark temperature event requires to perform the study, this may need to be revisited.

**R5.** SRC supports the addition of “*and applicable Facility Ratings*” considering the need to comply with FERC Order 881 and Ambient Adjusted Ratings in the near future. SRC members are also exploring this further with their member TOs.

Likes 0

Dislikes 0

#### Response

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

Answer

No

Document Name

Comment

PGAE agrees with R5 and R6 but does not agree with R4. Extreme Temperature Events are already a “sensitivity” to normal long-term planning cases and are built with Gen/Load/Transfer based on the extreme weather conditions of an entity's territory. Additional, mandatory “sensitivity cases” seems redundant in nature.

Likes 0

Dislikes 0

Response

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

Answer No

Document Name

Comment

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

In addition, ERCOT is concerned that Requirement R4, Part 4.1 unnecessarily and inadvertently limits the ability of entities to properly develop their benchmark planning cases. Specifically, ERCOT is concerned that Part 4.1 could be understood to mean that entities are limited to making the adjustments specifically described in Part 4.1 and are prevented from making adjustments necessary to update the planning cases to reflect the expected future state of the system or to ensure that the generation necessary to serve load is available so that the case can solve. Adjusting the case to ensure that it contains enough generation to serve the modeled load is essential to ensure that the standard does not address resource adequacy issues and fully complies with paragraph 94 of FERC Order No. 896, which states that resource adequacy is not in scope for this project.

ERCOT is also concerned that Part 4.1 could be understood to require entities to model facility derates and outages that were actually observed during the selected benchmark temperature event rather than requiring entities to model impacts of the temperatures observed during that event on the system as it is expected to exist in the year being evaluated. To address these concerns, ERCOT recommends that Part 4.1 be revised to read as follows:

4.1 Benchmark planning cases that **reflect the expected future state of the System and** include seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers **based on the weather** conditions **described in** the selected benchmark temperature events as identified in Requirement R2 for one of the years in the Long-Term Transmission Planning Horizon. **The responsible entity may adjust the total modeled generation or Load in each case as necessary to allow the total modeled generation to serve the total modeled System Load.** The rationale for the year selected for evaluation shall be available as supporting information. This establishes Category P0 as the normal System condition in Table 1.

ERCOT also recommends that Requirement R3 be revised as needed to align with any revisions made to Requirement R4.

Likes 0

Dislikes 0

Response

Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis

Answer No

Document Name

**Comment**

PJM supports the IRC SRC comments.

Likes 0

Dislikes 0

**Response****Robert Blackney - Edison International - Southern California Edison Company - 1**

**Answer**

No

**Document Name**

**Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

**Response****John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

**Answer**

No

**Document Name**

**Comment**

(R3) It is unclear who the "other designated study entities" are and who defines them.

(R3) R2 Requirement allows each responsible entity to select different benchmark temperature event(s). R3 should be revised to clarify how conflicts will be resolved if different Planning Coordinators within the same Interconnection select different events.

(R4.1) In Order 896 paragraph 88, FERC directs "NERC to require under the new or revised Reliability Standard the study of concurrent/correlated generator and transmission outages due to extreme heat and cold events in benchmark events," explaining in paragraph 89 that "it is necessary that responsible entities evaluate the risk of correlated or concurrent outages and derates of all types of generation resources and transmission facilities as a result of extreme heat and cold events." We suggest modifying "Benchmark planning cases that include seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers" to include "concurrent/correlated generator and transmission outages."

Allowing benchmark planning cases for “one of the years in the Long-Term Transmission Planning Horizon” will burden each responsible entity with developing necessary adjustments for a different year than the adjacent responsible entity selected if they do not select the same year.

(R4.2) If sensitivity analysis allows the selection of only one condition, R4.2 should be revised to (1) provide a ranking of what conditions should be selected first, or (2) provide a process that each responsible entity should follow for the sensitivity analysis with the three listed conditions, or (3) requires all conditions to be changed during the sensitivity analysis.

(R5) No issue.

Likes 0

Dislikes 0

**Response**

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer**

No

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF**

**Answer**

Yes

**Document Name**

**Comment**

M4 should state “Each responsible entity, as identified in Requirement R1,...” to remain consistent with other Measures

Likes 0

Dislikes 0

**Response**

**Gary Trezza - Long Island Power Authority - 1 - NPCC**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>Comments/ Questions:</p> <p>Requirement #5 mentions having criteria for acceptable System steady state voltage limits, post-Contingency voltage deviations, and applicable Facility Ratings.</p> <p>Is it the intent that entities will also have to have (and document) applicable thermal criteria for completing the Extreme Temperature Assessment? For example, allowing for the possible use of STE facility ratings post-contingency?</p> <p>In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>Duke Energy supports proposed language but requires clarification of the phrase “other designated study entities”.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Daniela Atanasovski - APS - Arizona Public Service Co. - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>AZPS generally supports the updates made by the STD to R3 – R5. AZPS also supports the comments that were submitted by EEI on behalf of its members that R3 does not provide sufficient clarity for the processes or expectations for coordination between adjacent Planning Coordinators and</p>	



Transmission Planners, including the deadlines for the review of the Extreme Temperature Assessments by adjacent PCs and TPs. Please see EEI comments regarding recommended changes to the requirement.

Likes 0

Dislikes 0

**Response**

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

**Answer**

Yes

**Document Name**

**Comment**

R3 and R4.4 should include facility ratings since FERC Order 881 establish AAR. Seasonal rating typically used in planning studies would not be appropriate for the extreme weather assessment.

... include seasonal and temperature dependent adjustment for Load, generation, Transmission, facility ratings, and transformers...

The SDT should consider making the definition of Extreme Temperature Assessment align better with the definition of Planning Assessment.

Likes 0

Dislikes 0

**Response**

**Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

**Answer**

Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Robert Follini - Avista - Avista Corporation - 3</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

**Mike Magruder - Avista - Avista Corporation - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Teresa Krabe - Lower Colorado River Authority - 5**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer** Yes

**Document Name**

## Comment

Likes 0

Dislikes 0

## Response

Rachel Coyne - Texas Reliability Entity, Inc. - 10

### Answer

### Document Name

## Comment

Texas RE has the following recommendations for Requirement R3:

- Provide clarification around “adjacent impacted Planning Coordinators, Transmission Planners, and other designated study entities”. If the Planning Coordinator (PC) determines an adjacent PC or Transmission Planner (TP) is not impacted, justification should be provided.
- The goal for Requirement R3, is for the PC to have a process which describes the methodology used to define temperature dependent adjustments to the overall load, generation, transmission ratings, and transfers to match the benchmark temperature level compared to the seasonal ratings in order for consistent temperature dependent adjustments to be utilized by all the impacted entities within the interconnection. Texas RE recommends the following revision to Requirement R3 (in bold):

R3. Each Planning Coordinator shall develop and implement a process for coordinating the development of benchmark planning cases, using the selected benchmark temperature events identified in Requirement R2, among adjacent impacted Planning Coordinator(s), Transmission Planner(s), and other designated study entities, within an Interconnection. This process shall include the methodologies used to generate seasonal and the temperature dependent adjustments for the data inputs such as Load, generation, Transmission, and transfers to represent the selected benchmark temperature events.

Texas RE has the following recommendations for Requirement R4:

- Requirements R3 and R4 are currently written in such a way that if an entity fails to meet one of the standards, it will fail to meet the other one. Texas RE recommends bifurcating both requirements so R3 focuses on developing a process for coordination the development of benchmark cases, and R4 focuses on implementing the process in Requirement R3 for coordinating the development of the benchmark case. The term “implement” rather than the term “use” is consistent with other NERC Reliability Standards. Texas RE recommends the following verbiage:

R3. Each Planning Coordinator **shall develop** a process for coordinating the development of benchmark planning cases, using the selected benchmark temperature events...

R4. Each responsible entity, as identified in Requirement R1, shall **implement** the coordination process developed in accordance with Requirement R3...

- Texas RE is concerned that Requirement R4 states the selected benchmark temperature events should be for one of the years in the Long-Term Transmission Planning Horizon. Given the number of variables, the Transmission System could be significantly different 6-10 years in the future. Texas RE recommends selecting benchmark events for the Near-Term Planning Horizon as there are more known variables.

- Requirement 4.1 states the “Benchmark planning cases that include seasonal and temperature dependent adjustments for Load, generation...” This could create some confusion whether a seasonal base case should be developed first and then make the temperature dependent adjustments for the data points listed. Texas RE recommends removing the word ‘seasonal’ from this requirement.

4.1. Benchmark planning cases that include temperature dependent adjustments for Load, generation, Transmission, and transfers to represent the System conditions of the selected benchmark temperature events as identified in Requirement R2 for one of the years in the Long-Term Transmission Planning Horizon. The rationale for the year selected for evaluation shall be available as supporting information. This establishes Category P0 as the normal System condition in Table 1

For consistency with other Requirement language, Texas RE recommends the following revision for Requirement R5 (in bold):

R5. Each responsible entity, as identified in Requirement R1, **shall define** and document the criteria for acceptable System steady state voltage limits, post-Contingency voltage deviations, and applicable Facility Ratings for **evaluating** the Extreme Temperature Assessment results.

Likes 0	
Dislikes 0	
<b>Response</b>	

**4. The DT updated Requirements R6 – R8 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirements R6-R8? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**

Long Island Power Authority	
Answer	No
Document Name	(if an attachment is provided by submitter)
Comment	
<p>Requirement # 7 states:</p> <p>“Each responsible entity, as identified in Requirement R1, shall identify the planning events for each category in Table 1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System. The rationale for those Contingencies selected for evaluation shall be available as supporting information.”</p> <p>We observe that the above language is slightly different from TPL-001-5.1 Req # 3.4, which states:</p> <p>“Those planning events in Table 1 that are expected to produce more severe System impacts on its portion of the BES shall be identified, and a list of those Contingencies to be evaluated for System performance in Requirement R3, Part 3.1 created. The rationale for those Contingencies selected for evaluation shall be available as supporting information.”</p> <p>In summary, we observe that TPL-008-1 Req #7 requires the identification of planning events for each category in Table 1 (i.e., P0, P1, P2, P4, P7), while TPL-001-5.1 Req #3.4 does not explicitly require the identification of planning events for each category in Table 1.</p> <p>We are not certain if this distinction (added burden for TPL-008-1 as compared to TPL-001-5.1) was intended by the SDT, as so we wanted to point this out.</p> <p>We would also like the SDT to clarify if the intent is that the entity must identify contingencies for each “Category” (P2 for example) AND each “Event” (P2.1 for example). Without clarification, this requirement could be interpreted differently by auditors.</p>	
Likes 0	# of other submitters who agree with these comments
Dislikes 0	# of other submitters who disagree with these comments
Response	
(Drafting team’s response to submitter’s comments)	

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

**Answer** No

**Document Name**

**Comment**

(R6) No issue.

(R7) No issue.

(R8) It is not clear if steady state and transient stability analysis using the identified contingencies from R7 should be included in every 8.1 (the benchmark planning cases developed in accordance with Requirement R4 Part 4.1.) and 8.2 (the sensitivity cases developed in accordance with Requirement R4 Part 4. 2.) analysis.

The Technical Rationale for R8 Requirements specifies the minimum number of assessments (a minimum of one benchmark planning case analysis for extreme cold, a minimum of one for extreme heat, a minimum of one sensitivity study case for one condition for extreme cold, and a minimum of one sensitivity study case for one condition for extreme heat). We suggest clarifying this in 4.1. and 4.2.

Likes 0

Dislikes 0

**Response**

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

**Answer** No

**Document Name**

**Comment**

PNM agrees with EEI's comments and feedback for this question.

Likes 0

Dislikes 0

**Response**

**Robert Blackney - Edison International - Southern California Edison Company - 1**

**Answer** No

**Document Name**

**Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer**

No

**Document Name**

**Comment**

PJM supports the IRC SRC comments.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

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

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer**

No

**Document Name**

**Comment**



PGAE has no comment on R6 or R7, however, we disagree with the proposed R8. See above comments for Question 3 related to R4, as R8 is in reference to R4.

Likes 0

Dislikes 0

### Response

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name** ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2

**Answer**

No

**Document Name**

### Comment

The SRC supports some of the revisions and proposes modifications to others as detailed below.

R6 needs better wording to indicate instability, uncontrolled separation and cascading must all be monitored for. The “or” makes it seem like only one of the three must be addressed.

**R7.** SRC supports the SDT’s decision to modify the language from “Contingencies” to “planning events;” however, we believe a similar change should be made to the second reference to “Contingencies” later in the paragraph (see sentence 2). SRC proposes the edit below.

**R7.** Each responsible entity, as identified in Requirement R1, shall identify the planning events for each category in Table 1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System. The rationale for those **planning events** selected for evaluation shall be available as supporting information.

Likes 0

Dislikes 0

### Response

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer**

No

**Document Name**

### Comment

Seminole would like a longer implementation timeline for R7 of 72 months to determine which planning events produce more severe planning events.

Likes 0

Dislikes 0

### Response

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE****Answer** No**Document Name****Comment**

Please refer to Question 1 comments.

Likes 0

Dislikes 0

**Response****Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin****Answer** No**Document Name****Comment**

In R7, ITC has concerns with the term planning event and believes that this should be changed to contingencies. To ITC, the term planning event should be used to describe the benchmark event, not the outage of a portion of the grid.

The DT needs to identify which system this standard is applicable to analyze. ITC believes it should remain the Bulk Electric System (BES) rather than being applicable to the Bulk Power System (BPS). NERC standards do not typically apply to the BPS. Entities that own the BES system in an area can identify any concerns for the BES. If an entity does not own the BPS also, applying it to the BPS would expose them to issues outside of their control.

Likes 0

Dislikes 0

**Response****Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen****Answer** No**Document Name****Comment**

R6 could be moved to the beginning of the R2-R5 section or be included as part of the Operating Plan as described in our response to Question 1.

R7 requires testing of all the events listed in Table 1, however R9 only requires the development of CAPs for the P0 and P1 contingencies.

ISO-NE recommends modifying Table 1 to only include P0 and P1 events in accordance with the FERC Order 896 Paragraph 113 Commission Determination that *“NERC may determine whether contingencies P1 through P7 should also apply to the new or modified Reliability Standard, or*

whether a new set of contingencies should be developed.” Paragraph 113 of the Commission Determination does not require the inclusion of events other than P0. ISO-NE believes P0 and P1 events are acceptable for this Standard, however, P2, P4, and P7 events are not.

The technical Rationale for R10 should be modified to remove “However, due to their potential severity resulting from single Contingency multiple element outages, the SDT believes it is appropriate for responsible entities to at least evaluate and document possible mitigation actions to reduce the likelihood or mitigate the consequences and adverse impacts. The biggest benefit from the evaluation and documentation of the mitigating actions is it allows an entity to see where major problems exist that they may need to be addressed; and, if a project shows up on enough issues, it may encourage a fix to be implemented without it being strictly called for from the standard. Not requiring CAPs for these contingencies but requiring the evaluation is a compromise from having CAPs for all studied issues.”

Likes 0

Dislikes 0

## Response

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

No

**Document Name**

**Comment**

R6:

- The inclusion of “within an Interconnection” is not appropriate as the PC or TP should not be required to assess outside of its applicable area. Note the inclusion of more appropriate language referring to the PC’s or TP’s planning area (its portion of the Bulk Electric System) in this draft so it is not clear why some requirements refer to an Interconnection while others, more correctly, refer to the area of actual responsibility for the PC or TP.
- The following bullet contains a wording addition to clarify the applicability of this requirement to System-wide impacts. This is also consistent with wording in other Reliability Standards when referencing these types of impacts.
- “Each responsible entity, as identified in Requirement R1, shall define and document the criteria or methodology used in the Extreme Temperature Assessment analysis to identify instability, uncontrolled separation, or Cascading of the Bulk Electric System.”

R7 & R8:

- It does not appear likely that P0 & P1 events would be “expected to produce more severe System impacts” in typical planning studies. However, with an extreme weather scenario as the baseline, a P0 or P1 may produce more severe impacts due to the anomalous starting point. It would make more sense to allow the PC/TP to develop the appropriate study methodology (and document it) to appropriately analyze the required benchmark. Focusing on traditional P-event definitions and recycling language from TPL-001 is not appropriate since the analysis/assessments between the two standards is drastically different.
- The standard does not clearly and specifically state whether steady-state and/or stability analysis is to be performed for the identified events as TPL-001 does for instance. The SDT should consider modifying R7 to allow the responsible entity to develop a methodology or rationale in the performance of a benchmark event to appropriately assess it for that entity’s planning area, otherwise, additional clarity in the analysis expectations is needed. Different weather events would require a different consideration of applicable contingencies and analysis approaches.
- Adding “transient” to qualify stability may result in more confusion in interpretation between planning entities, auditors, and the referenced ERO. There is a requirement to document stability criteria so this should be clear based on that documentation. Adding “transient” therefore is more detrimental than helpful to this standard.
- Some of the lack of clarity may be related to the lack of clarity around the composition of the benchmark events to be determined. If these benchmark events are limited to temperature profiles versus temperature profiles and potential resultant generation unavailability (for example), the responsible entity’s analysis approach will potentially vary.

Likes 0

Dislikes 0

**Response**

**Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO**

**Answer** No

**Document Name**

**Comment**

SPP has concerns in reference to Requirement R7 and the applicability of Table 1 creating issues for industry by applying the extreme weather event matrix to this standard as it creates issues with the base case and scenario results.

At this point, it is unclear how the base case will translate the benchmarked events into the models. Moreover, it is unclear on the expectations of handling the events in the Table 1. For example, our initial assessment would lead us to believe that we will need to evaluate a P1 event like a P6 event.

Finally, there is a concern about the validity of the issues that maybe found dearing in this assessment and resulting dollars for CAPs.

SPP recommends that the drafting team provide clarity around their expectations for Table 1 by using the current events information from TPL-001 or revisioning those events to align appropriate with the requirements of the assessment for the TPL-008.

Likes 0

Dislikes 0

**Response**

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer** No

**Document Name**

**Comment**

The phrase "within an Interconnection" may need to be clarified or defined.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

<b>Document Name</b>	
<b>Comment</b>	
Tri-State supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
<b>Response</b>	
Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Similar to the CIP-014 project, R6 includes "instability, uncontrolled separation, or Cascading". This is similar to, yet slightly different from, the defined term Interconnection Reliability Operating Limit (IROLs).	
Likes 0	
Dislikes 0	
<b>Response</b>	
Hillary Creurer - Allele - Minnesota Power, Inc. - 1	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	

Requirement R7 struck "Contingencies" and replaced that with "the planning events" in the first sentence but did not strike "Contingencies" in the second sentence. It is not clear as to why the change was made as "Contingency" is defined while "planning event" is not. Requirement R8 uses the phrase "Contingencies identified in Requirement 7" which is not supported by the proposed language of Requirement R7. The Technical Rational supports and reiterates the use of Contingency. FERC Order 896 stated (and is listed in the Technical Rationale): "[w]e believe that it is necessary to establish a set of common contingencies for all responsible entities to analyze. Required contingencies, such as those listed in Table 1 of Reliability Standard TPL-001-5.1 (i.e., category P1 through P7), establish common planning events that set the starting point for transmission system planning assessments,".

Likes 0

Dislikes 0

### Response

**Selene Willis - Edison International - Southern California Edison Company - 5**

Answer No

Document Name

### Comment

Please see comments from EEI

Likes 0

Dislikes 0

### Response

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

Answer No

Document Name

### Comment

EEI does not have concerns with Requirement R6 or Requirement R8, however, we do suggest some non-substantive changes to Requirement R7. Specifically, we suggest changing "planning event" to "contingency event" to align with Table 1.1 more clearly. Our suggested changes are indicated below in boldface.

R7. Each responsible entity, as identified in Requirement R1, shall identify the **contingency** events for each category in Table 1.1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System. The rationale for those Contingencies selected for evaluation shall be available as supporting information. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

Likes 0

Dislikes 0

Response	
Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop	
Answer	No
Document Name	
Comment	
In R7, Ameren recommends changing "Contingencies" to "planning events" in the last sentence. This would align with the revision made in the first part of R7. In addition, Ameren agrees with and supports EEI's comments.	
Likes	0
Dislikes	0

Response	
Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez	
Answer	No
Document Name	
Comment	
Define Table 1 for requirement R7. We also request increased clarity on the case selection & building process required in R4.	
Likes	0
Dislikes	0

Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	No
Document Name	
Comment	
The Requirement R7 language is not clear whether the responsible entity should evaluate the impact of each of the Contingencies listed in Table 1.1 or the responsible entity is to guess (or select based on some rationale criteria) which contingency event will produce more severe System impacts on its portion of the BPS. Additionally, while the requirement language states there should be rationale for those Contingencies selected, there is no language saying there should be rationale for the Contingencies not selected. Texas RE recommends language to require rationale for both why certain Contingencies are selected and why others are not selected.	
Likes	0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

Southern Company requests that the phrase “within an Interconnection” be clarified or defined. Southern Company would like clarification on why transient stability is specified in R8, but not other portions of the standard.

Likes 0

Dislikes 0

**Response**

**Richard Vendetti - NextEra Energy - 5**

**Answer** No

**Document Name**

**Comment**

NextEra supports EEI's comments

EEI does not have concerns with Requirement R6 or Requirement R8, however, we do suggest some non-substantive changes to Requirement R7. Specifically, we suggest changing “planning event” to “contingency event” to align with Table 1.1 more clearly. Our suggested changes are indicated below in boldface.

R7. Each responsible entity, as identified in Requirement R1, shall identify the **contingency** events for each category in Table 1.1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System. The rationale for those Contingencies selected for evaluation shall be available as supporting information. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

Likes 0

Dislikes 0

**Response**

**Kevin Conway - Western Power Pool - 4**

**Answer** No

**Document Name**



**Comment**

R6 and R7 Risk factors should be Medium to match TPL 001-5.

Likes 0

Dislikes 0

**Response**

**Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper**

**Answer**

No

**Document Name**

**Comment**

For R6 & R7, Santee Cooper suggests the VRF's be Medium to match TPL-001-5. We also feel like the additional sensitivity studies required in R8.2 would add a significant administrative burden without more clarification to how it benefits the long term planning horizon.

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer**

No

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer**

No

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 4

Likes 0

Dislikes 0

### Response

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

Answer

No

Document Name

### Comment

The Violation Risk Factor (VRF) for Requirements R7 and R8 are designated as High, however, the VRF for similar requirements in TPL-001-5 are designated as Medium. The VRF for Requirements R7 and R8 in TPL-008-1 should be set to Medium to match TPL-001-5.

Likes 0

Dislikes 0

### Response

**Robert Jones - Seattle City Light - 1,3,4,5,6**

Answer

No

Document Name

### Comment

R6 and R7 Risk factors should be Medium to match TPL-001-5.

Likes 0

Dislikes 0

### Response

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

Answer

No

Document Name

**Comment**

For R6, Oncor urges its comment from R5. The PC would need to ensure that all entities use the same methodology and criteria for instability, uncontrolled separation, or Cascading.

For R8, Oncor asks whether language can be added to ensure that entities can take credit for studies that are run as part of the Extreme Temperature Assessment, rather than running those studies again as part of the assessment to be conducted under TPL-001? For example, the Extreme Temperature Assessment could take the place of the sensitivity analysis required within the TPL-001 assessment for both the steady state and stability analyses.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

MRO NSRF supports some of the revisions and proposes modifications to others as detailed below.

R6 needs better wording to indicate instability, uncontrolled separation and cascading must all be monitored for. The “or” makes it seem optional.

**R7.** MRO NSRF supports the SDT’s decision to modify the language from “Contingencies” to “*planning events*,” however, we believe a similar change should be made to the second reference to “Contingencies” later in the paragraph (see sentence 2). MRO NSRF proposes the edit below.

**R7.** Each responsible entity, as identified in Requirement R1, shall identify the *planning events* for each *category* in Table 1 that are expected to produce more severe System impacts *on its portion of the Bulk Electric System*. The rationale for those Contingencies *planning events* selected for evaluation shall be available as supporting information.

**Part 8.1** MRO NSRF supports Part 8.1 and the analysis of the benchmark planning cases developed pursuant to Requirement 4, Part 4.1. As noted above, MRO NSRF views the benchmark temperature event as a “base case sensitivity” to that performed under TPL-001 and asks whether all sensitivities can be “baked into” the benchmark temperature event.

Likes 1

Scott Brame, N/A, Brame Scott

Dislikes 0

**Response**

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

**Answer**

No

**Document Name**

**Comment**

Dominion Energy supports EEI comments. In addition, Dominion Energy is concerned over the ambiguity in the CAP process and would appreciate additional clarity on the role of the ERO in the CAP process.

Likes 0

Dislikes 0

### Response

#### Zahid Qayyum - New York Power Authority - 5

Answer

No

Document Name

Comment

The Violation Risk Factor for R6 and R7 is currently 'high' and should be lowered to 'medium' to align with TPL 001-5.1

Likes 0

Dislikes 0

### Response

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

Answer

No

Document Name

Comment

FirstEnergy supports EEI's comments which state:

EEI does not have concerns with Requirement R6 or Requirement R8, however, we do suggest some non-substantive changes to Requirement R7. Specifically, we suggest changing "planning event" to "contingency event" to more clearly align with Table 1.1. We also note that Bulk Power System was incorrectly identified as Bulk Electric System. Our suggested changes are indicated below in boldface:

R7. Each responsible entity, as identified in Requirement R1, shall identify the **contingency** events for each category in Table 1.1 that are expected to produce more severe System impacts on its portion of the Bulk **Electric Power** System. The rationale for those Contingencies selected for evaluation shall be available as supporting information. [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

Likes 0

Dislikes 0

### Response

#### Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Duke Energy agrees with and recommends implementation of EEI comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>The standard practice is to first identify the base-case planning scenarios to perform the extreme temperature assessment and then identify the applicable contingencies. The revised wording in R7 is confusing and does not convey the correct message. Please refer to the specific table when referring to contingencies and performance requirements, for example, refer to Table 1.1 the contingencies to be studies and Table 1.2 for the performance requirements. It is expected that the SDT will revise R7 to make this clarification.</p> <p>Manitoba Hydro does not think there is a need to perform additional sensitivity studies as per R 8.2 (see our response to R 4.2 under comment -3).</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Gary Trezza - Long Island Power Authority - 1 - NPCC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Requirement # 7 states:</p> <p><i>“Each responsible entity, as identified in Requirement R1, shall identify the planning events for each category in Table 1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System. The rationale for those Contingencies selected for evaluation shall be available as supporting information.”</i></p> <p>We observe that the above language is slightly different from TPL-001-5.1 Req # 3.4, which states:</p>	

“Those planning events in Table 1 that are expected to produce more severe System impacts on its portion of the BES shall be identified, and a list of those Contingencies to be evaluated for System performance in Requirement R3, Part 3.1 created. The rationale for those Contingencies selected for evaluation shall be available as supporting information.”

In summary, we observe that TPL-008-1 Req #7 requires the identification of planning events for each category in Table 1 (i.e., P0, P1, P2, P4, P7), while TPL-001-5.1 Req #3.4 does not explicitly require the identification of planning events for each category in Table 1.

We are not certain if this distinction (added burden for TPL-008-1 as compared to TPL-001-5.1) was intended by the SDT, as so we wanted to point this out.

We would also like the SDT to clarify if the intent is that the entity must identify contingencies for each “Category” (P2 for example) AND each “Event” (P2.1 for example). Without clarification, this requirement could be interpreted differently by auditors.

Likes 0

Dislikes 0

### Response

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer**

No

**Document Name**

**Comment**

CHPD believes the updates made to R6 through R8 were very good, with one concern for R6 and R7 remaining. The VRF for the ‘Bad 3’ criteria and contingencies/rational are both set as ‘High’ as proposed in TPL-008, while the same type of limits requirement has a VRF of ‘Medium’ in TPL-001-5 R6 and R3.4/R4.4 respectively. It is requested the VRF for TPL-008 R6 and R7 be similarly set as ‘Medium’ for consistency.

Likes 1

Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

**Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC**

**Answer**

No

**Document Name**

**Comment**

(R6) No issues.

(R7) No issues.

(R8.2) We do not agree that R8.2, which requires an increasingly more extreme scenario for purposes of a sensitivity analysis, is credible. This is especially true for longer term planning horizons when generation additions and retirements, along with transmission configuration changes and new technologies to be deployed are less detailed.

Likes 0

Dislikes 0

### Response

**Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name** WPP Consortium of Engineers

**Answer**

No

**Document Name**

**Comment**

R6 and R7 Risk factors should be Medium to match TPL 001-5.

Likes 0

Dislikes 0

### Response

**Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF**

**Answer**

No

**Document Name**

**Comment**

If R8 refers to Contingencies identified in requirement R7, why was the use of “contingencies” in R7 changed to “planning events”. Recommend changing R7 back to contingencies for consistency. When referring to contingencies in table 1, suggest updating to table “1.1”.

Likes 0

Dislikes 0

### Response

**Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1**

**Answer**

No

**Document Name**

**Comment**

R6, and R7 VRFs are 'high', but they should be Medium to match TPL 001-5.

Likes 2

Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

#### Ben Hammer - Western Area Power Administration - 1

Answer

Yes

Document Name

Comment

R6. Each responsible entity, as identified in Requirement R1, shall define and document the criteria or methodology used in the Extreme Temperature Assessment analysis to identify instability, uncontrolled separation, **and** Cascading. within an Interconnection.

Likes 0

Dislikes 0

### Response

#### Kinte Whitehead - Exelon - 3

Answer

Yes

Document Name

Comment

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

### Response

#### Helen Lainis - Independent Electricity System Operator - 2

Answer

Yes

Document Name

Comment



We support the SDT's decision to modify the language from "Contingencies" to "planning events;" however, we believe a similar change should be made throughout the proposed standard.

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name** Black Hills Corporation - All Segments

**Answer**

Yes

**Document Name**

**Comment**

Black Hills Corporation has no concerns with the updated language for requirements R6, R7, and R8.

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

None

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**Answer**

Yes

**Document Name**

**Comment**

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

**Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC**

**Answer** Yes

**Document Name**

**Comment**

BPA recommends R6 and R7 Risk factors should be set to Medium to match TPL 001-5.

For R7, BPA recommends adding “and create a list of Contingencies to be evaluated”.

*Each responsible entity, as identified in Requirement R1, shall identify the planning events for each category in Table 1 that are expected to produce more severe System impacts on its portion of the Bulk Electric System and create a list of Contingencies to be evaluated. The rationale for those Contingencies selected for evaluation shall be available as supporting information.*

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Shafer - New York State Electric & Gas (NYSEG) - 6**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Teresa Krabe - Lower Colorado River Authority - 5**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Tondalo - United Illuminating Co. - 1**

**Answer**

Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Mike Magruder - Avista - Avista Corporation - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Junji Yamaguchi - Hydro-Quebec (HQ) - 5</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

**Response**

**Robert Follini - Avista - Avista Corporation - 3**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer** Yes

**Document Name**

**Comment**

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**

Likes 0

Dislikes 0

**Response****Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC****Answer**

Yes

**Document Name****Comment**

Likes 0

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Thomas Foltz - AEP - 5**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Jeffrey Streifling - NB Power Corporation - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**



**5. The DT updated Requirement R9 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirement R9? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.**

<b>Long Island Power Authority</b>	
Answer	No
Document Name	(if an attachment is provided by submitter)
<b>Comment</b>	
<p>Requirement #9.3 states:</p> <p>“Be permitted to utilize Non-Consequential Load Loss as an interim solution, which normally is not permitted in Table 1, in situations that are beyond the control of the Planning Coordinator or Transmission Planner that prevent the implementation of a Corrective Action Plan in the required timeframe.”</p> <p>The Extreme Temperature Assessment would have to be performed at least once every 5 years, assessing one year in the Long Term Planning Horizon.</p> <p>It is recognized that the details of the extreme heat/cold benchmark temperature events may change over time, and that the underlying assumptions utilized in the Extreme Temperature Assessment for one of the years in the Long Term Planning Horizon may change over time. CAPs identified in one Assessment may not be needed in a future Assessment. It may be difficult to pursue expensive CAPs understanding that assumptions may change.</p> <p>With this in mind, we find it difficult from a compliance perspective to clearly identify what is meant by “in the required timeframe”. This language, while allowing for flexibility, seems very ambiguous. The Technical Rationale does not elaborate on this point.</p> <p>We recommend that the SDT clarify what is intended by “in the required timeframe.”</p>	
Likes 0	# of other submitters who agree with these comments
Dislikes 0	# of other submitters who disagree with these comments
<b>Response</b>	
(Drafting team’s response to submitter’s comments)	
<b>Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza</b>	
Answer	No
Document Name	

**Comment**

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

**Response****Jeffrey Streifling - NB Power Corporation - 1**

**Answer**

No

**Document Name**

**Comment**

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

**Response****Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1**

**Answer**

No

**Document Name**

**Comment**

The "applicable regulatory authorities... electric service" needs better clarification - what does this look like for Jurisdictionals vs non-Jurisdictionals - is this not applicable to non-Jurisdictionals? Ask of SDT to provide better guidance & examples. Could NERC provide some examples for both jurisdictional entities and non-jurisdictional entities for what is intended for this standard. It is highly recommended using operation procedures instead of CAPs since operation procedures have more flexibility to respond to a system's needs and adapt proactively.

Likes 2

Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie

Dislikes 0

**Response****Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name WPP Consortium of Engineers**

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Language unclear pertaining to non-jurisdictionals, could NERC provide some examples for both jurisdictionals and non-jurisdictionals for what is intended for this standard? "applicable regulatory authorities or governing bodies responsible for retail electric service" needs better clarification - what does this look like for Jurisdictionals vs non-Jurisdictionals - is this not applicable to non-Jurisdictionals? Ask of SDT to provide better guidance and examples here.</p> <p>Could operational procedures be used in lieu of a CAP as an acceptable mitigation?</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>R9.3 The phrase "required timeframe" is unclear and should be more thoroughly defined.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>(R9.1) We cannot agree with R9.1 without further clarification of how "applicable" entities are determined. We recommend that the reference to "applicable" entities in R9.1 should be integrated into R3, suggesting that "applicable" entities shall be identified as part of R3 coordination process developed by the PC.</p>	

(R9.2) We cannot agree with R9.2 due to the lack of understanding of the value for “alternative considerations”. The analysis process to determine how best to meet performance requirements is quite complex and comprehensive. We believe attempting to document, notify, and discuss alternatives that were deemed less reliable, less economical, and therefore less impactful to ensure system performance would be an inefficient and ineffective task, and likely to cause more confusion than clarity.

(R9.3) No issues.

(R9.4) No issues.

Likes 0

Dislikes 0

**Response**

**Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova**

**Answer** No

**Document Name**

**Comment**

Comments:

We think R9.1 should be removed because it creates a compliance requirement without any incremental benefit to reliability. It further conflicts with existing planning requirements and processes.

Please see comment on R10.

Likes 0

Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer** No

**Document Name**

**Comment**

CHPD believes the updates made to R9 were very good, with a couple concerns remaining. The first concern is to the statement ‘make their CAP available’ in R9.1. CHPD suggests this be changed to ‘make available on request’, to align with a similar request-based mechanism under R11. We’ve found the general ‘make available’ is murky language for compliance.

The second concern is the expectation in 9.1 and 9.2 for soliciting feedback and notifications to ‘regulatory authorities or governing bodies responsible for retail electric service issues. The intent here is not clear. Could the SDT provide some examples of what is intended here, both for Jurisdictional and

non-Jurisdictional entities? Furthermore, it is noted that the Measures for R9 do not appear to include the solicitation and notification as part of the measures for compliance with R9.

Likes 1

Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

#### Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO

Answer

No

Document Name

### Comment

R9 and Table 1 requires the development of Corrective Action Plans for P1 events where applicable facility ratings are exceeded and steady state voltages are not within limits. This requirement goes beyond the directives in FERC Order 896. The FERC Order is concerned with cascading, instability, and uncontrolled islanding but not with facility overloads.

Likes 0

Dislikes 0

### Response

#### Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC

Answer

No

Document Name

### Comment

BPA views this as an extreme event that doesn't occur often. BPA recommends these issues be resolved in the operational time horizon through operating plans. BPA believes an operating plan would provide acceptable performance for an extreme event. BPA believes an operating plan could be used in lieu of a Corrective Action Plan.

Likes 0

Dislikes 0

### Response

#### Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5

Answer

No

Document Name

### Comment

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

### Response

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

**Answer**

No

**Document Name**

**Comment**

Duke Energy agrees with and recommends implementation of EEI comments.

Additionally: (a) Define authorities and governing bodies listed in proposed Requirement 9.1.: "Make their CAP available and solicit feedback from applicable regulatory authorities or governing bodies responsible for retail electric service issues" and

(b) Modify R9.2. to read 'Document "any" alternative(s) considered', since scenarios may only have one option and prove unrealistic for all scenarios.

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

**Comment**

FirstEnergy requests the DT to clarify intent providing feedback toward CAP – timeframe of soliciting feedback and what actions would result from providing feedback. Clarify who applicable "regulatory authorities or governing bodies for retail service" would be.

FirstEnergy also supports EEI's comments which state:

EEI offers non-substantive edits in boldface below to Requirement R9.

R9. Each responsible entity, as identified in Requirement R1, shall develop a Corrective Action Plan(s) (CAPs) when the assessment of a benchmark planning case, in accordance with Requirement R8 Part 8.1, indicates its portion of the Bulk **Electric Power** System is unable to meet performance requirements for Table 1.1 P0 or P1 Contingencies. For each Corrective Action Plan, the responsible entity shall: [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

Likes 0

Dislikes 0

**Response**

**Zahid Qayyum - New York Power Authority - 5**

**Answer**

No

**Document Name**

**Comment**

Regarding R9.1 NYPA request standard drafting team to clarify the term "applicable regulatory authorities...electric service" for better clarification and understanding.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

The MRO NSRF recommends the SDT adopt one of the two options (below) and clarify the requirements for each.:

Option #1:

- R9 should focus solely on either benchmark cases for power flow and stability and
- R10 should focus solely on sensitivity cases for each

Option #2:

- R9 should focus on power flow for both benchmark and stability and
- R10 focus on sensitivity study requirements for both power flow and dynamic stability.

MRO NSRF observes that **R9** addresses Load Loss under TPL-008 whereas this is addressed under TPL-001 in TPL-001-5.1, Table 1. The first sentence of Part 9.3 should be stricken from the standard as illustrated below because it is explanatory in nature and adds no value to the standard. MRO NSRF recommends this be migrated to the Technical Rationale if the SDT feels it is important to retain.

**9.3.**The use of Non-Consequential Load Loss as an interim solution in this situation is permitted, provided that each responsible entity documents the situation causing the problem, alternatives evaluated, and takes actions to resolve the situation.

(Please review the attached document, question 1).

Likes 1

Scott Brame, N/A, Brame Scott

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

**Response**

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer**

No

**Document Name**

**Comment**

Oncor strongly disagrees with the following statement in R9.1: "Make their CAP available and solicit feedback from, applicable regulatory authorities or governing bodies responsible for retail electric service issues." We propose that "applicable regulatory authorities or governing bodies" be defined and limited. For example, a TP should only need to provide their PC with CAP information.

In addition, we disagree with the following phrase "and notify the applicable regulatory authorities or governing bodies responsible for retail electric service issues" as it relates to Load Shed. The intended regulatory audience needs to be clearly defined.

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**



**Comment**

The language unclear pertaining to non-jurisdictionals. "Applicable regulatory authorities or governing bodies responsible for retail electric service" needs better clarification - what does this look like for Jurisdictionals vs non-Jurisdictionals. Is this not applicable to non-Jurisdictionals? Please provide better guidance and examples here.

Could operational procedures be used in lieu of a CAP as an acceptable mitigation?

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

SMUD supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer**

No

**Document Name**

**Comment**

The term, "Non-Consequential Load Loss," is an oxymoron.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 5</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Amy Wilke - American Transmission Company, LLC - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>ATC supports the MRO NSRF comments.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<b>Robert Follini - Avista - Avista Corporation - 3</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Avista offers the following suggested comments for consideration:</p> <p>Avista suggests clarifying that operational procedures may be acceptable mitigation.</p> <p>Avista suggests NERC does not need to require interactions with regulatory authorities and governing bodies.</p>	
Likes	0
Dislikes	0
<b>Response</b>	

**Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper**

**Answer** No

**Document Name**

**Comment**

Santee Cooper supports other entity comments for defining regulatory authorities and governing bodies proposed in R9.1. We also suggest modifying R9.2. to read 'Document "any" alternative(s) considered', since scenarios may only have one option and prove unrealistic for all scenarios.

Likes 0

Dislikes 0

**Response**

**Kevin Conway - Western Power Pool - 4**

**Answer** No

**Document Name**

**Comment**

Language unclear pertaining to non-jurisdictionals, could NERC provide some examples for both jurisdictionals and non-jurisdictionals for what is intended for this standard? applicable regulatory authorities or governing bodies responsible for retail electric service" needs better clarification - what does this look like for Jurisdictionals vs non-Jurisdictionals - is this not applicable to non-Jurisdictionals? Ask of SDT to provide better guidance and examples here. Could operational procedures be used in lieu of a CAP as an acceptable mitigation?

Likes 0

Dislikes 0

**Response**

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer** No

**Document Name**

**Comment**

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

It is Southern Company's recommendation that the language requiring entities to solicit feedback from regulatory authorities and governing bodies, in R9.1, should be removed from the standard.

The action of soliciting regulatory feedback/approval does not comport with a risk-based action and only serves as an administrative burden that could delay reliability improvements to the BES. It is beyond the purview of a reliability standard to mandate a regulatory strategy for the implementation of projects. The precedent set by TPL-001-5 pertaining to notifying regulatory authorities and governing bodies is specific to the review of non-consequential load loss and does not support mandating regulatory authority and governing body feedback solicitation as outlined in R9.1.

Further clarification of the recipients and intention for making CAP details available is also required for R9.1 since not all entities fall under the jurisdiction of a Public Service Commission and considerations need to be made for the sharing of CEII information.

Southern appreciates the inclusion of R9.3 and R9.4 as clarification for CAP development.

Likes 0

Dislikes 0

**Response**

**Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF**

**Answer** No

**Document Name**

**Comment**

The DT replaced "assessment" with "analysis" in Requirement R8 Part 8.1. It is suggested that the same replacement be made in Requirement R9 for consistency.

Soliciting feedback from applicable regulatory authorities or governing bodies responsible for retail electric service should not be required for CAPs that do not include Non-Consequential Load Loss. There is no need to add the administrative burden or introduce the opportunity for disagreements and delays when the responsible entity is doing something straightforward like reconductoring a transmission line.

This type of solicitation is only required in TPL-001 when Non-Consequential Load Loss is being used as an emergency mitigation option, which is appropriate. The DT has done the reverse. Normal CAPs require feedback per Parts 9.1 and 9.2. However, the use of Non-Consequential Load Loss as an emergency mitigation option does not require feedback per Part 9.3. It is recommended that the DT remove Part 9.1 and add the feedback solicitation to Part 9.3. In this way, any use of Non-Consequential Load Loss (whether planned or emergency alternative) will receive feedback. CAPs including only standard System upgrades can proceed without the additional coordination.

Likes 0

Dislikes 0

**Response**

**Mike Magruder - Avista - Avista Corporation - 1**

**Answer** No

**Document Name**

**Comment**

Suggest clarifying that operational procedures may be acceptable mitigation.

Suggest NERC does not need to require interactions with regulatory authorities and governing bodies.

Likes 0

Dislikes 0

**Response**

**Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez**

**Answer** No

**Document Name**

**Comment**

Define Table 1 for requirement R9. Define who are the regulatory authorities or governing bodies.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

Requirement R9 should say "Extreme Temperature Assessment" Or "analysis" versus simply "assessment". It is not clear where and when prevention of a Corrective Action Plan implementation would occur. Broadly allowing the use of Non-Consequential Load Loss could be detrimental to reliability. Calling it an "interim solution" with no CAP deadlines set and allowances for "revisions to the CAP in subsequent Extreme Temperature Assessments" ("subsequent" equals once every five (5) calendar years as a minimum based on a simple compliance approach) essentially creates an environment where Non-Consequential Load is a compliant result that does not appear to support reliability. Requirement R9 Part 9.4 is unclear. Who

is allowing this to occur? Sounds more like a statement but unsure of who the statement should be for as there is no process for the “permitted” use on Non-Consequential Load Loss.

Likes 0

Dislikes 0

**Response**

**Teresa Krabe - Lower Colorado River Authority - 5**

**Answer**

No

**Document Name**

**Comment**

LCRA agrees with other comments that we strongly disagrees with the following statement in R9.1: “Make their CAP available and solicit feedback from, applicable regulatory authorities or governing bodies responsible for retail electric service issues.” We propose that “applicable regulatory authorities or governing bodies” be defined and limited.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

Minnesota Power supports MRO’s NERC Standards Review Forum’s (NSRF) comments.

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer**

No

**Document Name**

**Comment**

LCRA TSC agrees with other comments that we strongly disagrees with the following statement in R9.1: “Make their CAP available and solicit feedback from, applicable regulatory authorities or governing bodies responsible for retail electric service issues.” We propose that “applicable regulatory authorities or governing bodies” be defined and limited.

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

**Comment**

Tri-State supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

### Response

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer**

No

**Document Name**

**Comment**

The language requiring entities to solicit feedback from regulatory authorities and governing bodies, in R9.1, should be clarified.

Likes 0

Dislikes 0

### Response

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

No

**Document Name**

**Comment**

- As it stands, “Performance Requirements” referred to in this draft is not clearly defined. Refer to the comment for R5.

- Note the inclusion of language referring to the PC's or TP's planning area (its portion of the Bulk Electric System) in this draft so it is not clear why some requirements refer to an Interconnection while others, more correctly, refer to the area of actual responsibility for the PC or TP.
- Refer to previous comments for question 4 regarding referencing specific P events instead of a methodology developed by the PC/TP to appropriately assess the studied benchmark event.
- R9.4 refers to "performance requirements of Table 1". There are no performance requirements (stable system, loading within Facility Ratings...) in this draft of Table 1.
- The purpose and required response actions related to the sharing of CAPs and solicitation of feedback is not clear.
- Documentation of alternatives is an additional administrative burden and provides little benefit to reliability. It is also unclear if there is some type of expectation these alternatives are reviewed or potentially challenged as invalid.
- R9.3 would be better captured in Table 1 similar to TPL-001 Table 1.
- The role of the TO and/or GO in implementing or otherwise responding to CAPs that may require additions or modifications to their systems/facilities is not captured in these requirements.
- There appears to be a significant amount of outside review required but no clear actions the responsible entity is required to take, particularly if there is a dispute. What is the purpose of the review and the expected response? This potentially produces an undue burden on the PC/TP and adds subjectivity in requiring a review with no documented guidelines for conducting the review.

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer**

No

**Document Name**

**Comment**

OPG supports NPCC Regional Standards Committee's comments:

There are already existing processes for interactions with applicable regulatory authorities and governing bodies regarding CAP for many other issues and items. Extreme weather CAPs are not exceptions and do not need a new way to solicit feedback. R9.1 should be removed because it also creates a compliance requirement without any benefit to reliability and would be confusing.

Likes 0

Dislikes 0

**Response**

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer**

No

**Document Name**

**Comment**

See SRC Comments



Likes 0

Dislikes 0

**Response**

**Ben Hammer - Western Area Power Administration - 1**

**Answer** No

**Document Name**

**Comment**

**9.3.** The use of Non-Consequential Load Loss as an interim solution in this situation is permitted, provided that each responsible entity documents the situation causing the problem, alternatives evaluated, and takes actions to resolve the situation.

Likes 0

Dislikes 0

**Response**

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer** No

**Document Name**

**Comment**

- R9.2 ITC believes the requirement for the notification to an applicable regulatory entity should also include a threshold. As written, an entity would need to make a notification if a proposal tripped 0.1 MW of non-consequential load. Recommend the DT add a threshold in a similar way as is included in TPL-001 Attachment 1.
- R9.3 Delete the first sentence of this sub-requirement. It is explanatory and does not add anything to the intent of R9.
- ITC also has a recommended change to Table 1 which therefore would require a change to R9 at a minimum.

Likes 0

Dislikes 0

**Response**

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

**Answer** No

**Document Name**

**Comment**

Please refer to Question 1 comments.

Likes 0

Dislikes 0

**Response**

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer** No

**Document Name**

**Comment**

NERC, under R9.1, should not add in requirements for other regulatory authorities or governing bodies. Those entities may have approval requirements that are not clearly laid out here which could cause an undue burden onto NERC entities. Other regulatory entities, if they have been given such authority, can develop regulations on their own, to achieve what the SDT has written in R9.1.

Likes 0

Dislikes 0

**Response**

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**

**Answer** No

**Document Name**

**Comment**

The SRC<sup>[1]</sup> observes that Load Loss is addressed in TPL-008, requirement R9 whereas Load Loss is addressed in TPL-001-5.1, Table 1. The SRC recommends the first sentence of Part 9.3 be stricken from the standard as illustrated below because it is explanatory in nature and adds no value to the standard. The SRC recommends the first sentence be migrated to the Technical Rationale if the SDT feels it is important to retain.

**9.3.** The use of Non-Consequential Load Loss as an interim solution in this situation is permitted, provided that each responsible entity documents the situation causing the problem, alternatives evaluated and takes actions to resolve the situation.

The SRC also expresses concern with Part 9.2, concerning notification to local public service commissions, and proposes this *only* be required when Non-Consequential Load Loss is utilized as an element of a corrective action plan (CAP) for the Table P1 contingency. The SRC believes this would be consistent with existing reporting requirements in TPL-001 and FERC Order 896. See proposed language below:

**9.2** Document the alternatives considered and notify the applicable regulatory authorities or governing bodies responsible for retail electric service issues *only* when Non-Consequential Load Loss is utilized as an element of a CAP for the Table 1 P1 Contingency.

[1] For purposes of question 5, the IRC SRC includes the following entities: CAISO (only in support of our recommendation regarding Part 9.3), ERCOT, ISO-NE, MISO, NYISO, PJM and SPP.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

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

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer** No

**Document Name**

**Comment**

PJM supports the IRC SRC comments.

Likes 0

Dislikes 0

**Response**

**Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF**

**Answer** Yes

**Document Name**

**Comment**

Recommend updating table references to 1.2.

Likes 0

Dislikes 0

**Response**

**Gary Trezza - Long Island Power Authority - 1 - NPCC**

**Answer** Yes

**Document Name**

**Comment**

Requirement #9.3 states:

*“Be permitted to utilize Non-Consequential Load Loss as an interim solution, which normally is not permitted in Table 1, in situations that are beyond the control of the Planning Coordinator or Transmission Planner that prevent the implementation of a Corrective Action Plan in the required timeframe.”*

The Extreme Temperature Assessment would have to be performed at least once every 5 years, assessing one year in the Long Term Planning Horizon.

It is recognized that the details of the extreme heat/cold benchmark temperature events may change over time, and that the underlying assumptions utilized in the Extreme Temperature Assessment for one of the years in the Long Term Planning Horizon may change over time. CAPs identified in one Assessment may not be needed in a future Assessment. It may be difficult to pursue expensive CAPs understanding that assumptions may change.

With this in mind, we find it difficult from a compliance perspective to clearly identify what is meant by “in the required timeframe”. This language, while allowing for flexibility, seems very ambiguous. The Technical Rationale does not elaborate on this point.

We recommend that the SDT clarify what is intended by “*in the required timeframe.*”

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**Answer** Yes

**Document Name**

**Comment**

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer** Yes

<b>Document Name</b>	
<b>Comment</b>	
None	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Rachel Schuldt - Black Hills Corporation - 6, Group Name</b> Black Hills Corporation - All Segments	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Black Hills Corporation has no concerns with the updated language for requirement R9.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Richard Vendetti - NextEra Energy - 5</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
NextEra supports EEI's comments	
: EEI offers non-substantive edits in boldface below to Requirement R9.	
<p>R9. Each responsible entity, as identified in Requirement R1, shall develop a Corrective Action Plan(s) (CAPs) when the assessment of a benchmark planning case, in accordance with Requirement R8 Part 8.1, indicates its portion of the Bulk Electric System is unable to meet performance requirements for Table 1.1 P0 or P1 Contingencies. For each Corrective Action Plan, the responsible entity shall: [Violation Risk Factor: High] [Time Horizon: Long-term Planning]</p> <p>9.1. Make their CAP available and solicit feedback from applicable regulatory authorities or governing bodies responsible for retail electric service issues.</p>	

9.2. Document the alternative(s) considered and notify the applicable regulatory authorities or governing bodies responsible for retail electric service issues when Non-Consequential Load Loss is utilized as an element of a CAP for the Table 1.1 P1 Contingency.

9.3. Be permitted to utilize Non-Consequential Load Loss as an interim solution, which normally is not permitted in Table 1, in situations that are beyond the control of the Planning Coordinator or Transmission Planner that prevent the implementation of a Corrective Action Plan in the required timeframe. The use of Non-Consequential Load Loss as an interim solution in this situation is permitted, provided that each responsible entity documents the situation causing the problem, alternatives evaluated, and takes actions to resolve the situation.

Likes 0

Dislikes 0

### Response

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer** Yes

**Document Name**

### Comment

In R9.1, Ameren suggests inserting the phrase "and Planning Coordinators" after "governing bodies." Ameren CAPs are typically approved by the Planning Coordinator through a stakeholder process.

Likes 0

Dislikes 0

### Response

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

**Answer** Yes

**Document Name**

### Comment

EEl offers non-substantive edits in boldface below to Requirement R9.

R9. Each responsible entity, as identified in Requirement R1, shall develop a Corrective Action Plan(s) (CAPs) when the assessment of a benchmark planning case, in accordance with Requirement R8 Part 8.1, indicates its portion of the Bulk Electric System is unable to meet performance requirements for Table 1.1 P0 or P1 Contingencies. For each Corrective Action Plan, the responsible entity shall: [Violation Risk Factor: High] [Time Horizon: Long-term Planning]

9.1. Make their CAP available and solicit feedback from applicable regulatory authorities or governing bodies responsible for retail electric service issues.

9.2. Document the alternative(s) considered and notify the applicable regulatory authorities or governing bodies responsible for retail electric service issues when Non-Consequential Load Loss is utilized as an element of a CAP for the Table 1.1 P1 Contingency.

9.3. Be permitted to utilize Non-Consequential Load Loss as an interim solution, which normally is not permitted in Table 1, in situations that are beyond the control of the Planning Coordinator or Transmission Planner that prevent the implementation of a Corrective Action Plan in the required timeframe. The use of Non-Consequential Load Loss as an interim solution in this situation is permitted, provided that each responsible entity documents the situation causing the problem, alternatives evaluated, and takes actions to resolve the situation.

Likes 0

Dislikes 0

### Response

#### Selene Willis - Edison International - Southern California Edison Company - 5

**Answer** Yes

**Document Name**

#### Comment

Please see comments from EEI

Likes 0

Dislikes 0

### Response

#### Carver Powers - Utility Services, Inc. - 4

**Answer** Yes

**Document Name**

#### Comment

It is challenging to agree due to not knowing the benchmarks to be set by NERC and the number of CAPs that may exist. The benchmarks identified may not actually be realistic for certain entities depending on locations and could complicate the ability to apply CAPS for unrealistic benchmarks. We must assume that the process for developing the benchmarks will recognize the complexities that microclimates play on certain locations across the ERO footprint.

Based on other projects that include developing and implementing CAPs, USV would feel more confident with the proposed modifications if there were timelines set for the CAPs. Perhaps not in the standard itself, but guidance on timelines could be explained in the technical rationale and include timelines for implementing CAPs and when entities can utilize backup action plans such as Non-Consequential Load Loss.

Likes 0

Dislikes 0

**Response**

**Kinte Whitehead - Exelon - 3**

**Answer** Yes

**Document Name**

**Comment**

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer** Yes

**Document Name**

**Comment**

PGAE has no comment on the updated R9 Corrective Action Plan.

Likes 0

Dislikes 0

**Response**

**Robert Blackney - Edison International - Southern California Edison Company - 1**

**Answer** Yes

**Document Name**

**Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

**Response**



**Thomas Foltz - AEP - 5**

<b>Answer</b>	Yes
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<b>Document Name</b>	
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<b>Comment</b>	
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Likes	0
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Dislikes	0
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<b>Response</b>	
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**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

<b>Answer</b>	Yes
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<b>Document Name</b>	
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<b>Comment</b>	
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Likes	0
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Dislikes	0
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<b>Response</b>	
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**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

<b>Answer</b>	Yes
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<b>Document Name</b>	
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<b>Comment</b>	
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Likes	0
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Dislikes	0
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<b>Response</b>	
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**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

<b>Answer</b>	Yes
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<b>Document Name</b>	
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<b>Comment</b>	
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Likes 0

Dislikes 0

**Response**

**Helen Lainis - Independent Electricity System Operator - 2**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Tondalo - United Illuminating Co. - 1**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Shafer - New York State Electric & Gas (NYSEG) - 6**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

Texas RE continues to recommend including a timeframe for which the CAPs need to be developed and submitted for review once the benchmark planning case study results indicate the System is unable to meet performance requirements.

Texas RE likewise continues to have concerns about the submission of CAPs solely to “applicable regulatory authorities...responsible for retail electric service.” As an initial matter, it is unclear how this requirement will work in practice and how the ERO could maintain visibility into the CAP review process. More broadly, since the Reliability Coordinator (RC) is the functional entity responsible for the Reliable Operation of the Bulk Electric System within the NERC jurisdictional model, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations, the CAP should at least be submitted to the RC in addition to applicable regulatory authorities.

Consistent with this approach, Texas RE recommends the following revision:

9.1 Make their CAPs available and solicit feedback from their Reliability Coordinator and applicable regulatory authorities or governing bodies responsible for retail electric service issues within 60 days of developing the CAPs.

Likes 0

Dislikes 0

**Response**

6. The DT updated Requirement R10 based on comments received. Do you agree with the updated proposed TPL-008-1 Reliability Standard Requirement R10? If you do not agree, please provide your recommendation and, if appropriate, technical or procedural justification.

**Long Island Power Authority**

Answer Yes

Document Name (if an attachment is provided by submitter)

**Comment**

Submitter's comments

Likes 0 # of other submitters who agree with these comments

Dislikes 0 # of other submitters who disagree with these comments

**Response**

(Drafting team's response to submitter's comments)

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

Answer No

Document Name

**Comment**

(R10) Previous requirements allowed for alternative(s) to be considered. We are suggesting replacing all "possible actions" with "possible action(s)" to allow a single action to mitigate the consequences and adverse impacts.

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

Answer No

Document Name

**Comment**

The decision to include the escalating phrase "instability, uncontrolled separation, or Cascading" in R10.1, but not 10.2 is confusing. This would indicate that the benchmark planning cases only require entities to "evaluate and document possible actions" if they rise to the level of significant BES impact. At a minimum, the DT should provide a clarifying statement to explain this rationale.

Likes 0

Dislikes 0

**Response**

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

**Answer**

No

**Document Name**

**Comment**

Please refer to Question 1 comments.

Likes 0

Dislikes 0

**Response**

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer**

No

**Document Name**

**Comment**

ITC understands the need for both steady-state and stability studies for the required contingencies. However, ITC makes the following recommendation for the sensitivity event being evaluated.

R10 should be modified to only require P0 and P1 contingencies be analyzed as part of the standard for the sensitivity event. The remaining contingencies identified should be left as an option for entities. R10.2 should only be applicable for steady state studies of P0 and P1 for the sensitivity case. Additionally Table 1 should be modified so that system issues identified during steady state reviews for P0 and P1 be addressed with a CAP. As currently drafted, completion of the sensitivity case studies are purely an administrative burden on entities completing the studies.

Likes 0

Dislikes 0

**Response**

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer**

No

**Document Name**

**Comment**

FERC Order 896 Paragraph 113 as part of the Commission Determination states that “NERC may determine whether contingencies P1 through P7 should also apply to the new or modified Reliability Standard, or whether a new set of contingencies should be developed.”

ISO-NE recommends that R10 be removed from the Standard as the FERC Order does not require the inclusion of P2, P4, or P7 contingency events. The P0 and P1 contingency events have a higher likelihood of occurrence and should remain within the Standard.

Likes 0

Dislikes 0

### Response

#### Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer No

Document Name

#### Comment

OPG supports NPCC Regional Standards Committee's comments:

We see that R10 requires a significant amount of work without providing additional system reliability.

Likes 0

Dislikes 0

### Response

#### Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford

Answer No

Document Name

#### Comment

- The purpose and reliability benefit of R10 is ambiguous. It is understood that P2, P4, P5, & P7 events tend to be lower probability but documenting possible mitigations every 5 years for these low-probability events in an extreme weather condition appears more administrative than reliability-based as the requirement is currently written. Reliability Standards should be performance based and impact reliability. Developing possible actions where mitigation is not required just adds more administrative burden to the PC/TP with no benefit to reliability as the result.
- The exclusion of the P3 & P6 events from these requirements is appropriate. The SDT should consider if specific P2, P4, P5, & P7 events should likewise be excluded so the standard only addresses those events that must be evaluated and mitigated. A better option would be to pursue a methodology developed by the PC/TP that is relevant to the benchmark event they are studying as opposed to rigidly referring to specific P events that may or may not be applicable to the analysis to be performed

Likes 0

Dislikes 0

### Response

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer** No

**Document Name**

**Comment**

Technical rationale should be assessed for justifying the removal of P2, P4, and especially P7 as well.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

Tri-State supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer** No

**Document Name**

**Comment**

LCRA TSC would like see more clarification on the difference between R9 and R10. How is “evaluate and document possible actions” different then developing CAPs?

Likes 0

Dislikes 0

**Response**

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



<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Teresa Krabe - Lower Colorado River Authority - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
LCRA would like see more clarification on the difference between R9 and R10. How is "evaluate and document possible actions" different then developing CAPs?	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Steven Rueckert - Western Electricity Coordinating Council - 10, Group Name WECC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
WECC suggests the DT consider "CAP development" versus "document possible actions". Possible actions could include "do nothing" which does not appear to support reliability.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable</b>	
<b>Answer</b>	No

<b>Document Name</b>	
<b>Comment</b>	
<p>EEl does not object to the intent of Requirement 10, but we do not agree that entities should be made accountable for developing actions for categories P2 through P7 because no corrective actions are required under this Reliability Standard beyond categories P0 and P1. It is sufficient for the responsible entity to conduct the assessments but developing and retaining documentation for mitigations for categories P2 through P7 represents an unnecessary administrative burden and provides no reliability benefit.</p>	
<p>R10. Each responsible entity, as identified in Requirement R1, shall evaluate <b>the Contingency Categories identified in Table 1.1</b> and document possible actions for <b>Categories P0 and P1. For Categories P2 through P7, document these categories were analyzed but it is not required to develop mitigations or retain records of those assessments. Assessments shall be as follows:</b> [Violation Risk Factor: Lower] [Time Horizon: Longterm Planning]</p>	
<p>10.1. Benchmark planning cases where possible actions are designed to mitigate the consequences and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.</p>	
<p>10.2. Sensitivity cases where possible actions are designed to mitigate failures to meet the performance requirements in Table 1 for category P0, P1, Contingencies</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<p><b>Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez</b></p>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>Define Table 1 in requirement R10.1 and R10.2. Need to clarify or re write what needs to be done for requirement R10.</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<p><b>Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF</b></p>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	

The analysis requirements of Requirement R10 pose a significant burden and produce no significant reliability benefit. Most of the contingencies analyzed do not require CAPs. It is suggested to remove P2, P4, and P7 from Part 10.2. This lessens the analysis burden while still ensuring sensitivity cases are analyzed for the Contingencies that require CAPs in the benchmark planning cases. This still accomplishes the FERC directives requiring the analysis of sensitivity cases.

Likes 0

Dislikes 0

### Response

**Helen Lainis - Independent Electricity System Operator - 2**

**Answer**

No

**Document Name**

**Comment**

**We support NPCC TFCP comment**

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

**Comment**

Southern Company appreciates the removal of P5. Technical rationale should be assessed for justifying the removal of P2, P4, and especially P7 as well.

Likes 0

Dislikes 0

### Response

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer**

No

**Document Name**

**Comment**

We see that R10 requires a significant amount of work without providing additional system reliability. We suggest that this requirement be removed.

Likes 0

Dislikes 0

### Response

**Kevin Conway - Western Power Pool - 4**

**Answer**

No

**Document Name**

**Comment**

Add in language that had been removed from previous version "reduce the likelihood or mitigate the consequences" to align with TPL-001.

Likes 0

Dislikes 0

### Response

**Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper**

**Answer**

No

**Document Name**

**Comment**

Santee Cooper would like to see the language align more with TPL-001-5 and is concerned about the additional work and the benefit of the analysis to long term planning horizon.

Likes 0

Dislikes 0

### Response

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer**

No

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer**

No

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 6

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer**

No

**Document Name**

**Comment**

Documenting possible actions is insufficient; responsible entities must do something.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

SMUD supports the comments submitted by EEI.

Likes 0

Dislikes 0

**Response****Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**

**Comment**

Add in language that had been removed from previous version “reduce the likelihood or mitigate the consequences” to align with TPL-001.

Likes 0

Dislikes 0

**Response****Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer**

No

**Document Name**

**Comment**

Oncor disagrees with R10 as well. The requirement does not give TPs the ability to create CAPs for the listed contingencies.

Likes 0

Dislikes 0

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

**Answer**

No

**Document Name**

**Comment**

We see that R10 requires a significant amount of work without providing additional system reliability.

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

### Comment

**Part 10.1.** MRO NSRF requests clarification regarding the objective of TPL-008-1, Part 10.1. What results are to be achieved pursuant to TPL-008-1, Requirement 10, Part 10.1 that are above and beyond the results achieved pursuant to TPL-001-5.1, Requirement 2, Parts 2.1, 2.2 and 2.7? The two provisions seem to be very similar and duplicative.

**10.1.** Benchmark planning cases where possible actions are designed to mitigate the consequences and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.

See also our response to Question #5.

Likes 0

Dislikes 0

### Response

**Zahid Qayyum - New York Power Authority - 5**

**Answer**

No

**Document Name**

### Comment

NYPA suggest SDT should consider align the language in R10 with that of TPL 001 5.1 for consistency. For instance, SDT can consider retaining the term “reduce the likelihood” as used in TPL 001-5.1

Likes 0

Dislikes 0

### Response

**Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5**

**Answer** No

**Document Name**

**Comment**

We see that R10 requires a significant amount of work without providing additional system reliability.

Likes 0

Dislikes 0

**Response**

**Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC**

**Answer** No

**Document Name**

**Comment**

BPA recommends that R10.1 and R10.2 be modified to include “to reduce the likelihood or mitigate the consequences” to align with TPL-001.

R10.1. Benchmark planning cases where possible actions are designed to **reduce the likelihood or mitigate the consequences** and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.

R10.2. Sensitivity cases where possible actions are designed to **reduce the likelihood or mitigate** failures to meet the performance requirements in Table 1 for category P0, P1, P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response**

**Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO**

**Answer** No

**Document Name**

**Comment**

Please refer to our response for comments 3 and 4.

Likes 0



Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name** CHPD

**Answer** No

**Document Name**

**Comment**

CHPD agrees with Western Power Pool's (WPP) comment.

Likes 1 Jennie Wike, N/A, Wike Jennie

Dislikes 0

**Response**

**Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova**

**Answer** No

**Document Name**

**Comment**

Comments:

We see that R10 requires a significant amount of effort and work without any assurance of providing additional system reliability. We suggest that this requirement and associated testing requirements in R9 be removed.

Likes 0

Dislikes 0

**Response**

**Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC**

**Answer** No

**Document Name**

**Comment**

(R10 and R10.1) It is recommended that the requirement for documenting "possible actions" should preserve the right to identify only a single action (i.e., "possible action(s)") that would best mitigate the consequence or adverse impact based on the analysis. Otherwise, due to the complex and comprehensive nature of the analysis and mitigation option review, we believe attempting to document less reliable or less effective solutions in a way that is clear, so as to avoid any confusion, would be an inefficient and ineffective task.

(R10.2) As noted in the comments associated with R4.2, we do not agree that an increasingly more extreme scenario for purposes of a sensitivity analysis, is credible. This is especially true for longer term planning horizons when generation additions and retirements, along with transmission configuration changes and new technologies to be deployed are less detailed.

Likes 0

Dislikes 0

### Response

**Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name** WPP Consortium of Engineers

**Answer**

No

**Document Name**

**Comment**

Add in language that had been removed from previous version "reduce the likelihood or mitigate the consequences" to align with TPL-001.

Likes 0

Dislikes 0

### Response

**Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1**

**Answer**

No

**Document Name**

**Comment**

Add in language that was removed from previous version "reduce the likelihood or mitigate the consequences" to align with TPL-001-5.

Likes 2

Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

**Jeffrey Streifling - NB Power Corporation - 1**

**Answer**

No

**Document Name**

**Comment**

We see that R10 requires a significant amount of work without providing additional system reliability.

Likes 0

Dislikes 0

**Response**

**Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza**

**Answer** No

**Document Name**

**Comment**

We see that R10 requires a significant amount of work without providing additional system reliability. We suggest that this requirement be removed.

Likes 0

Dislikes 0

**Response**

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer** No

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Gary Trezza - Long Island Power Authority - 1 - NPCC**

**Answer** No

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Robert Blackney - Edison International - Southern California Edison Company - 1****Answer** Yes**Document Name****Comment**

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

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

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response****Selene Willis - Edison International - Southern California Edison Company - 5****Answer** Yes**Document Name****Comment**

Please see comments from EEI

Likes 0

Dislikes 0

**Response****Richard Vendetti - NextEra Energy - 5****Answer** Yes

**Document Name**

**Comment**

NextEra supports EEI's comments

EEI does not object to the intent of Requirement 10, but we do not agree that entities should be made accountable for developing actions for categories P2 through P7 because no corrective actions are required under this Reliability Standard beyond categories P0 and P1. It is sufficient for the responsible entity to conduct the assessments but developing and retaining documentation for mitigations for categories P2 through P7 represents an unnecessary administrative burden and provides no reliability benefit.

R10. Each responsible entity, as identified in Requirement R1, shall evaluate **the Contingency Categories identified in Table 1.1** and document possible actions for **Categories P0 and P1. For Categories P2 through P7, document these categories were analyzed but it is not required to develop mitigations or retain records of those assessments. Assessments shall be as follows the following:** [Violation Risk Factor: Lower] [Time Horizon: Longterm Planning]

10.1. Benchmark planning cases where possible actions are designed to mitigate the consequences and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.

10.2. Sensitivity cases where possible actions are designed to mitigate failures to meet the performance requirements in Table 1 for category P0, P1, **P2, P4, and P7** Contingencies

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name** Black Hills Corporation - All Segments

**Answer**

Yes

**Document Name**

**Comment**

Black Hills Corporation is aligned with the comments made by EEI, which are in italics below.

*'EEI does not object to the intent of Requirement 10, but we do not agree that entities should be made accountable for developing actions for categories P2 through P7 because no corrective actions are required under this Reliability Standard beyond categories P0 and P1. It is sufficient for the responsible entity to conduct the assessments but developing and retaining documentation for mitigations for categories P2 through P7 represents an unnecessary administrative burden and provides no reliability benefit.*

*R10. Each responsible entity, as identified in Requirement R1, shall evaluate **the Contingency Categories identified in Table 1.1** and document possible actions for **Categories P0 and P1. For Categories P2 through P7, document these categories were analyzed but it is not required to develop mitigations or retain records of those assessments. Assessments shall be as follows** (remove: **the following**): [Violation Risk Factor: Lower] [Time Horizon: Longterm Planning]*

10.1. Benchmark planning cases where possible actions are designed to mitigate the consequences and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.

10.2. Sensitivity cases where possible actions are designed to mitigate failures to meet the performance requirements in Table 1 for category P0 and P1 Contingencies'

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

None

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**Answer**

Yes

**Document Name**

**Comment**

Exelon supports the comments submitted by the EEI for this question.

Likes 0

Dislikes 0

**Response**

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

**Answer**

Yes

**Document Name**

**Comment**

FirstEnergy supports EEI's comments which state:

EEI does not object to the intent of Requirement 10, but we do not agree that entities should be made accountable for developing actions for categories P2 through P7 because no corrective actions are required under this Reliability Standard beyond categories P0 and P1. It is sufficient for the responsible entity to conduct the assessments but developing and retaining documentation for mitigations for categories P2 through P7 represents an unnecessary administrative burden and provides no reliability benefit.

R10. Each responsible entity, as identified in Requirement R1, shall evaluate **the Contingency Categories identified in Table 1.1** and document possible actions for **Categories P0 and P1. For Categories P2 through P7, document these categories were analyzed but it is not required to develop mitigations or retain records of those assessments. Assessments shall be as follows the following:** [Violation Risk Factor: Lower] [Time Horizon: Long term Planning]

10.1. Benchmark planning cases where possible actions are designed to mitigate the consequences and adverse impacts when the study results indicate the System could result in instability, uncontrolled separation, or Cascading for the Table 1 P2, P4, and P7 Contingencies.

10.2. Sensitivity cases where possible actions are designed to mitigate failures to meet the performance requirements in Table 1 for category P0, P1, P2, P4, and P7 Contingencies

Likes 0

Dislikes 0

### Response

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

Answer

Yes

Document Name

Comment

Duke Energy agrees with and recommends implementation of EEI comments.

Likes 0

Dislikes 0

### Response

**Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF**

Answer

Yes

Document Name

Comment

Recommend updating table references to 1.2.

Likes 0

Dislikes 0

**Response**

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

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

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**



Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Ben Hammer - Western Area Power Administration - 1</b>	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO</b>	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Michele Shafer - New York State Electric &amp; Gas (NYSEG) - 6</b>	
Answer	Yes
Document Name	
Comment	

Likes 0

Dislikes 0

**Response**

**Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Tondalo - United Illuminating Co. - 1**

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Mike Magruder - Avista - Avista Corporation - 1</b>	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Rachel Coyne - Texas Reliability Entity, Inc. - 10</b>	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
<b>Robert Follini - Avista - Avista Corporation - 3</b>	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0

**Response**

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name** Dominion

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name** Dominion

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer** Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Thomas Foltz - AEP - 5</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	

7. The DT split out Table 1 into parts for better readability. Do you agree with the updated layout of Table 1? If you do not agree, please provide your recommendation and technical justification.

<b>Long Island Power Authority</b>	
Answer	No
Document Name	(if an attachment is provided by submitter)
<b>Comment</b>	
<p>a) The updated layout of Table 1 is helpful. Note however, that the text of applicable requirements which reference “Table 1” should be modified to reflect reference to either “Table 1.1”, “Table 1.2” or “Table 1.3”.</p> <p>b) We observe that Table 1.1 (Contingency Category) references a Footnote 2. Footnote 2 states applicable contingencies would be Facilities 200 kV and above.</p> <p>This is an important distinction, and we recommend that that this detail be included within the actual text of Requirement #7.</p> <p>c) Regarding Footnote 2b, the wording of the text is confusing.</p> <p>We would recommend to edit the wording of Footnote 2b to be more consistent with TPL-001-5.1, footnote 11, such as:</p> <p>“For P7 planning events that have at least one 200 kV voltage and above Facility that shares a common structure for at least 1 mile.”</p> <p>d) Additionally, Footnote 2b should be referenced within Table 1.1, next to the P7 category Event item 1 (similar to TPL-001-5.1 Table 1 for P7 events).</p> <p>e) Questions Regarding footnote 2:</p> <p>We interpret that footnote 2 is meant to be a filter (&gt;200kV) or screening for identifying events that would have a more severe impact on the BES. We also interpret that as part of the Extreme Temperature Assessment, an entity is responsible for monitoring their entire BES.</p> <p>Is this interpretation correct? Some elaboration within the Technical Rationale would be helpful.</p>	
Likes 0	# of other submitters who agree with these comments
Dislikes 0	# of other submitters who disagree with these comments

**Response**

(Drafting team's response to submitter's comments)

**Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza****Answer** No**Document Name****Comment**

Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response****Jeffrey Streifling - NB Power Corporation - 1****Answer** No**Document Name****Comment**

Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response****Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1****Answer** No**Document Name****Comment**

The new table approach was confusing. Matching the formatting to Table 1 in TPL-001-5.1 would make good sense here.

Likes 2

Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer** No

**Document Name**

**Comment**

List all Planning Events from Table 1 of TPL-001-5 but identify N/A events for TPL-008 rather than including incomplete table.

Likes 0

Dislikes 0

**Response**

**Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name WPP Consortium of Engineers**

**Answer** No

**Document Name**

**Comment**

Matching formatting to TPL 001-5 makes good sense here. Please see attached PNG for suggestion.

Likes 0

Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer** No

**Document Name** [Proposed Table 1.pdf](#)

**Comment**

CHPD does not agree with the updated layout of Table 1. CHPD recommends combining Table 1.1 and Table 1.2 to keep things more in the flavor of TPL-001-5 Table 1. See the "Proposed Table 1" attachment for the direction of what CHPD would recommend.

Additionally:

- 1) Footnote 1 in Table 1.3 (related to faults) does not appear to have an item referencing it in the current Table 1.1 or 1.2 and;
- 2) for the stability performance requirement, there is an additional line "The System shall remain stable" for the P0 event; this line does not appear to be coming from any



requirements and does not appear to be discussed elsewhere. It is recommended this line be removed and the P0 requirement for stability is the same as the P1-P7 language set "Instability, uncontrolled separation, or Cascading, as defined in Requirement R6, shall not occur."

Likes 1 Jennie Wike, N/A, Wike Jennie

Dislikes 0

### Response

#### Gary Trezza - Long Island Power Authority - 1 - NPCC

Answer No

Document Name

#### Comment

a) The updated layout of Table 1 is helpful. Note however, that the text of applicable requirements which reference "Table 1" should be modified to reflect reference to either "Table 1.1", "Table 1.2" or "Table 1.3".

b) We observe that Table 1.1 (Contingency Category) references a Footnote 2. Footnote 2 states applicable contingencies would be Facilities 200 kV and above.

This is an important distinction, and we recommend that that this detail be included within the actual text of Requirement #7.

c) Regarding Footnote 2b, the wording of the text is confusing.

We would recommend to edit the wording of Footnote 2b to be more consistent with TPL-001-5.1, footnote 11, such as:

"For P7 planning events that have at least one 200 kV voltage and above Facility that shares a common structure for at least 1 mile."

d) Additionally, Footnote 2b should be referenced within Table 1.1, next to the P7 category Event item 1 (similar to TPL-001-5.1 Table 1 for P7 events).

e) Questions Regarding footnote 2:

We interpret that footnote 2 is meant to be a filter (>200kV) or screening for identifying events that would have a more severe impact on the BES. We also interpret that as part of the Extreme Temperature Assessment, an entity is responsible for monitoring their entire BES.

Is this interpretation correct? Some elaboration within the Technical Rationale would be helpful.

Likes 0

Dislikes 0

### Response

#### Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name [WPP TPL-008 Table 1 Reference.pdf](#)

#### Comment

BPA agrees with WPP Consortium of Engineers comments to match the format to TPL-001-5. BPA has attached a copy of the table referenced by WPP.

Likes 0

Dislikes 0

**Response**

**Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5**

**Answer**

No

**Document Name**

**Comment**

Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response**

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer**

No

**Document Name**

**Comment**

Table 1 should be updated to remove P2, P4, and P7 Contingencies. Oncor also agrees that matching the formatting of Table 1 to TPL 001-5 is appropriate.

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**

**Comment**

The table should match formatting to TPL 001-5.

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

SMUD supports the comments submitted by the MRO NSRF.

Likes 0

Dislikes 0

**Response**

**Robert Follini - Avista - Avista Corporation - 3**

**Answer**

No

**Document Name**

[2023-07 comment7.png](#)

**Comment**

Avista offers the following suggested comment for consideration:

Given the intended scope of the project and the technical differences between TPL-001-5, we suggest maintaining consistency between these standards wherever possible to reduce confusion.

To reduce confusion and create consistency, match formatting to TPL-001-5 using suggested table formatting below.

Likes 0

Dislikes 0

**Response**

**Kevin Conway - Western Power Pool - 4**

**Answer**

No

**Document Name**

**Comment**

Matching formatting to TPL 001-5 makes good sense here.

Likes 0

Dislikes 0

**Response**

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer**

No

**Document Name**

**Comment**

Comments: Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.

Likes 0

Dislikes 0

**Response**

**Helen Lainis - Independent Electricity System Operator - 2**

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
We support NPCC TFCP comment	
Likes 0	
Dislikes 0	
<b>Response</b>	
Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF	
<b>Answer</b>	No
<b>Document Name</b>	<a href="#">TPL-008-1-proposed-Table-1.docx</a>
<b>Comment</b>	
We appreciate the work of the DT to increase readability of Table 1. We recommend changes in the attached document to improve upon the revisions.	
Likes 0	
Dislikes 0	
<b>Response</b>	
Mike Magruder - Avista - Avista Corporation - 1	
<b>Answer</b>	No
<b>Document Name</b>	<a href="#">Table Example.png</a>
<b>Comment</b>	
Given the intended scope of the project and the technical differences between TPL-001-5, we suggest maintaining consistency between these standards wherever possible to reduce confusion. To reduce confusion and create consistency, match formatting to TPL-001-5 using suggested table formatting attached.	
Likes 0	
Dislikes 0	
<b>Response</b>	
Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford	

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Performance criteria should be included in the table.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Constantin Chitescu - Ontario Power Generation Inc. - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
OPG supports NPCC Regional Standards Committee's comments: Consistent with comments above, Table 1 should be updated to remove P2, P4, and P7 Contingencies.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Please refer to Question 1 comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable</b>	
<b>Answer</b>	No

<b>Document Name</b>	
<b>Comment</b>	
By splitting out Table 1, the footnotes became Table 1.3. If the Table 1 split is selected for the final version of the standard, please move the footnotes after Table 1.1 because that is the only table with footnotes. Furthermore, check the footnote numbers. Footnote #1 is missing as a reference in the tables 1.1 and 1.2.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Usama Tahir - Seminole Electric Cooperative, Inc. - 3</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
references in requirements should reference table 1.1 or 1.2 instead of only table 1	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	

Footnote 1 is missing from table 1.1 & 1.2 and is defined in table 1.3.

Likes 0

Dislikes 0

**Response**

**Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO**

**Answer**

Yes

**Document Name**

**Comment**

Please refer to appropriate table number either Table 1.1 or Table 1.2 in the requirements.

Likes 0

Dislikes 0

**Response**

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

**Answer**

Yes

**Document Name**

**Comment**

Duke Energy agrees with and recommends implementation of EEI comments.

Likes 0

Dislikes 0

**Response**

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

**Answer**

Yes

**Document Name**

**Comment**

No additional comments.



Likes	0
Dislikes	0
<b>Response</b>	
<b>Anna Martinson - MRO - 1,2,3,4,5,6 - MRO, Group Name</b> MRO Group	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>MRO NSRF supports the format for Table 1; however, has the following questions and comments.</p> <p>Does Footnote 2 in Table 1.3 (200kV and greater) apply everywhere? The MRO NSRF requests the SDT clarify this in the standard.</p> <p>Steady state performance requirements have stability requirements for P2, P4, P7. Voltage collapse (cascading) can be identified, but not instability or uncontrolled separation. This would require a dynamic study.</p> <p>The MRO NSRF disagrees with the Table 1 reference to extreme conditions in a base model.</p> <p>Is there an opportunity for TPL-008-1, Table 1.1 to reference TPL-001-5.1 instead? Only TPL-008-1, Table 1.2 shows information specific and unique to TPL-008.</p>	
Likes	1
Dislikes	0
Scott Brame, N/A, Brame Scott	
<b>Response</b>	
<b>Daniel Gacek - Exelon - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>Exelon agrees with the updated layout of Table 1. However, in Table 1.2, we believe the sentence “The System shall remain stable.” should either be removed or added to P1 Stability Performance Requirements so both P0 and P1 are consistent. Additionally, we noticed that footnote 1 in Table 1.3 is not referenced in any of the tables.</p> <p>Additionally, Exelon supports the comments submitted by the EEI for this question.</p>	
Likes	0
Dislikes	0
<b>Response</b>	

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

**Answer** Yes

**Document Name**

**Comment**

None

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name Black Hills Corporation - All Segments**

**Answer** Yes

**Document Name**

**Comment**

Black Hills Corporation has no concerns with the updated layout of Table 1.

Likes 0

Dislikes 0

**Response**

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer** Yes

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Edison Electric Institute (EEI) and the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 7

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Footnote 1 does not appear to be linked to 'Fault Type' in Table 1.1. ATC supports the MRO NSRF comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Table 1.2 provides much better visualization and clarification of expectations. Please clarify the meaning of "The System shall remain stable", as well as the distinction between the use of "System" and "within an Interconnection".	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
EEI does not have any concerns with the revised labelling of the Tables but references to the tables should also be updated for clarity.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Kinte Whitehead - Exelon - 3</b>	

<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>Exelon agrees with the updated layout of Table 1. However, in Table 1.2, we believe the sentence “The System shall remain stable.” should either be removed or added to P1 Stability Performance Requirements so both P0 and P1 are consistent. Additionally, we noticed that footnote 1 in Table 1.3 is not referenced in any of the tables.</p> <p>Additionally, Exelon supports the comments submitted by the EEI for this question.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
<p>ISO-NE is satisfied with the format of Table 1 with the recommendation of removing P2 and greater contingencies as FERC Order 896 Paragraph 113 as part of the Commission Determination states that “<i>NERC may determine whether contingencies P1 through P7 should also apply to the new or modified Reliability Standard, or whether a new set of contingencies should be developed.</i>”.</p> <p>The FERC Order does not require the inclusion of P2, P4, or P7 contingency events. The P0 and P1 contingency events have a higher likelihood of occurrence and should remain within the Standard.</p> <p>ISO-NE recommends removing the P2, P4 and P7 events from the Table or eliminating the need to perform analysis on those events from the Requirements.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	

The SRC supports the Table 1 format. Is there an opportunity for TPL-008-1, Table 1.1 to reference TPL-001-5.1 instead? Only TPL-008-1, Table 1.2 shows information specific and unique to TPL-008.

Steady state performance requirements have stability requirements for P2, P4, P7. Voltage collapse (cascading) can be identified, but not instability or uncontrolled separation. This would require a dynamic study.

How does the SDT define how to determine stability performance requirements for P0 events? Currently it says that the system shall remain stable, and that instability, uncontrolled separation and cascading shall not occur, but how would those things occur for a P0 event?

Likes 0

Dislikes 0

### Response

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

Answer

Yes

Document Name

Comment

PGAE agrees with the updated layout of Table 1.

Likes 0

Dislikes 0

### Response

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

Answer

Yes

Document Name

Comment

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

Likes 0

Dislikes 0

### Response

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

Answer

Yes

<b>Document Name</b>	
<b>Comment</b>	
PJM supports the IRC SRC comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Thomas Foltz - AEP - 5</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	

Dislikes 0

**Response**

**Zahid Qayyum - New York Power Authority - 5**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

**Answer**

Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Michele Tondalo - United Illuminating Co. - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	



Dislikes 0

**Response**

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Teresa Krabe - Lower Colorado River Authority - 5**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

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

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Carver Powers - Utility Services, Inc. - 4**

**Answer** Yes

<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Greg Sorenson - Greg Sorenson On Behalf of: Tyler Schwendiman, ReliabilityFirst , 10; - Greg Sorenson</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Matt Lewis - Lower Colorado River Authority - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Donna Wood - Tri-State G and T Association, Inc. - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	

<b>Response</b>	
<b>Michele Shafer - New York State Electric &amp; Gas (NYSEG) - 6</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes	0
Dislikes	0

<b>Response</b>	
<b>Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes	0
Dislikes	0

<b>Response</b>	
<b>Ben Hammer - Western Area Power Administration - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
Likes	0
Dislikes	0

<b>Response</b>	
<b>Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	

**Comment**

Likes 0

Dislikes 0

**Response****Richard Vendetti - NextEra Energy - 5****Answer****Document Name****Comment**

NetEra supports EEI's comments

EEI does not have any concerns with the revised labelling of the Tables but references to the tables should also be updated for clarity.

Likes 0

Dislikes 0

**Response****Rachel Coyne - Texas Reliability Entity, Inc. - 10****Answer****Document Name****Comment**

Texas RE noticed multiple requirements in the standard refers to Table 1 and it is not clear which table is referenced (Table 1.1, Table 1.2 or Table 1.3)? Texas RE recommends the SDT consider making changes to reference the appropriate Table in each of the requirements. Texas RE also recommends that the column headers be carried over onto each page of the tables.

Likes 0

Dislikes 0

**Response****Selene Willis - Edison International - Southern California Edison Company - 5****Answer****Document Name****Comment**

Please see comments from EEI

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

N/C

Likes 0

Dislikes 0

**Response**

**Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO**

**Answer**

**Document Name**

**Comment**

N/A

Likes 0

Dislikes 0

**Response**

**Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin**

**Answer**

**Document Name**

**Comment**

ITC does not have concerns with the layout of Table 1.

Likes 0

Dislikes 0

**Response**

8. The DT believes proposed modifications in TPL-008-1 provide entities with flexibility to meet the reliability objectives in a cost-effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for improvement to enable more cost-effective approaches, please provide your recommendation and, if appropriate, technical or procedural justification.

**Long Island Power Authority**

Answer Yes

Document Name (if an attachment is provided by submitter)

**Comment**

Submitter's comments

Likes 0 # of other submitters who agree with these comments

Dislikes 0 # of other submitters who disagree with these comments

**Response**

(Drafting team's response to submitter's comments)

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

Answer No

Document Name

**Comment**

In general, the modifications in TPL-008-1 are a step in the right direction to provide entities with the flexibility to meet the reliability objectives cost-effectively. However, some concerns remain.

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

Answer No

Document Name

**Comment**

PJM supports the IRC SRC comments.

Likes 0

Dislikes 0

**Response**

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

**Answer** No

**Document Name**

**Comment**

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

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer** No

**Document Name**

**Comment**

Benchmarking extreme events should be considered a “sensitivity” case to normal Transmission Planning long-term cases. PGAE agrees that additional sensitivity cases to alter Gen/Load/Transfer may be prudent, however, a discrete Requirement for assessing sensitivity cases on top of the “sensitivity” cases of extreme weather conditions do not seem cost-effective.

Likes 0

Dislikes 0

**Response**

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2**

**Answer** No

**Document Name**

**Comment**

The SRC believes TPL-008 will require four additional cases be added to the case build process:

- 1. Summer benchmark planning case



- 2. Summer sensitivity case
- 3. Winter benchmark planning case
- 4. Winter sensitivity case

The **Eastern Interconnection Reliability Assessment Group (ERAG) Multi-Regional Modeling Working Group (MMWG)** is likely the group that will coordinate interregional case builds for entities in the Eastern Interconnection, so these cases will be IN ADDITION TO existing case requirements. Also, extreme temperature sets will require additional data collection from generator owners through MOD-032. Once the temperature sets are known, PCs will need to issue a data request to generators requesting they provide:

- 1) the unit's ability to operate at that extreme temperature, and
- 2) if able, the machine's capability.

Further, the interchange coordination through the ERAG MMWG process only considers transactions that have confirmed annual firm transmission service along the entire path from source to sink and have a firm energy contract for the resource. As these transactions do not currently include temperature, that adds an additional layer of complexity to the development of these cases.

These are all non-trivial workload additions. For the Eastern Interconnection, the current funding of ERAG may be insufficient to accommodate model building for all the scenarios listed above. Therefore, ERAG will likely need to increase its fees to accomplish this work. In addition, PCs will likely need to hire more people to perform the studies.

Finding an effective and efficient process to meet the requirements of Order 896 is paramount to the success of this standard. The drafting team must be cognizant of the implications of workload on industry to ensure there is value-added for investing in these additional resources.

Likes 0

Dislikes 0

**Response**

**Usama Tahir - Seminole Electric Cooperative, Inc. - 3**

**Answer**

No

**Document Name**

**Comment**

The TPL-001 studies are performed every year. The TPL-008 study will be performed at a minimum every 5 years. The DT should look at an approach that will reduce redundancy and overlap in testing between the TPL-008 and TPL-001 studies in order to save costs to customers.

Likes 0

Dislikes 0

**Response**

**Diana Aguas - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE**

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
There is an associated cost impact with increasing experienced Transmission Planning resources for the additional work this new standard will require.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Allie Gavin - Allie Gavin On Behalf of: Michael Moltane, International Transmission Company Holdings Corporation, 1; - Allie Gavin</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>ITC has concerns with the study scope for the sensitivity event. While ITC agrees that information can be gained from these studies, ITC believes that in most areas they will not result in any reliability benefit for the grid. ITC recommends a reduction in the required studies for the sensitivity event to only requiring steady state P0 and P1 studies. ITC also recommends that a CAP is also required when the system is unable to meet performance expectations. With these changes, less overall study work is required and additional reliability benefit will be obtained.</p> <p>ITC also requests clarification be added in terms of footnote 1. The footnote identifies normal fault clearing. Is this what is intended for the study? Should this footnote be modified to consider the actual expected performance of the system to faults based on the weather event being studied.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Ben Hammer - Western Area Power Administration - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
<p>WAPA believes the TPL-008 changes will require additional cases be added to the case build process. Also, extreme temperature sets will require additional data collection from generator owners through MOD-032. Once the temperature sets are known, PCs will need to issue a data request to generators to provide:</p> <ol style="list-style-type: none"> <li>1) the unit's ability to operate at that extreme temperature, and</li> <li>2) if able, the machine's capability.</li> </ol>	

Likes 0

Dislikes 0

**Response**

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer**

No

**Document Name**

**Comment**

ISO-NE does not agree with the requirements to perform Sensitivity Case studies in 4.2, 8.2 and 10.2. The results of Sensitivity Case studies are not required to be used per the current Standard language. This seems to be strictly an administrative action, which would burden the PCs with cost of time and resources to conduct the studies and does not provide reliability benefit for the BES.

R7 requires testing of all the events listed in Table 1, however R9 only requires the development of CAPs for the P0 and P1 contingencies. ISO-NE recommends modifying Table 1 to only include P0 and P1 events.

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer**

No

**Document Name**

**Comment**

See comments provided by NPCC Regional Standards Committee.

Likes 0

Dislikes 0

**Response**

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

No

**Document Name**

**Comment**

- The attempt for flexibility is appreciated but this standard falls significantly short of something that is clear and allows the PC/TP to appropriately plan to meet reliability goals. The inclusion of outside entity reviews of CAPs offers the reviewer flexibility as there are no bounds provided to them. The PC/TP, however is potentially subjected to subjective reviews that have no framework with which the PC/TP can effectively respond.

Likes 0

Dislikes 0

**Response**

**Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO**

**Answer**

No

**Document Name**

**Comment**

SPP has a concern about the cost-effectiveness for this project.

From our perspective, it's unclear on how the proposed modifications provides entities the flexibility to meet the reliability objectives in a cost effective manner. .

SPP recommends that the drafting team work with NERC staff revise the SAR development to include cost effective language to help industry get a better understanding of the cost effectiveness on implementing this standard.

Likes 0

Dislikes 0

**Response**

**Rebika Yitna - Rebika Yitna On Behalf of: David Weekley, MEAG Power, 3, 1; Roger Brand, MEAG Power, 3, 1; - Rebika Yitna**

**Answer**

No

**Document Name**

**Comment**

The language requiring entities to solicit feedback from regulatory authorities and governing bodies, in R9.1, may be removed from the standard to make it cost-effective. Requiring CAP and installation of equipment is likely not as cost effective as implementing operational procedures

Likes 0

Dislikes 0

**Response**

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

<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Tri-State supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Hillary Creurer - Allete - Minnesota Power, Inc. - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Mike Magruder - Avista - Avista Corporation - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Suggest clarification that operational procedures may constitute an appropriate CAP.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company</b>	
<b>Answer</b>	No
<b>Document Name</b>	

**Comment**

The requirement to solicit CAP feedback from regulatory authorities and governing bodies raises concern about how flexibility might otherwise be limited outside of the direct influence of the standard. It is Southern Company's recommendation that the language requiring entities to solicit feedback from regulatory authorities and governing bodies, in R9.1, should be removed from the standard.

Likes 0

Dislikes 0

**Response****Junji Yamaguchi - Hydro-Quebec (HQ) - 5****Answer**

No

**Document Name****Comment**

*see comments in other sections.*

Likes 0

Dislikes 0

**Response****Kevin Conway - Western Power Pool - 4****Answer**

No

**Document Name****Comment**

Requiring CAP and installation of equipment based off NERC TPL 008 is likely not as cost-effective as implementing operational procedures

Likes 0

Dislikes 0

**Response****Robert Follini - Avista - Avista Corporation - 3****Answer**

No

**Document Name****Comment**

Avista offers the following suggested comments for consideration:  
Avista suggests clarification that operational procedures may constitute an appropriate CAP.

Likes 0

Dislikes 0

### Response

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer**

No

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

### Response

**Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples**

**Answer**

No

**Document Name**

**Comment**

Evergy supports and incorporates by reference the comments of the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 8

Likes 0

Dislikes 0

### Response

**Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion**

**Answer**

No

**Document Name**

**Comment**

There are concerns over the CAP as well as ambiguity in R2.

Likes 0

Dislikes 0

**Response**

**Donald Lock - Talen Generation, LLC - 5**

**Answer**

No

**Document Name**

**Comment**

See our comments above

Likes 0

Dislikes 0

**Response**

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

**Answer**

No

**Document Name**

**Comment**

SMUD does not believe it is cost effective. The additional costs to maintain the necessary base cases and perform sensitivity studies of rare events that require no corrective actions is unnecessary and provides no reliability gains.

Likes 0

Dislikes 0

**Response**

**Robert Jones - Seattle City Light - 1,3,4,5,6**

**Answer**

No

**Document Name**

**Comment**



Requiring a CAP is likely not as cost-effective as implementing operational procedures.

Likes 0

Dislikes 0

### Response

**Broc Bruton - Broc Bruton On Behalf of: Byron Booker, Oncor Electric Delivery, 1; - Broc Bruton**

**Answer**

No

**Document Name**

### Comment

The timeline should not start until the ERO has developed and shared the benchmark event library. Because of the complexity of the required study, the proposed standard is written to employ a five-year process. Final implementation of the proposed standard should be five years after the ERO has developed the benchmark event library.

Likes 0

Dislikes 0

### Response

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

**Answer**

No

**Document Name**

### Comment

The MRO NSRF believes TPL-008 will require eight additional cases be added to the case build process:

1. Summer benchmark power flow
2. Summer sensitivity power flow
3. Summer benchmark dynamics
4. Summer sensitivity dynamics
5. Winter benchmark power flow
6. Winter sensitivity power flow
7. Winter benchmark dynamics
8. Winter sensitivity dynamics

MMWG is likely going to be the group to coordinate interregional case builds, so these cases will be IN ADDITION TO existing case requirements. Also, extreme temperature sets will require additional data collection from generator owners through MOD-032. Once the temperature sets are known, PCs will need to issue a data request to generators to provide:

- 1) the unit's ability to operate at that extreme temperature, and
- 2) if able, the machine's capability.

These are all non-trivial workload additions. Current funding of ERAG may be insufficient to accommodate model building for all the scenarios listed above. Therefore, ERAG will likely need to increase its fees to accomplish this work. In addition, PCs will likely need to hire more people to perform the studies.

Likes 1	Scott Brame, N/A, Brame Scott
Dislikes 0	

**Response**

**Zahid Qayyum - New York Power Authority - 5**

Answer	No
Document Name	

**Comment**

&bull; NYPA will need more information to adequately assess the cost effectiveness of the proposed approach.

Likes 0	
Dislikes 0	

**Response**

**Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC**

Answer	No
Document Name	

**Comment**

BPA does not believe it is cost effective. It is cost prohibitive to make capital investments for multiple contingency events during extreme temperatures. BPA believes it is more appropriate to deal with such scenarios in operating horizon through operating plans

Likes 0	
Dislikes 0	

**Response**

**Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO**

**Answer** No

**Document Name**

**Comment**

We believe performing sensitivity studies is unnecessary for the benchmarked extreme temperature scenarios. It is purely administrative and adds no value to the reliability since nothing expected to do with the the study results other than documenting the possible actions.

Likes 0

Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer** No

**Document Name**

**Comment**

CHPD agrees with WPP's comment.

Likes 1

Jennie Wike, N/A, Wike Jennie

Dislikes 0

**Response**

**Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC**

**Answer** No

**Document Name**

**Comment**

At this time, due to the number of requirements that we do not agree with, we are unable to fully agree that this standard provides the necessary flexibility to meet the reliability objectives in a cost-effective manner.

Likes 0

Dislikes 0

**Response**

<b>Chelsea Loomis - Western Power Pool - NA - Not Applicable - WECC, Group Name WPP Consortium of Engineers</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Requiring CAP and installation of equipment based off NERC TPL 008 is likely not as cost-effective as implementing operational procedures	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Alyssia Rhoads - Public Utility District No. 1 of Snohomish County - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Requiring CAP and installation of equipment is likely not as cost effective as implementing operational procedures.	
Likes 2	Snohomish County PUD No. 1, 3, Chaney Holly; Jennie Wike, N/A, Wike Jennie
Dislikes 0	
<b>Response</b>	
<b>Jeffrey Streifling - NB Power Corporation - 1</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
See other answers.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza</b>	
<b>Answer</b>	No

<b>Document Name</b>	
<b>Comment</b>	
see comments in other sections	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC RSC</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5</b>	
<b>Answer</b>	No
<b>Document Name</b>	
<b>Comment</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Daniela Atanasovski - APS - Arizona Public Service Co. - 1</b>	
<b>Answer</b>	Yes
<b>Document Name</b>	
<b>Comment</b>	
None	

Likes 0

Dislikes 0

**Response**

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

**Answer** Yes

**Document Name**

**Comment**

FE has no comment toward the cost-effectiveness of this proposal

Likes 0

Dislikes 0

**Response**

**Apollonia Gonzales - PNM Resources - Public Service Company of New Mexico - 1,3,5 - WECC**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Kinte Whitehead - Exelon - 3**

**Answer** Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Shafer - New York State Electric & Gas (NYSEG) - 6****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Matt Lewis - Lower Colorado River Authority - 1****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Carver Powers - Utility Services, Inc. - 4****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Teresa Krabe - Lower Colorado River Authority - 5****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response**

**Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Michele Tondalo - United Illuminating Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**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****Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response****Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF****Answer** Yes**Document Name****Comment**

Likes 0

Dislikes 0

**Response**

**Jessica Cordero - Unisource - Tucson Electric Power Co. - 1**

**Answer**

Yes

**Document Name**

**Comment**

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

N/C

Likes 0

Dislikes 0

**Response**

**Selene Willis - Edison International - Southern California Edison Company - 5**

**Answer**

**Document Name**

**Comment**

Please see comments from EEI

Likes 0

Dislikes 0

**Response**

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer**

**Document Name**

**Comment**

Ameren has no comments on the cost effectiveness of the project.

Likes 0

Dislikes 0

**Response**

**Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF**

**Answer**

**Document Name**

**Comment**

Without including the framework and criteria for benchmark events in the standard, it is impossible to assess the cost-effectiveness or the reliability objectives. While the DT does not need to include detailed weather data in the standard, it must include parameters such as: the duration of historical meteorological data to use, the likelihood/probability of the events to be studied, the granularity of data required, etc.

Likes 0

Dislikes 0

**Response**

**Rachel Schuldt - Black Hills Corporation - 6, Group Name Black Hills Corporation - All Segments**

**Answer**

**Document Name**

**Comment**

Black Hills Corporation will not comment on cost effectiveness.

Likes 0

Dislikes 0

**Response**

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

**Answer**

**Document Name**

**Comment**

Duke Energy does not comment on costs.

Likes 0

Dislikes 0

**Response**

9. Provide any additional comments for the standard drafting team to consider, including the provided technical rationale document, if desired.

**Long Island Power Authority**

Answer

Document Name

Comment

Comment on the Implementation Plan:

From the Implementation Plan (IP), the graphic on page 3 of the IP does not match the text on page 2. In the graphic, it appears that the timeline is based on governmental authority approval, and not on when TPL-008-1 goes into effect.

Page 2 of the IP states:

Phased-In Compliance Dates

Compliance Date for TPL-008-1 Requirement R1

Entities shall be required to comply with Requirement R1 upon the effective date of Reliability Standard TPL-008-1.

Compliance Date for TPL-008-1 Requirements R2, R3, R4, R5, R6

Entities shall not be required to comply with Requirements R2, R3, R4, R5, and R6 until thirty-six (36) months after the effective date of Reliability Standard TPL-008-1.

Compliance Date for TPL-008-1 Requirements R7, R8, R9, R10, R11

Entities shall not be required to comply with Requirements R7, R8, R9, R10, R11 until sixty (60) months after the effective date of Reliability Standard TPL-008-1.

To match the text on page 2, our interpretation is that the graphic on page 3 should be modified as shown below.



### Comment on Requirement #11

Requirement #11 states:

“Each responsible entity, as identified in Requirement R1, shall provide its Extreme Temperature Assessment results within 60 calendar days of a request to any functional entity that has a reliability related need and submits a written request for the information.”

This could be interpreted in different ways.

We would recommend the SDT consider modifying the wording (see TPL-001-5.1 Req #8 for reference) and timeframe to be more consistent with TPL-001-5.1 Req #, 8 as follows:

“Each responsible entity, as identified in Requirement R1, shall provide its latest completed Extreme Temperature Assessment results within 90 calendar days of a request to any functional entity that has a reliability related need and submits a written request for the information.”

Likes 0

# of other submitters who agree with these comments

Dislikes 0

# of other submitters who disagree with these comments

**Response**

(Drafting team's response to submitter's comments)

**Chantal Mazza - Chantal Mazza On Behalf of: Nicolas Turcotte, Hydro-Quebec (HQ), 1, 5; - Chantal Mazza****Answer****Document Name****Comment**

1. Facility Owners (FOs) have an important role in developing and implement corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

2. In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

**Response****Jeffrey Streifling - NB Power Corporation - 1****Answer****Document Name****Comment**

Facility Owners (FOs) have an important role in developing and implement corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

**Response****Eric Sutlief - CMS Energy - Consumers Energy Company - 3,4,5 - RF****Answer****Document Name****Comment**

To remain consistent with TPL-001 and the definition of the Extreme Temperature Assessment, “Bulk Power System” should be refined to “Bulk Electric System” in the purpose statement of this standard.

Likes 0

Dislikes 0

**Response**

**Srikanth Chennupati - Entergy - Entergy Services, Inc. - 1,3,5,6 - SERC**

**Answer**

**Document Name**

**Comment**

The implementation plan should allow additional time beyond the five-year assessment schedule for the first assessment to be completed. This will allow time for benchmark temperature events to be identified and developed by the ERO & industry. This will also provide leeway for any issues that may arise in implementing this large-scale and complex model building and study process that will require new collaboration processes between Planning Coordinators.

Likes 0

Dislikes 0

**Response**

**Jennifer Weber - Tennessee Valley Authority - 1,3,5,6 - SERC**

**Answer**

**Document Name**

**Comment**

(R11) We do not agree with R11. Although the comment document does not appear to request input for R11, we recommend that the “results” only include the assessments as contemplated in R9, for which Corrective Action Plans will be developed. Since the “possible actions” in R10 are suggested to be useful for reference only, per the Technical Rationale document, and are not required to have Corrective Action Plans, we believe sharing this reference information would be an inefficient and ineffective task, and likely to cause more confusion than clarity.

Likes 0

Dislikes 0

**Response**

**Lidija Efremova - Lidija Efremova On Behalf of: Emma Halilovic, Hydro One Networks, Inc., 1; - Lidija Efremova**

**Answer**



**Document Name****Comment**

Comments:

1. The document does not acknowledge the role of the facility owner explicitly. Facility Owners (FO) have an important role in developing and implement corrective action plans. PC cannot and should NOT come up with requirements without involving the FO. As an example, the IESO should not be allowed to come up for requirements for extreme weather without full alignment with HONI, that needs to spend the money and provision for emergency response and replacement for every event. In some jurisdictions, the FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.
2. NERC and/or FERC should only direct coordination and alignment and not specific actions. The local PC/TO/BA can determine what the local needs and responses should be based on a consistent framework for the control area.
3. In Ontario, we have updated and derated equipment ratings by taking extreme temperatures into account; for example, for transmission line we have gone from 30C to 35C based on regional temperatures. In addition, we also consider extreme weather correction factors both for winter and summer. For this exercise/standard, would facility owner need to establish further extreme ratings such as 40C or 45C? This will be unmanageable and provide skewed results and double counting.
4. Are the benchmark events considering regional-specific extremes? We are interested in seeing how Canadian, provincial attributes are considered within the ERO benchmark library. It is extremely important that Canadian benchmarks are adequately reflected and/or provide flexibility for Canadian to make changes to the ERO benchmark library.
5. We appreciate and agree with the draft standard for assessment of extreme weather conditions using normal contingencies. However, we would not support an assessment with required CAP using any type of extreme contingencies.
6. The benchmarking and baselining of the events that one should consider is a necessary step as some jurisdictions/utilities may not want to take any risk and ask for a lot of funding and others may be more balanced and ask for less funding. Assessing to a reasonable risk level needs to be consistent.

Likes 0

Dislikes 0

**Response**

**Joyce Gundry - Public Utility District No. 1 of Chelan County - 3, Group Name CHPD**

**Answer****Document Name****Comment**

Industry have not been provided NERC's proposed set of benchmark events so that we may provide meaningful feedback during this standard development process. We continue to have concerns about the benchmark library and the process to include and update events.

On a positive note, while we have not seen such materials included in this standard development process, CHPD appreciates members of the SDT have reached out to our region regarding the benchmark library, and we have been able to provide dialogue to the SDT via this outreach. This outreach by the SDT members is appreciated and commendable.

Regarding outages – we see the SDT’s comment and response to “All lines in Service”, but we do not see clarification in the standard itself along these lines. CHPD requests clarity from the SDT on whether this is the expectation (in which case this should be specifically called out in requirements) or if this is more a N-0 all lines in service instance, in which case the baseline scenario would not have outages.

The approach in TPL-001-5 R2.1.4. regarding planned outages has precedence in the transmission planning realm.

TPL-001-5.1 R2.1.4 Language:

*When known outage(s) of generation or Transmission Facility(ies) are planned in the Near-Term Planning Horizon, the impact of selected known outages on System performance shall be assessed. These known outage(s) shall be selected for assessment consistent with a documented outage coordination procedure or technical rationale by the Planning Coordinator or Transmission Planner. Known outage(s) shall not be excluded solely based upon outage duration. The assessment shall be performed for the P0 and P1 categories identified in Table 1 with the System peak or Off-Peak conditions that the System is expected to experience when the known outage(s) are planned. This assessment shall include, at a minimum known outages expected to produce more severe System impacts on the Planning Coordinator or Transmission Planner’s portion of the BES. Past or current studies may support the selection of known outage(s), if the study(s) has comparable post-Contingency System conditions and TPL-001-5.1 — Transmission System Planning Performance Requirements Page 3 of 32 configuration such as those following P3 or P6 category events in Table 1.*

If planned outages instead of weather-related historic outages are the intent, a proposed language selection for TPL-008, based on TPL-001-5.1 R2.1.4 could be:

*When known outage(s) of generation or Transmission Facility(ies) are planned in the Long-Term Transmission Planning Horizon, the impact of selected known outages on System performance shall be assessed. These known outage(s) shall be selected for assessment consistent with a documented outage coordination procedure or technical rationale by the Planning Coordinator or Transmission Planner. Known outage(s) shall not be excluded solely based upon outage duration. The assessment shall be performed for the P0 and P1 categories identified in Table 1 for under Benchmark Planning Case Assessment conditions that the System is expected to experience when the known outage(s) are planned. This assessment shall include, at a minimum known outages expected to produce more severe System impacts on the Planning Coordinator or Transmission Planner’s portion of the BES.*

CHPD would also like to note, that we support and agree with WPP’s submitted comments.

Likes	1	Jennie Wike, N/A, Wike Jennie
Dislikes	0	

**Response**

**Gary Trezza - Long Island Power Authority - 1 - NPCC**

**Answer**

**Document Name** [2023-07\\_Unofficial\\_Comment\\_Form Draft 2\\_071624\\_LIPA comments\\_08-15-2024 \(002\).pdf](#)

**Comment**

***Comment on the Implementation Plan:***

From the Implementation Plan (IP), the graphic on page 3 of the IP does not match the text on page 2.

In the graphic, it appears that the timeline is based on governmental authority approval, and not on when TPL-008-1 goes into effect.

Page 2 of the IP states:

### Phased-In Compliance Dates

#### Compliance Date for TPL-008-1 Requirement R1

Entities shall be required to comply with Requirement R1 upon the effective date of Reliability Standard TPL-008-1.

#### Compliance Date for TPL-008-1 Requirements R2, R3, R4, R5, R6

Entities shall not be required to comply with Requirements R2, R3, R4, R5, and R6 **until thirty-six (36) months after the effective date of Reliability Standard TPL-008-1.**

#### Compliance Date for TPL-008-1 Requirements R7, R8, R9, R10, R11

Entities shall not be required to comply with Requirements R7, R8, R9, R10, R11 until **sixty (60) months after the effective date of Reliability Standard TPL-008-1.**

**To match the text on page 2, our interpretation is that the graphic on page 3 should be MODIFIED as shown on on page 7 of 7 of the UPLOADED / ATTACHED file named "2023-07\_Unofficial\_Comment\_Form Draft 2\_071624\_LIPA comments\_08-15-2024 (002).pdf".**

### Comment on Requirement #11

Requirement #11 states:

"Each responsible entity, as identified in Requirement R1, shall provide its Extreme Temperature Assessment results within 60 calendar days of a request to any functional entity that has a reliability related need and submits a written request for the information."

This could be interpreted in different ways.

We would recommend the SDT consider modifying the wording (see TPL-001-5.1 Req #8 for reference) and timeframe to be more consistent with TPL-001-5.1 Req #, 8 as follows:

*"Each responsible entity, as identified in Requirement R1, shall provide its **latest completed** Extreme Temperature Assessment results within **90** calendar days of a request to any functional entity that has a reliability related need and submits a written request for the information."*

Likes 0

Dislikes 0

### Response

Duane Franke - Manitoba Hydro - 1,3,5,6 - MRO

Answer

Document Name

Comment

Please correct the wording "min" to "max" in the table heading on page-4 of the "Extreme Heat and Cold Weather Benchmark Events Example" document.

Likes 0

Dislikes 0

**Response**

**Ronald Hoover - Bonneville Power Administration - 1,3,5,6 - WECC**

**Answer**

**Document Name**

**Comment**

BPA recommends adding "or to its designee" to all references of "ERO" in R2. BPA believes this will add flexibility to the requirement for scenarios such as large geographical footprints, where benchmark temperatures could be extremely variable"

BPA currently has the following concerns:

R2 - Uncertainty about the events in the NERC library and the process.

R3/R4 - Need a clearly defined scope regarding coordination with the other entities.

R9 Corrective Action Plans, use of Operating Plans could be a cost effective alternative to a CAP and result in acceptable system performance.

Likes 0

Dislikes 0

**Response**

**Fon Hiew - NB Power Corporation - New Brunswick Power Transmission Corporation - 5**

**Answer**

**Document Name**

**Comment**

Facility Owners (FOs) have an important role in developing and implement corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

**Response**

**Andy Thomas - Duke Energy - 1,3,5,6 - SERC,RF**

**Answer**

**Document Name**

**Comment**

Modify R11 to match TPL-001-5.1 R8 except change 90 calendar-days to “180 calendar-days” in R8.1 due to the five-year time period between studies.

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

None.

Likes 0

Dislikes 0

**Response**

**Zahid Qayyum - New York Power Authority - 5**

**Answer**

**Document Name**

**Comment**

&bull; It’s unclear whether the responsible entity will do an annual reconciliation of cases using actual recorded data? NYPA appreciates if the SDT can provide clarity on this

&bull; Table 1 in the requirement language should be replaced with Table 1.1, table 1.2 appropriately.

Likes 0

Dislikes 0

## Response

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

Answer

Document Name

Comment

Footnote 1 from Table 1.3 is not reflected in Table 1.1 (it should be up by 'Fault Type' column header).

**ETA Definition and Purpose:** MRO NSRF notes that the definition for Extreme Temperature Assessment uses BES and the purpose of TPL-001-8 uses BPS. The two should align and MRO NSRF supports the use of “BES” to align with existing standard, TPL-001-5.1. Alternatively, the SDT needs to justify the reason for the difference.

### **DRAFT ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance**

The process document says, “Refer to the NERC **Glossary of Terms** for the below capitalized terms used in this process.” While NERC may have defined these terms, those highlighted in yellow (below) are **not** in the NERC Glossary of Terms.

• Affected Regional Entity (ARE)

• Compliance Enforcement Authority (CEA)

• Coordinated Oversight

• Extreme Temperature Assessment (ETA) – New! In TPL-008-1 standard

• Lead Regional Entity (LRE)

• Multi-Region Registered Entity (MRRE)

### **Absence of the Benchmark Library**

The MRO NSRF has concerns with finalizing the TPL-008 standard with the benchmark event library unseen as this may have significant impact as to how the standard should be structured and how it is interpreted and applied.

### **Relevance to Canada**

The MRO NSRF requests that Canadian provinces be considered within the ERO benchmark library.

MRO NSRF requests clarification regarding the following. Is an entity required to use the same benchmark event across its entire footprint or can an entity use different events for different areas of its footprint? For example, if an MRO NSRF member selects a benchmark event that has high impacts concentrated in its Southern Region for its first iteration, could the next 5-year iteration use a benchmark event that has high impacts concentrated in its Central Region?

Depending on how far into the future these requests are made, there may be great uncertainty for the resources. Many states have firm policies driving unit deactivations, but replacement resource location and size is not going to be able to be known. This may lead to these future cases being unsolvable without large reactive or replacement power assumptions.

Likes 1 Scott Brame, N/A, Brame Scott

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

Facility Owners (FOs) have an important role in developing and implementing corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

In certain jurisdictions, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

**Response**

**Daniel Gacek - Exelon - 1**

**Answer**

**Document Name**

**Comment**

Overall, Exelon would like to see additional details of events in the benchmark library included in the associated standard requirements. Specifically, seeking clarity on exactly what data will be included in selected events as well as how event selection will inform coordination.

Likes 0

Dislikes 0

**Response**

**Daniela Atanasovski - APS - Arizona Public Service Co. - 1**

<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
None	
Likes 0	
Dislikes 0	
<b>Response</b>	
<p><b>Tim Kelley - Tim Kelley On Behalf of: Charles Norton, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Fong Mua, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Looney, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Ryder Couch, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; Wei Shao, Sacramento Municipal Utility District, 3, 6, 4, 1, 5; - Tim Kelley, Group Name SMUD and BANC</b></p>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
SMUD supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<p><b>Barbara Marion - Dominion - Dominion Resources, Inc. - 5, Group Name Dominion</b></p>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
There are concerns over the CAP as well as ambiguity in R2.	
Likes 0	
Dislikes 0	
<b>Response</b>	
<p><b>Michael Jones - National Grid USA - 1</b></p>	



<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
<p>National Grid supports EEI's comments. In addition, please thoroughly review TPL-008-1 Table 1 to ensure consistency with TPL-001-5.1 Table 1, where applicable, to ensure nothing has been unintentionally missed. For example and consideration:</p> <p>Table 1 - General comments:</p> <p>Footnote 1 (in TPL-001) in header of Event column is 'missing,' i.e., not included in TPL-008.</p> <p>Footnote 1 (in TPL-008), which is Footnote 2 (in TPL-001), is missing(?) from the header of Table 1</p> <p>Footnote 2 (in TPL-001) in header of BES Level column is 'missing,' i.e., not included in TPL-008, while Facility voltage level of Contingency is listed in new Footnote 2 (in TPL-008) it is still 'inconsistent.'</p> <p>Footnote 5 (in TPL-001) related to transformers is 'missing,' i.e., not included in TPL-008.</p> <p>Footnote 9 (in TPL-001) for interruption of firm transmission is 'missing,' i.e., not included in TPL-008.</p> <p>Footnote 11 (in TPL-001) related to DCTs is 'missing,' i.e., not included in TPL-008.</p> <p>Footnote 12 (in TPL-001) on non-consequential load loss is 'missing,' i.e., not included in TPL-008.</p> <p>Table 1.2 – Performance Requirements</p> <p>P0: "The System shall remain stable" is only listed for P0– Suggest removing since not 'defined.' Similar to EEI comment, but recommending deleting since reference to 'remain stable' is unclear.</p> <p>Allowance for non-Consequential Load Loss as an interim solution seems more stringent than TPL-001.</p> <p>Requirement to "Simulate the removal of all elements that Protection Systems and other controls are expected to automatically disconnect for each event" (TPL-001) has no matching counterpart in Table 1.</p> <p>Event to "Simulate Normal Clearing unless otherwise specified" (TPL-001) has no counterpart in Table 1.</p> <p>Minor issues: Table 1.2 (in TPL-008) is structured differently than in TPL-001 and placed after the 'main' Table 1., The ordering of Non-Consequential Load Loss and Interruption of Firm Transmission reversed (vs. TPL-001).</p>	
Likes	0
Dislikes	0
<b>Response</b>	
<p><b>Hayden Maples - Hayden Maples On Behalf of: Jeremy Harris, Evergy, 3, 5, 1, 6; Kevin Frick, Evergy, 3, 5, 1, 6; Marcus Moor, Evergy, 3, 5, 1, 6; Tiffany Lake, Evergy, 3, 5, 1, 6; - Hayden Maples</b></p>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	

Evergy supports and incorporates by reference the comments of the Midwest Reliability Organization's NERC Standards Review Forum (MRO NSRF) on question 9

Likes 0

Dislikes 0

**Response**

**Amy Wilke - American Transmission Company, LLC - 1**

**Answer**

**Document Name**

**Comment**

ATC supports the MRO NSRF comments.

Likes 0

Dislikes 0

**Response**

**Junji Yamaguchi - Hydro-Quebec (HQ) - 5**

**Answer**

**Document Name**

**Comment**

1. Facility Owners (FOs) have an important role in developing and implement corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

2. In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

**Response**

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

<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
<ul style="list-style-type: none"> <li>• Key responsibilities and deadline details from the “ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance” should be included in the TPL-008-1 reliability standard to define the ERO’s responsibilities as they pertain to the development and maintenance of the Weather Event Library. At minimum, the suggested language and footnote proposed by EEI in response to survey question 2 should be included.</li> <li>• Page 3, A.3, the Introduction Purpose should change “Bulk Power System (BPS)” to “Bulk Electric System (BES)” for consistency.</li> <li>• Reference to the benchmark events as either ‘temperature benchmark events’ or ‘benchmark temperature events’ should be made consistent throughout the document. Slight preference for ‘temperature benchmark events’.</li> </ul>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Helen Lainis - Independent Electricity System Operator - 2</b>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
<b>We support NPCC TFCP comment regarding whether facility owners will be required to establish extreme cold or warm temperature ratings for this standard?</b>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Devin Shines - PPL - Louisville Gas and Electric Co. - 1,3,5,6 - SERC,RF</b>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
The DT should consider whether the use of “The responsible entity” is appropriate instead of “Each responsible entity”. Use of “each” seems to read that the PC and all TPs must each do the requirements, whereas the intention is that the PC and TPs decide who is going to be <i>the</i> responsible entity for each step.	
Likes 0	

Dislikes 0

## Response

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

**Answer**

**Document Name**

**Comment**

Texas RE has identified two issues with the proposed Implementation Plan. First, the Implementation Plan timeline and narrative do not consistently use the same start date for all applicable compliance dates. In particular, the compliance dates for Requirement R1 appear tied to the Standard Effective Date, but the compliance dates in the proposed timeline appear tied to the date of the government order. Second, Texas RE notes that no initial performance date is specified for Requirement R8.

### Phased Implementation Dates

Texas RE requests again that the implementation plan descriptions and diagram be aligned to a consistent start date for all applicable requirements. Texas RE notes that in the narrative description, compliance activities appear to be linked to the Standard Effective Date, which is 12 months following the first calendar quarter after the order of the applicable governing authority approving the standard. For instance, the proposed Implementation Plan provides that entities shall be required to comply with Requirement R1 upon the effective date of the Reliability Standard TPL-008-1. Similarly, compliance dates for Requirements R2 through R6 are occur 36 months after the effective date of standard.

The table then provides that the enforcement date for Requirement R1 is 12 months following the applicable governing authority's order – that is, the Effective Date of the Standard. In contrast, however, the implementation timeline then appears to link the various staggered implementation dates for R2 through R6 and R7 through R11 to the date of the order approving the standard, not the Effective Date of the Standard itself. That is, entities in effect have only 24 months from the Effective Date of the Standard to comply with R2 though R6 under the timeline, not 36 months from the Effective Date of Reliability Standard TPL-008-1 as set forth in the Implementation Plan narrative.

Texas RE recommends that the SDT either revise the timeline chart to consistently link all required compliance dates to the Effective Date of the Standard or, alternatively, revise the narrative description to reference the date of the order approving the standard for all required compliance dates to avoid confusion.

The following table summarizes the Implementation Plan and chart as currently drafted:

### Phased In Compliance Dates

Effective Date of the Standard = The first day of the first calendar quarter that is twelve (12) months after the effective date of the applicable governing authority's order.

R1 = Effective Date of TPL-008-1 (12 months after the government order)

R2, R3, R4, R5, R6 = Effective Date + 36 months

R7, R8, R9, R10, R11 = Effective Date + 60 months

The diagram in the implementation plan shows the following:

R1 = Effective Date of TPL-008-1 (12 months after the government order date)

R2, R3, R4, R5, R6 = Effective Date for TPL-008-1 + 24 months (36 months after the government order date)

R7, R8, R9, R10, R11 = Effective Date for TPL-008-1 + 48 months (60 months after the government order date)

Initial Performance Date

Additionally, Requirement R8 states that the Extreme Temperature Assessment shall be done once every five calendar years. Since there is no initial performance date specified, Texas RE understands that the entity would not need to perform its initial Extreme Temperature Assessment until 5 years after the effective date of Requirement R8 (that is, 10 years after the Effective Date of Requirement R8). Texas RE generally recommends establishing an explicit initial performance date upon the effective date of the requirement to avoid delaying compliance obligations an additional five years.

Likes 0

Dislikes 0

### Response

**Israel Perez - Israel Perez On Behalf of: Laura Somak, Salt River Project, 3, 6, 5, 1; Mathew Weber, Salt River Project, 3, 6, 5, 1; Thomas Johnson, Salt River Project, 3, 6, 5, 1; Timothy Singh, Salt River Project, 3, 6, 5, 1; - Israel Perez**

**Answer**

**Document Name**

**Comment**

The standard as written is inconsistent in all references to the attached tables. "Table 1" should be removed from the requirement language and table 1.1 and 1.2 used appropriately.

Likes 0

Dislikes 0

### Response

**Danielle Moskop - Danielle Moskop On Behalf of: David Jendras Sr, Ameren - Ameren Services, 3, 6, 1; - Danielle Moskop**

**Answer**

**Document Name**

**Comment**

Ameren supports EEI's comments on this project.

Likes 0

Dislikes 0

**Response**

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

**Answer****Document Name****Comment**

Purpose statement includes use of BPS but new definition is limited to BES. Was that intentional? R11-Who determines “reliability related need”?

There are no defined actions to address deficiencies recognized by an Extreme Temperature Assessment. Only CAPs are called out, is that the expectation?

Extreme weather may not cover all of a responsible entity’s area. Is it the DT’s assumption that it would and therefore no partial footprint Extreme Temperature Assessments would meet the Requirements? Or are partial footprint Extreme Temperature Assessments allowable? Based on the additional materials provided it appears that boundaries have been set.

Table Issues- Where is Footnote 1 within the Table used?

Steady State P1- Capitalize “Facility ratings”

Requirement R5 Severe VSL should say “completing” not “performing”.

Requirement R7 VSLs need rewritten to match language of the Standard unless language gets changed back to “Contingencies”.

Requirement R8 VSLs indicate completion of an Extreme Temperature Assessment but do not reflect completion of “steady state and transient stability analyses”. If one of those is not done, effectively an Extreme Temperature Assessment has not been performed. Is that correct?

Benchmark Weather Event Development and Maintenance Document

There are several terms noted as being in the Glossary of Terms but are not used in the process nor are they in the Glossary. Many deal with the Coordinated Oversight Program that has its own set of definitions. The sample benchmark event materials for the Weather Event Library provide some clarity on what materials will be included. Still looks like additional information may be needed for registered entities approach in using the events in the Extreme Temperature Assessments.

Likes 0

Dislikes 0

**Response**

**Teresa Krabe - Lower Colorado River Authority - 5**

**Answer**

**Document Name**

**Comment**

The Technical Rationale for R7 mentions that the benchmark planning cases will factor generation and transmission outages. LCRA does not believe its clear on how the benchmark cases will account for generation and transmission outages prior to running the specified contingencies and how outages factor into CAP development.

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

Minnesota Power supports MRO's NERC Standards Review Forum's (NSRF) comments.

Likes 0

Dislikes 0

**Response**

**Matt Lewis - Lower Colorado River Authority - 1**

**Answer**

**Document Name**

**Comment**

The Technical Rationale for R7 mentions that the benchmark planning cases will factor generation and transmission outages. LCRA TSC does not believe its clear on how the benchmark cases will account for generation and transmission outages prior to running the specified contingencies and how outages factor into CAP development.

Likes 0

Dislikes 0

<b>Response</b>	
<b>Donna Wood - Tri-State G and T Association, Inc. - 1</b>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
<p>Tri-State supports the comments submitted by the MRO NSRF referencing the absence of the Benchmark Library.</p> <p>"MRO NSRF has concerns with finalizing the TPL-008 standard with the benchmark event library unseen as this may have significant impact as to how the standard should be structured and how it is interpreted and applied."</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Romel Aquino - Edison International - Southern California Edison Company - 3</b>	
<b>Answer</b>	
<b>Document Name</b>	<a href="#">Near Final EEI Comments P2023-07_ TPL-008 Draft 2 _ Rev. 0g 8_21_2024.docx</a>
<b>Comment</b>	
<p>See comments submitted by the Edison Electric Institute, attached.</p>	
Likes 0	
Dislikes 0	
<b>Response</b>	
<b>Shannon Mickens - Shannon Mickens On Behalf of: Joshua Phillips, Southwest Power Pool, Inc. (RTO), 2; - Shannon Mickens, Group Name SPP RTO</b>	
<b>Answer</b>	
<b>Document Name</b>	
<b>Comment</b>	
<p>SPP recommends that the drafting team coordinate with other drafting teams like the Energy Reliability Assessment (ERA) to ensure that these assessments doesn't create overlap for each other's processes and efforts.</p>	
Likes 0	



Dislikes 0

**Response**

**Kinte Whitehead - Exelon - 3**

**Answer**

**Document Name**

**Comment**

Overall, Exelon would like to see additional details of events in the benchmark library included in the associated standard requirements. Specifically, seeking clarity on exactly what data will be included in selected events as well as how event selection will inform coordination.

Likes 0

Dislikes 0

**Response**

**Stephen Stafford - Stephen Stafford On Behalf of: Greg Davis, Georgia Transmission Corporation, 1; - Stephen Stafford**

**Answer**

**Document Name**

**Comment**

- In general, the development of an extreme weather benchmark event is reasonable. The difficulty in properly assessing this draft Reliability Standard is the unknowns around the benchmark events. Whether these events are solely temperature-based or if there is a related electrical system or resource availability embedded needs to be clarified in the standard language. Also, there are numerous inconsistencies, ambiguities, and significant burdens being placed on the PC/TP in this standard that will result in problematic assessments, issues with coordination, competing CAPS within Interconnections, and cost for more staff to support the significant burden this standard poses.

Likes 0

Dislikes 0

**Response**

**Constantin Chitescu - Ontario Power Generation Inc. - 5**

**Answer**

**Document Name**

**Comment**

OPG supports NPCC Regional Standards Committee's comments:

Facility Owners (FOs) have an important role in developing and implement corrective action plans. The document does not acknowledge the role of the FO explicitly. The FO ultimately has the accountability to present CAP and associated investments and cost to its regulatory body for retail service. We suggest the standard make this explicitly clear.

In certain jurisdiction, extreme temperature ratings have been established, but that is not necessarily the case in all jurisdictions. Will facility owners be required to establish extreme cold or warm temperature ratings for this standard?

Likes 0

Dislikes 0

### Response

**Keith Jonassen - Keith Jonassen On Behalf of: John Pearson, ISO New England, Inc., 2; - Keith Jonassen**

**Answer**

**Document Name**

**Comment**

While ISO-NE appreciates the Benchmark Event Example, many concerns that the industry has regarding this standard and the studies that would be required, could be alleviated by the SDT/NERC providing a list of the Benchmark Temperature Events that would be available to choose from. It is difficult for areas to determine what would be required and to agree to perform studies on specific events without the list of events to choose from for the studies.

In the specific Benchmark Event Example, ISO-NE did not experience a cold weather event so there is no value to ISO-NE in studying that particular event.

ISO-NE requests that a list of Benchmark Events and applicable parameters be provided **prior** to any final Ballot on the TPL-008 Standard.

Likes 0

Dislikes 0

### Response

**Ben Hammer - Western Area Power Administration - 1**

**Answer**

**Document Name**

**Comment**

#### **Absence of the Benchmark Library**

WAPA has concerns with finalizing the TPL-008 standard with the benchmark event library unseen as this may have significant impact as to how the standard should be structured and how it is interpreted and applied.

Likes 0

Dislikes 0

## Response

**Michael Goggin - Grid Strategies LLC - 5**

### Answer

### Document Name

### Comment

First, to comply with FERC Order 896, the standard should specify that benchmark events and Extreme Temperature Assessments will account for concurrent/correlated outages of generators during extreme heat and cold events. In Order 896 paragraph 88, FERC directs “NERC to require under the new or revised Reliability Standard the study of concurrent/correlated generator and transmission outages due to extreme heat and cold events in benchmark events,” explaining in paragraph 89 that “it is necessary that responsible entities evaluate the risk of correlated or concurrent outages and derates of all types of generation resources and transmission facilities as a result of extreme heat and cold events.”

The drafts of TPL-008 and the associated “Consideration of FERC Order 896 Directives” document appear to put the burden on responsible entities and not NERC for accounting for correlated outages: “This directive is addressed in proposed TPL-008-1 through Requirement R3 Part 3.2. The responsible entity is obligated to modify the benchmark planning cases to include seasonal and temperature dependent adjustment for Load, generation, Transmission, and transfers which represent the selected benchmark events.”[\[1\]](#)

Having responsible entities and not NERC conduct this adjustment increases the risk that different regions will use inconsistent methods for doing so, and at worst responsible entities that want to avoid addressing reliability concerns through a Corrective Action Plan will use unrealistically low assumptions for the rate of correlated generator outages or other input assumptions like load and transfers. This assumption can have such a large impact on results it cannot be left to responsible entities, and should be made by NERC. The drafting team’s Technical Rationale used similar logic in deciding that NERC (the Electric Reliability Organization or ERO) should assemble the benchmark planning cases: “to ensure consistency across regions, it is necessary for the ERO to have the responsibility for determining the suitability of benchmark events to represent probable future conditions.”

Given the significant variation in the rates at which different fuel types experience correlated outages,[\[2\]](#) and rapid changes in the generation mix that may cause the future power system to have greater or lesser exposure to correlated outage risk, it is particularly important for the benchmark events and Extreme Temperature Assessments to account for the concurrent/correlated outage risk of each fuel type in the future generation mix. In recent cold snap events, gas generator outages due to equipment failures and fuel supply interruptions have accounted for the majority of outages. NERC GADS data can be used to assess the rate of correlated outages and derates of generators by fuel type.[\[C\]{3}](#)

Second, the benchmark cases and Extreme Temperature Assessments should account for changes to generation, demand, and transmission resulting from climate change, electrification of heating, and other factors that are affecting the risk posed by extreme heat and cold. Accounting for how climate change is increasing the frequency and magnitude of extreme heat and cold events is consistent with FERC’s Order 896 directive in paragraph 40: “We also direct NERC to ensure the reliability standard contains appropriate mechanisms for ensuring the benchmark event reflects up-to-date meteorological data. The increasing intensity, frequency, and unpredictability of extreme weather conditions requires that key aspects of the benchmark events be reviewed, and if necessary, updated periodically to ensure the corresponding benchmark planning cases reflect updated meteorological data.” Electrification of heating is also increasing the sensitivity of electricity demand to extreme cold conditions, which should be accounted for in the benchmark cases and Extreme Temperature Assessments.

Third, due to the impact of climate change, electrification, and rapid changes in the generation mix, requirement R8 should require responsible entities to complete an Extreme Temperature Assessment more frequently than at least once every five calendar years. As noted above, FERC Order 896 specifies that the meteorology underlying benchmark cases should be updated at least every five years, but the generation mix and other grid conditions can change more rapidly than that. TPL-001 requirement R2 requires Planning Assessments to be conducted annually, and a similar annual requirement for Extreme Temperature Assessments is appropriate given that extreme heat and cold events are the largest threat to electric reliability.

Finally, the requirement in Section 4.1 under R4 is unclear and may be inadequate. That section states that the Extreme Temperature Assessment shall evaluate “one of the years in the Long-Term Transmission Planning Horizon. The rationale for the year selected for evaluation shall be available as supporting information.” At minimum, that section of R4 should be modified to provide responsible entities with greater direction on which year or years to assess. Because extreme heat and cold risks can evolve over time due to changes in the generation mix, load, and the impact of climate change, R4 should require the responsible entity to document that the year selected is likely to pose the greatest reliability risk. If it cannot be determined which year is likely to pose the greatest risk, then the responsible entity should be required to conduct the assessment for all years that may pose the greatest risk. This is important because of the long and ambiguous timeframe covered by the Long-Term Transmission Planning Horizon, which the NERC Glossary indicates is the “Transmission planning period that covers years six through ten or beyond when required to accommodate any known longer lead time projects that may take longer than ten years to complete.” Planning for multiple years is consistent with the requirement in Section 2.1.1. of requirement R2 for TPL-001, which requires Planning Assessments to examine multiple years by incorporating “System peak Load for either Year One or year two, and for year five.”<sup>[4]</sup>

#### Requirement R9

a. Requirement R9 should be modified to specify that the expected impact of extreme heat and cold should be accounted for when designing and measuring the impact of the solutions proposed in a Corrective Action Plan (CAP). Many potential solutions in a CAP can have greater or lesser impact under extreme heat or cold conditions. For example, a CAP that relies on adding gas generation can be less effective under extreme heat due to output reductions due to ambient temperature derates, and under extreme cold due to correlated gas generator outages. Gas generator outages due to equipment failures and fuel supply interruptions have accounted for the majority of outages during recent cold snap events.<sup>[5]</sup> As noted above in response to question 4, FERC’s directive in paragraph 89 of Order 896 states that “it is necessary that responsible entities evaluate the risk of correlated or concurrent outages and derates of all types of generation resources and transmission facilities as a result of extreme heat and cold events.” On the other hand, CAPs that include demand response and energy efficiency programs related to building HVAC systems can offer contributions that are larger than expected during extreme heat or cold because load associated with cooling or heating is higher during such events.

During extreme cold events, expanded transmission ties with neighboring grid operators can also exceed the benefits they offer under normal conditions because transmission line thermal limits are higher during extreme cold and wind chill conditions. Transmission ties also tend to offer large benefits during extreme heat and cold, as severe weather events tend to be at their most extreme in geographically confined areas, ensuring at least some nearby grid operators are not experiencing shortfalls in generation.<sup>[6]</sup> The benefits of interregional transmission are even greater at higher renewable penetrations.<sup>[7]</sup> The value of transmission ties during extreme heat and cold events should be accounted for when assessing baseline performance during benchmark events as well as quantifying the value of expanding these ties as part of a CAP.

The higher transfer capacity of advanced conductors under extreme heat and cold conditions should also be accounted for, as carbon and composite core conductors sag roughly half as much as comparable ACSR conductors. Finally, Grid-Enhancing Technologies like dynamic line ratings, topology optimization, and power flow control devices offer significant benefits when the grid may be congested due to extreme temperatures. Dynamic line ratings are particularly valuable for enabling operators to safely use transmission lines’ higher thermal limits during extreme cold and wind chill conditions.

Accounting for how a CAP will fare under the extreme heat or cold conditions it is designed to solve is essential for ensuring reliability. Without accounting for the reduced effectiveness of some CAP elements under extreme heat or cold, planners will be blind to potential reliability risks. In other cases, failing to account for the effectiveness of specific CAP measures under extreme heat or cold will result in a suboptimal selection of solutions. Extreme heat and cold must not only be accounted for in identifying reliability risks, but also designing solutions to those risks.

b. The draft of R9 also includes a potential loophole that a responsible entity could use to avoid implementing a CAP that is needed to address reliability concerns.

First, allowing load curtailment for a P1 contingency under TPL-008 is a major departure from the requirements of TPL-001, which do not allow load shedding for a P1 contingency.<sup>[8]</sup> Allowing responsible entities plans’ to include load shed when they experience a single P1 contingency under extreme heat or cold conditions is contrary to FERC’s intent in Order 896 that NERC enact a standard that will ensure reliable operations under extreme heat and cold conditions.

More generally, a major concern with the draft standard is that there is no compliance mechanism to ensure CAPs are implemented. If implementing some CAP solutions requires action by an entity other than the transmission planner or planning coordinator responsible entities, the draft standard should be revised to include such a requirement on those entities. Other draft NERC standards include requirements to implement CAPs, and similar

language could be adopted for TPL-008. For example, requirement R9 of the PRC-028 draft requires a generator or transmission owner to “develop, maintain, and implement a Corrective Action Plan to provide the required capability.”<sup>[C]9</sup> and requirement R6 of the PRC-030 draft requires “Each applicable Generator Owner shall, for each of its CAPs developed pursuant to Requirement R5:

6.1. Implement the CAP;

6.2. Update the CAP if actions or timetables change; and

6.3. Notify each applicable Reliability Coordinator if CAP actions or timetables change and when the CAP is completed.”<sup>[10]C</sup>

#### Implementation plan

The draft Implementation Plan proposes that requirements R7-R11, which require the Extreme Temperature Assessment and any resulting Corrective Action Plan, do not take effect until more than 6 years after the Standard is approved by FERC. This unnecessary delay is contrary to FERC’s directive in Order 896 and the urgent importance of planning for extreme heat and cold events.

NERC’s 2023 State of Reliability Overview concluded that “extreme weather events continue to pose the greatest risk to reliability due to the increase in frequency, footprint, duration, and severity.” FERC Order 896 was also clear that the increasing frequency and magnitude of extreme weather events “have created an urgency to address the negative impact of extreme weather on the reliability of the Bulk-Power System” (at paragraphs 21-22). Waiting until after 2030 to address the largest threat to grid reliability does not make sense. Such a delay is also unnecessary, as entities responsible for TPL-008 already conduct nearly all of the elements of TPL-008 today to comply with TPL-001. TPL-008 effectively requires running similar analyses as TPL-001, but for extreme heat and cold scenarios. As a result, it should be straightforward for responsible entities to modify their existing planning practices to incorporate the two additional scenarios.

This unnecessary delay is also at odds with FERC’s directive in Order 896. At paragraph 188, FERC directed “NERC to propose an implementation timeline for the new or modified Reliability Standard, with implementation beginning no later than 12 months after the effective date of a Commission order approving the proposed Reliability Standard.” Under the draft Implementation Plan, the only requirement of TPL-008 that comes close to falling within the 12-month timeline FERC directed is compliance with R1, which begins “the first day of the first calendar quarter that is twelve (12) months after the effective date of the applicable governmental authority’s order approving the standard.”

More importantly, R1 only requires that “Each Planning Coordinator, in conjunction with its Transmission Planner(s), shall determine and identify each entity’s individual and joint responsibilities for performing the studies needed to complete the Extreme Temperature Assessment,” and as such is a minor procedural step towards implementing the actual Extreme Temperature Assessment and any resulting Corrective Action Plan in R7-R11. As noted above, those meaningful requirements do not begin until more than 6 years after the standard is approved by FERC. To comply with FERC’s directive, the drafting team should require compliance with R7-R11 to begin within 12 months of FERC approval of the standard, and the interim steps in R2-R6 should also be moved up from the Implementation Plan’s proposed deadline of 36 months after the effective date of the standard.

<sup>[C]1</sup><sup>[C]</sup> NERC, *Consideration of FERC Order 896 Directives* (March 2024), [https://www.nerc.com/pa/Stand/Project202307ModtoTPL00151TransSystPlanPerfReqExWe/2023-07\\_Consideration%20of%20FERC%20Order%20896%20Directives%20Final\\_032024.pdf](https://www.nerc.com/pa/Stand/Project202307ModtoTPL00151TransSystPlanPerfReqExWe/2023-07_Consideration%20of%20FERC%20Order%20896%20Directives%20Final_032024.pdf), at 5

<sup>[C]2</sup><sup>[C]</sup> See, e.g., FERC and NERC, *Winter Storm Elliott Report: Inquiry into Bulk-Power System Operations During December 2022* (October 2023), <https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-during-december-2022>, at 17; FERC and NERC, *The February 2021 Cold Weather Outages in Texas and the South Central United States* (November 2021), <https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and>, at 16; FERC and NERC, *2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018* (July 2019), <https://www.ferc.gov/legal/staff-reports/2019/07-18-19-ferc-nerc-report.pdf>; PJM, *Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events* (May 2014), <https://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>.

[C]3[C] For example, see the analysis of GADS data provided in S. Murphy et al., *Resource adequacy risks to the bulk power system in North America* (February 2018), <https://www.sciencedirect.com/science/article/pii/S0306261917318202>, with Supplementary Material including outage data available at <https://ars.els-cdn.com/content/image/1-s2.0-S0306261917318202-mmc1.zip>

[C]4[C] <https://www.nerc.com/pa/Stand/Reliability%20Standards/TPL-001-4.pdf>

[C]5[C] See, e.g., FERC and NERC, *Winter Storm Elliott Report: Inquiry into Bulk-Power System Operations During December 2022* (October 2023), <https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-during-december-2022>, at 17; FERC and NERC, *The February 2021 Cold Weather Outages in Texas and the South Central United States* (November 2021), <https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and>, at 16; FERC and NERC, *2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018* (July 2019), <https://www.ferc.gov/legal/staff-reports/2019/07-18-19-ferc-nerc-report.pdf>; PJM, *Analysis of Operational Events and Market Impacts During the January 2014 Cold Weather Events* (May 2014), <https://www.pjm.com/~media/library/reports-notice/weather-related/20140509-analysis-of-operational-events-and-market-impacts-during-the-jan-2014-cold-weather-events.ashx>.

[C]6[C] [https://acore.org/wp-content/uploads/2021/07/GS\\_Resilient-Transmission\\_proof.pdf](https://acore.org/wp-content/uploads/2021/07/GS_Resilient-Transmission_proof.pdf)

[C]7[C] <https://www.nrel.gov/docs/fy22osti/78394.pdf>

[C]8[C] <https://www.nerc.com/pa/Stand/Reliability%20Standards/TPL-001-5.pdf>, at 21

[C]9[C] [https://www.nerc.com/pa/Stand/Project202104ModificationstoPRC0022DL/2021-04\\_AB\\_PRC-028-1\\_Clean\\_03182024.pdf](https://www.nerc.com/pa/Stand/Project202104ModificationstoPRC0022DL/2021-04_AB_PRC-028-1_Clean_03182024.pdf)

[C]10[C] [https://www.nerc.com/pa/Stand/Project202302PerformanceofIBRsDL/2023-02%20PRC-030-1\\_032524.pdf](https://www.nerc.com/pa/Stand/Project202302PerformanceofIBRsDL/2023-02%20PRC-030-1_032524.pdf)

Likes 0

Dislikes 0

## Response

**Bobbi Welch - Midcontinent ISO, Inc. - 2, Group Name** ISO/RTO Council Standards Review Committee (SRC) Project 2023-07 TPL-008-1 Draft #2

**Answer**

**Document Name**

[2023-07\\_Unofficial\\_Comment\\_Form\\_Draft\\_2\\_SRC\\_08-22-24\\_final.docx](#)

**Comment**

### **DRAFT ERO Enterprise Process for TPL-008-1 Benchmark Weather Event Development and Maintenance**

The process document says, "Refer to the NERC **Glossary of Terms** for the below capitalized terms used in this process." While NERC may have defined these terms, the following terms are *not* currently in the NERC Glossary of Terms.

• Affected Regional Entity (ARE)

• Compliance Enforcement Authority (CEA)

• Coordinated Oversight

• Extreme Temperature Assessment (ETA)

• Lead Regional Entity (LRE)

&bull; Multi-Region Registered Entity (MRRE)

**Relevance to Canada**

The SRC requests that Canadian provinces be considered within the ERO benchmark library.

**Need for regional application of benchmark events for PCs covering large areas**

SRC requests clarification regarding the following. Is an entity required to use the same benchmark event across its entire footprint or can an entity use different events for different areas of its footprint? For example, if an SRC member selects a benchmark event that has high impacts concentrated in its Southern Region for its first iteration, could the next 5-year iteration use a benchmark event that has high impacts concentrated in that member's Central Region?

**Resource uncertainty in the Planning Horizon may lead to unsolvable study cases.**

Depending on how far into the future these Extreme Temperature Assessments are performed, there may be great uncertainty as to the resources available. Many states have firm policies driving unit deactivations, but replacement resource location and size may be unknown. This may lead to future cases being un-solvable without large reactive or replacement power assumptions. Furthermore, the farther out in the future an extreme case is studied, the greater the corresponding uncertainties in resource availability due to extreme weather conditions become; study requirements on this topic are only now being considered under the Project 2024-02 Energy Assurance Planning Horizon SAR.

Likes 0

Dislikes 0

**Response**

**Bob Cardle - Bob Cardle On Behalf of: Marco Rios, Pacific Gas and Electric Company, 3, 1, 5; Sandra Ellis, Pacific Gas and Electric Company, 3, 1, 5; Tyler Brun, Pacific Gas and Electric Company, 3, 1, 5; - Bob Cardle**

**Answer**

**Document Name**

**Comment**

A benchmark library maintained by the ERO is a welcome reference for transmission entities, however, local climate and geographic-specific extreme weather conditions should be made at Planning Coordinator and Transmission Planner level.

Extreme Heat/Cold conditions are already sensitivity scenarios to the normal long-term planning scenarios. Adding sensitivity cases on top of these "sensitivity scenarios" is redundant and unnecessarily burdensome to transmission entities.

Likes 0

Dislikes 0

**Response**

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

**Answer**

**Document Name**

**Comment**

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

Likes 0

Dislikes 0

**Response**

**Elizabeth Davis - Elizabeth Davis On Behalf of: Thomas Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis**

**Answer****Document Name**

[TPL-008-1 Process Flow.pdf](#)

**Comment**

PJM supports the IRC SRC comments and adds a process flow (attached) to assist in document organization and structure that are very important to ease of use and clarity.

PJM wants to thank NERC and the Project Team for all their hard work and consideration of the IRC SRC and PJM submitted comments.

Likes 0

Dislikes 0

**Response**

**John Brewer - National Energy Technology Laboratory - 9 - NA - Not Applicable**

**Answer****Document Name****Comment**

A more inclusive process for review and approval of benchmark temperature events should be developed. Currently, only events submitted by an entity will go through the more inclusive review process by review panel.

Likes 0

Dislikes 0

**Response**

Comments submitted by Long Island Power Authority



Submitter's Name

Answer

Y/N

Document Name

(if an attachment is provided by submitter)

Comment

Submitter's comments

Likes 0

# of other submitters who agree with these comments

Dislikes 0

# of other submitters who disagree with these comments

Response

(Drafting team's response to submitter's comments)

Submitter's Name

Answer

Y/N

Document Name

(if an attachment to comments is provided by submitter)

Comment

Submitter's comments

Likes 0

# of other submitters who agree with these comments

Dislikes 0

# of other submitters who disagree with these comments

Response

(Drafting team's response to submitter's comments)

Submitter's Name (group info also provided)

Answer

Y/N

Document Name

(if an attachment to comments is provided by submitter)

Comment

Submitter's comments

Likes 0

# of other submitters who agree with these comments

Dislikes 0

# of other submitters who disagree with these comments

Response

(Drafting team's response to submitter's comments)