

Consideration of Comments

Project Name:	2019-06 Cold Weather Draft 2- EOP-011-2, IRO-010-4, TOP-003-5
Comment Period Start Date:	4/2/2021
Comment Period End Date:	4/26/2021
Associated Ballots:	2019-06 Cold Weather EOP-011-2 AB 2 ST 2019-06 Cold Weather IRO-010-4 AB 2 ST 2019-06 Cold Weather TOP-003-5 AB 2 ST

There were 89 sets of responses, including comments from approximately 210 different people from approximately 137 companies representing 10 of the Industry Segments as shown in the table on the following pages.

All comments submitted can be reviewed in their original format on the [project page](#).

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

Questions

1. The SDT removed the generator unit-specific training from Requirement R7 and created a new Requirement R8. The new Requirement R8 was created by the SDT to add the GOP to the functional entities responsible for training. Whereas Requirement R7 is narrowly constructed for the GO to be responsible for the cold weather preparedness plan(s), Requirement R8 requires both the GO and GOP to provide the generating unit-specific training to their respective maintenance and operations personnel. Do you agree with this new requirement placement in the EOP-011 standard? If you do not agree, please provide an alternative. If you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.
2. In response to comments from the first posting, the SDT added cold weather data specification requirements for the BA within TOP-003, similar to what is required of the RC and TO. Do you agree with the inclusion of these requirements in the TOP-003 standard? If you do not agree, please provide an alternative to address the comments. If you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.
3. In response to comments, the SDT modified the Implementation Plan to allow eighteen (18) months following the effective date to become compliant with EOP-011, IRO-010, and TOP-003. Do you agree with this modification? If you do not agree, please provide an alternative implementation timeframe. If you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.
4. The SDT has provided draft Implementation Guidance to address some issues identified by industry during the previous comment period. Recognizing that Implementation Guidance is not subject to ballot body approval, do you agree with the SDT proceeding with the development of the Implementation Guidance? If you do not agree, or have additional topics you would like the SDT to consider in the Implementation Guidance, please provide your explanation and suggested language.
5. Please provide any additional comments for the SDT to consider, if desired.

The Industry Segments are:

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

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
BC Hydro and Power Authority	Adrian Andreoiu	1	WECC	BC Hydro	Hootan Jarollahi	BC Hydro and Power Authority	3	WECC
					Helen Hamilton Harding	BC Hydro and Power Authority	5	WECC
					Adrian Andreoiu	BC Hydro and Power Authority	1	WECC
Santee Cooper	Chris Wagner	1		Santee Cooper	Rene' Free	Santee Cooper	1,3,5,6	SERC
					Jennifer Richards	Santee Cooper	1,3,5,6	SERC
					Paul Camilletti	Santee Cooper	1,3,5,6	SERC
					LaChelle Brooks	Santee Cooper	1,3,5,6	SERC
MRO	Dana Klem	1,2,3,4,5,6	MRO	MRO NSRF	Joseph DePoorter	Madison Gas & Electric	3,4,5,6	MRO
					Larry Heckert	Alliant Energy	4	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Jodi Jensen	Western Area Power Administration	1,6	MRO
					Andy Crooks	SaskPower Corporation	1	MRO
					Bryan Sherrow	Kansas City Board of Public Utilities	1	MRO
					Bobbi Welch	Omaha Public Power District	1,3,5,6	MRO
					Jeremy Voll	Basin Electric Power Cooperative	1	MRO
					Bobbi Welch	Midcontinent ISO	2	MRO
					Douglas Webb	Kansas City Power & Light	1,3,5,6	MRO
					Fred Meyer	Algonquin Power Co.	1	MRO
					John Chang	Manitoba Hydro	1,3,6	MRO
					James Williams	Southwest Power Pool, Inc.	2	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Jamie Monette	Minnesota Power / ALLETE	1	MRO
					Jamison Cawley	Nebraska Public Power	1,3,5	MRO
					Sing Tay	Oklahoma Gas & Electric	1,3,5,6	MRO
					Terry Harbour	MidAmerican Energy	1,3	MRO
					Troy Brumfield	American Transmission Company	1	MRO
New York Independent System Operator	Gregory Campoli	2		ISO/RTO Standards Review Committee	Gregory Campoli	New York Independent System Operator	2	NPCC
					Helen Lainis	IESO	2	NPCC
					Michael Del Viscio	PJM	2	RF
					Charles Yeung	Southwest Power Pool, Inc. (RTO)	2	MRO
					Bobbi Welch	Midcontinent ISO, Inc.	2	RF

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Ali Miremadi	CAISO	2	WECC
					Kahtleen Goodman	ISO-NE	2	NPCC
Jennie Wike	Jennie Wike		WECC	LPPC	Jennie Wike	LPPC	1,3,4,5,6	WECC
					John Babik	JEA	5	SERC
					Joe Tarantino	SMUD	1,3,4,5,6	WECC
					Tyson Archie	Platte River Power Authority	5	WECC
ACES Power Marketing	Jodirah Green	1,3,4,5,6	MRO,NA - Not Applicable,RF,SERC,Texas RE,WECC	ACES Standard Collaborations	Bob Solomon	Hoosier Energy Rural Electric Cooperative, Inc.	1	SERC
					Kevin Lyons	Central Iowa Power Cooperative	1	MRO
					Bill Hutchison	Southern Illinois Power Cooperative	1	SERC
					David Hartman	Arizona Electric Power Cooperative	1	WECC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Nick Fogleman	Prairie Power Incorporated	1,3	SERC
					Susan Sosbe	Wabash Valley Power Association	3	RF
					Amber Skillern	East Kentucky Power Cooperative	1	SERC
					Ellen Watkins	Sunflower Electric Power Corporation	1	MRO
Entergy	Julie Hall	6		Entergy	Oliver Burke	Entergy - Entergy Services, Inc.	1	SERC
					Jamie Prater	Entergy	5	SERC
DTE Energy - Detroit Edison Company	Karie Barczak	3		DTE Energy - DTE Electric	Adrian Raducea	DTE Energy - Detroit Edison Company	5	RF
					Daniel Herring	DTE Energy - DTE Electric	4	RF
					Karie Barczak	DTE Energy - DTE Electric	3	RF
MRO	Kendra Buesgens	1,2,3,4,5,6	MRO	MRO NSRF	Bobbi Welch	Midcontinent ISO, Inc.	2	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Christopher Bills	City of Independence Power & Light	4	MRO
					Fred Meyer	Algonquin Power Co.	1	MRO
					Jamie Monette	Allete - Minnesota Power, Inc.	1	MRO
					Jodi Jensen	Western Area Power Administration - Upper Great Plains East (WAPA)	1,6	MRO
					John Chang	Manitoba Hydro	1,3,6	MRO
					Larry Heckert	Alliant Energy Corporation Services, Inc.	4	MRO
					Marc Gomez	Southwestern Power Administration	1	MRO
					Matthew Harward	Southwest Power Pool, Inc.	2	MRO

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					LaTroy Brumfield	American Transmission Company, LLC	1	MRO
					Bryan Sherrow	Kansas City Board Of Public Utilities	1	MRO
					Terry Harbour	MidAmerican Energy	1,3	MRO
					Jamison Cawley	Nebraska Public Power	1,3,5	MRO
					Seth Shoemaker	Muscatine Power & Water	1,3,5,6	MRO
					Michael Brytowski	Great River Energy	1,3,5,6	MRO
					Jeremy Voll	Basin Electric Power Cooperative	1,3,5	MRO
					Joe DePoorter	Madison Gas and Electric	4	MRO
					David Heins	Omaha Public Power District	1,3,5,6	MRO
Duke Energy		1,3,5,6	FRCC,RF,SERC,Texas RE	Duke Energy	Laura Lee	Duke Energy	1	SERC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
	Kim Thomas				Dale Goodwine	Duke Energy	5	SERC
					Greg Cecil	Duke Energy	6	RF
Southern Indiana Gas and Electric Co.	Leslie Hamby	3,5,6	RF	SIGE Project 2019-06	Erin Spence	Southern Indiana Gas and Electric Co.	6	RF
					Larry Rogers	Southern Indiana Gas and Electric Co.	5	RF
					Ryan Abshier	Southern Indiana Gas and Electric Co.	3	RF
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

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Ann Carey	FirstEnergy - FirstEnergy Solutions	6	RF
					Mark Garza	FirstEnergy-FirstEnergy	4	RF
Public Utility District No. 1 of Chelan County	Meaghan Connell	5		CHPD	Joyce Gundry	Public Utility District No. 1 of Chelan County	3	WECC
					Ginette Lacasse	Public Utility District No. 1 of Chelan County	1	WECC
					Glen Pruitt	Public Utility District No. 1 of Chelan County	6	WECC
					Meaghan Connell	Public Utility District No. 1 Chelan County	5	WECC
Northern California	Michael Whitney	3		NCPA	Scott Tomashefsky	Northern California Power Agency	4	WECC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
Power Agency					Marty Hostler	Northern California Power Agency	5,6	WECC
					Marty Hostler	Northern California Power Agency	5,6	WECC
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
					Jim Howell	Southern Company - Southern Company	5	SERC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
						Services, Inc. - Gen		
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	NPCC Regional Standards Committee No Dominion	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					David Burke	Orange & Rockland Utilities	3	NPCC
					Helen Lainis	IESO	2	NPCC
					David Kiguel	Independent	7	NPCC
					Nick Kowalczyk	Orange and Rockland	1	NPCC
					Joel Charlebois	AESI - Acumen Engineered	5	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
						Solutions International Inc.		
					Mike Cooke	Ontario Power Generation, Inc.	4	NPCC
					Salvatore Spagnolo	New York Power Authority	1	NPCC
					Shivaz Chopra	New York Power Authority	5	NPCC
					Deidre Altobell	Con Ed - Consolidated Edison	4	NPCC
					Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1	NPCC
					Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC
					Cristhian Godoy	Con Ed - Consolidated	6	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
						Edison Co. of New York		
					Nurul Abser	NB Power Corporation	1	NPCC
					Randy MacDonald	NB Power Corporation	2	NPCC
					Michael Ridolfino	Central Hudson Gas and Electric	1	NPCC
					Vijay Puran	NYSPS	6	NPCC
					ALAN ADAMSON	New York State Reliability Council	10	NPCC
					Sean Cavote	PSEG - Public Service Electric and Gas Co.	1	NPCC
					Brian Robinson	Utility Services	5	NPCC
					Quintin Lee	Eversource Energy	1	NPCC
					Jim Grant	NYISO	2	NPCC
					John Pearson	ISONE	2	NPCC

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					John Hastings	National Grid USA	1	NPCC
					Michael Jones	National Grid USA	1	NPCC
					Nicolas Turcotte	Hydro-Quebec TransEnergie	1	NPCC
					Chantal Mazza	Hydro-Quebec	2	NPCC
					Michele Tondalo	United Illuminating Co.	1	NPCC
					Paul Malozewski	Hydro One Networks, Inc.	3	NPCC
Dominion - Dominion Resources, Inc.	Sean Bodkin	6		Dominion	Connie Lowe	Dominion - Dominion Resources, Inc.	3	NA - Not Applicable
					Lou Oberski	Dominion - Dominion Resources, Inc.	5	NA - Not Applicable
					Larry Nash	Dominion - Dominion Virginia Power	1	NA - Not Applicable

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
					Rachel Snead	Dominion - Dominion Resources, Inc.	5	NA - Not Applicable
OGE Energy - Oklahoma Gas and Electric Co.	Sing Tay	6	SPP RE	OKGE	Sing Tay	OGE Energy - Oklahoma	6	MRO
					Terri Pyle	OGE Energy - Oklahoma Gas and Electric Co.	1	MRO
					Donald Hargrove	OGE Energy - Oklahoma Gas and Electric Co.	3	MRO
					Patrick Wells	OGE Energy - Oklahoma Gas and Electric Co.	5	MRO

1. The SDT removed the generator unit-specific training from Requirement R7 and created a new Requirement R8. The new Requirement R8 was created by the SDT to add the GOP to the functional entities responsible for training. Whereas Requirement R7 is narrowly constructed for the GO to be responsible for the cold weather preparedness plan(s), Requirement R8 requires both the GO and GOP to provide the generating unit-specific training to their respective maintenance and operations personnel. Do you agree with this new requirement placement in the EOP-011 standard? If you do not agree, please provide an alternative. If you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

John Allen - City Utilities of Springfield, Missouri - 4

Answer No

Document Name

Comment

The requirement does not state a clear measurable reliability objective. Without this clarity, the ERO and industry will likely have various interpretations and it may not meet its intended objective. Additionally, it applies to the GOP but the GOP has no requirement for a preparedness plan. Whose plan is this referencing? If the GOP is supposed to have a plan, then it needs to be a requirement. Otherwise, I offer the following alternative to R8.

Each Generator Owner shall provide training to personnel on their roles and responsibilities for implementing the cold weather preparedness plan(s) developed in R7.

Likes 0

Dislikes 0

Response

Thank you for your comments. Requirement R8 has been modified to further clarify the intent.

Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC

Answer No

Document Name

Comment	
<p>If the SDT believes R8 is justified and should include the GOP, it should also include the requirement to provide training on the specific cold-weather preparedness plan developed pursuant to R7. Seattle remains concerned about changes to this draft of EOP-011 and in particular the language of the subrequirements of R7, and these concerns are discussed in our responses to items 4 and 5, below.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comments. Requirement R8 has been modified to further clarify the intent.</p>	
<p>Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC</p>	
Answer	No
Document Name	
Comment	
<p>BPA supports Reclamation's comments.</p>	
Likes	0
Dislikes	0
Response	
<p>Please see the SDT's response to Reclamation.</p>	
<p>Donna Wood - Tri-State G and T Association, Inc. - 1</p>	
Answer	No
Document Name	
Comment	

Although, Tri-State agrees with separating out the generator unit-specific training requirement under R8, we believe this training requirement would be better placed under PER-006-1. Even though PER-006-1 R1 applies to protective relaying, the purpose of the standard is to ensure that personnel are receiving training on specific topics essential to reliability to perform or support real-time operations of the Bulk Electric System. This applies to the specific training requirement for Cold Weather plans as well. In addition, we would like to see one entity responsible for training, not both. Having both GO or GOP providing training could lead to confusion of responsibility where the GO and GOP do not belong to the same entity.

Likes 2	Tarantino Joe On Behalf of: Fong Mua, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Kevin; City Utilities of Springfield, Missouri, 4, Allen John
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Dislikes 0	
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Response

Thank you for your comments. Requirement R8 has been modified to further clarify the intent. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.

Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6

Answer	No
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Document Name	
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Comment

EOP-011-1 is presently applicable to System Operators (TOP, BA, RC). Adding GO/GOP applicability to EOP-011-2 with proposed Requirement 7 does not appear to be a good fit. NIPSCO suggests that creating a new standard may be more appropriate here, similar to what was done with EOP-010-1 GMD Operations. Also for the new training requirements, there appears to be a concern placing these in EOP-011 where they may be difficult to track. Within the PER standards may be a better location, possibly within PER-006. Also, the term "calendar year" should be considered in lieu of "annual".

Likes 2	Tarantino Joe On Behalf of: Fong Mua, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Kevin; City Utilities of Springfield, Missouri, 4, Allen John
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Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development. The SDT voted to provide additional clarification regarding the timing of training within the Implementation Guidance.	
Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper	
Answer	No
Document Name	
Comment	
Training requirements for the GO/GOP should be placed into the PER-006 standard. There was a concerted effort a few years ago to have all training requirements within one standard so that Registered Entities would know where to look to find all the requirements associated with training.	
Likes	3
Tarantino Joe On Behalf of: Fong Mua, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Kevin; City Utilities of Springfield, Missouri, 4, Allen John; Wike Jennie On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merre	
Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.	
Jennie Wike - Jennie Wike On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merrell, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Marc Donaldson, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Ozan Ferrin, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; Terry Gifford, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; - Jennie Wike, Group Name LPPC	
Answer	No
Document Name	

Comment

LPPC is concerned with locating training requirements in a Standard other than the PER suite of standards. While we agree with the inclusion of the Cold Weather requirements in EOP-011, we disagree with the inclusion of the training requirement associated with cold weather preparedness in the EOP-011 standard and believe more appropriate to be included in the PER suite of training standards. Adding training requirements to other non-training standards creates a condition that makes training requirements hard to find and easy to lose; a condition that is not conducive to a quality standard. Locating training requirements outside of PER Standards is also not following industry precedent, such as the Standards Efficiency Review recommendations and the recent Project 2007-06.2 that moved training requirements from PRC Standards to the new PER-006-1 Standard.

Currently, PER-006 includes training for the GOP and respective plant personnel. A simple fix to this issue is to strike Requirement R8 from the EOP-011 standard and place it into the appropriate PER-006 standard. If PER-006 is not allowed to be modified due to the scope of the SAR, then a new SAR to address this training requirements should be created.

Likes 5	Tarantino Joe On Behalf of: Fong Mua, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Kevin; Snohomish County PUD No. 1, 3, Chaney Holly; City Utilities of Springfield, Missouri, 4, Allen John; Platte River Power Authority, 5, Archie Tyson; Platte River Power Authority, 3, Kiess Wade
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Dislikes 0	
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Response

Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.

Joe Tarantino - Joe Tarantino On Behalf of: Fong Mua, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Kevin Smith, Balancing Authority of Northern California, 1; Nicole Looney, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; Wei Shao, Sacramento Municipal Utility District, 3, 5, 6, 4, 1; - Joe Tarantino

Answer	No
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Document Name	
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Comment

SMUD is concerned with locating training requirements in a Standard other than the PER suite of standards. While we agree with the inclusion of the Cold Weather requirements in EOP-011 we disagree with the inclusion of the training requirement associated with cold weather preparedness in the EOP-011 standard and believe it to be more appropriate for Requirement R8 to be moved into the PER suite of training standards. Adding training requirements to other non-training standards creates a condition that makes training requirements hard to find and easy to lose; a condition that is not conducive to a quality standard. Locating training requirements outside of PER Standards is also not following industry precedent, such as the Standards Efficiency Review recommendations and the recent Project 2007-06.2 that moved training requirements from PRC Standards to the new PER-006-1 Standard.

Likes 3

City Utilities of Springfield, Missouri, 4, Allen John; Wike Jennie On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merre; Platte River Power Authority, 5, Archie Tyson

Dislikes 0

Response

Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.

Ben Burnett - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE

Answer

No

Document Name

Comment

CenterPoint Energy Houston Electric, LLC (CEHE) recognizes the urgency to develop and implement the recommendations identified in the 2019 Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) Staff Report. However, CEHE maintains that cold weather preparedness should be considered standard operating procedure and thus preventative measures to avoid an Emergency Operation.

While CEHE supports the development of a requirement for cold weather rating of facilities and associated training for applicable personnel, CEHE encourages the SDT to reconsider the development of a new FAC Standard which would cover Generation and TO/TOP

Substation Winterization practices and requirements. The proposed new FAC Standard would focus on the development and implementation of preventative standard operating procedures intended to mitigate cold weather emergency-level situations.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT team will forward your suggestion for a new FAC standard onto NERC for further consideration and development.

Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF, Group Name SIGE Project 2019-06

Answer

No

Document Name

Comment

Southern Indiana Gas & Electric Company (SIGE) recognizes the urgency to develop and implement the recommendations identified in the 2019 Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) Staff Report. However, SIGE maintains that cold weather preparedness should be considered standard operating procedure and thus preventative measures to avoid an Emergency Operation.

While SIGE supports the development of a requirement for cold weather rating of facilities and associated training for applicable personnel, SIGE encourages the SDT to reconsider the development of a new FAC Standard which would cover Generation and TO/TOP Substation Winterization practices and requirements. The proposed new FAC Standard would focus on the development and implementation of preventative standard operating procedures intended to mitigate cold weather emergency-level situations.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT team will forward your suggestion for a new FAC standard onto NERC for further consideration and development.

Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC	
Answer	No
Document Name	
Comment	
<p>The “Redline to Last Posted” version of EOP-011-2 does not appear to be a true redline to last posted version. There was no R7, part 7.4 (as reflected in Draft 1) redlined out.</p> <p>Requirement R7 in Draft 2 replaces the phrase “...shall develop, maintain, and implement...” with “...shall implement and maintain...”. It would seem the Generator Owner should develop and maintain cold weather preparedness plan(s) for its generating unit(s) in consultation with the Generator Operator(s) of the unit(s). The Generator Operator will foreseeably be responsible for implementing some elements of the plan, particularly those that require execution during or nearing Real-time operations. Part of the plan should be to establish those accountabilities. We suggest Requirement R7 be restated as follows:</p> <p>“R7. Each Generator Owner, in conjunction with its Generator Operator(s), shall develop and maintain one or more cold weather preparedness plans for its generating units. The cold weather preparedness plan(s) shall address the following concerns, as applicable:</p> <p style="padding-left: 40px;">7.1. Accountabilities for implementing the plan. <i>[new].....</i>”</p> <p>Then shift the 7.1 through 7.3.2.3 in Draft 2 to 7.2 through 7.4.2.3. Measure M7 would need to be revised to “Each Generator Owner will have evidence that demonstrates its cold weather preparedness plans have been developed and maintained in conjunction with its Generator Operator(s). Each Generator Owner and Generator Operator will have evidence that demonstrates it implemented actions in the cold weather preparedness plans that it is accountable for.”</p> <p>Requirement R8 starts by stating, “Each Generator Operator or Generator Owner...”. The “or” infers that one or the other must do this. When the GO and GOP are separate entities, how is it to be determined which will be responsible? We recommend changing the “or” to an “and” such that each is responsible for the training of their “personnel responsible for implementing cold weather preparedness plan(s)”. The same comment goes for the wording in section 1.2, Evidence Retention. This goes along with the Technical Rationale for Requirement R8, which states in part, “...The SDT created R8 as applicable to both the Generator Owner and the Generator Operator...” and with the question above which states in part, “...Requirement R8 requires both the GO and GOP to provide</p>	

the generating unit-specific training to their respective...”. Similarly, Measure M8 should start with “Each Generator Operator and Generator Owner...”.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT has revised Requirement R8 to clarify the intent and added language regarding the GO and GOP working “in conjunction” to identify the responsible entity.

Paul Mehlhaff - Sunflower Electric Power Corporation - 1

Answer

No

Document Name

Comment

Sunflower agrees with the comments ACES provided for question 1.

Likes 0

Dislikes 0

Response

Please see the SDT’s response to ACES.

Rich Hydzik - Rich Hydzik On Behalf of: Scott Kinney, Avista - Avista Corporation, 3, 5, 1; - Rich Hydzik

Answer

No

Document Name

Comment

R7 is a significant administrative burden on the portion of the industry that operates in seasonally cold environments. Those facilities are engineered to operate through expected cold weather conditions, and R7 does not appear to improve the reliability those facilities. The

cold weather events that the industry has experienced have disproportionately affected entities that rarely see extreme cold. It may make more sense to pursue a regional standard to address these issues.

As I do not support R7, I also see no need for R8 on a continent wide basis.

Likes 0

Dislikes 0

Response

The FERC\NERC Report has recommended an industry wide standard. The SDT discussed and previously determined to not include proposed regional standards within the scope of the project and recommends the issue be raised with the appropriate Regional Entities for further consideration.

Truong Le - Truong Le On Behalf of: David Owens, Gainesville Regional Utilities, 1, 5, 3; Neville Bowen, Ocala Utility Services, 3; - Truong Le

Answer

No

Document Name

Comment

We support the comments made by John Allen from City Utilities of Springfield, Missouri: "

The requirement does not state a clear measurable reliability objective. Without this clarity, the ERO and industry will likely have various interpretations and it may not meet its intended objective. Additionally, it applies to the GOP but the GOP has no requirement for a preparedness plan. Whose plan is this referencing? If the GOP is supposed to have a plan, then it needs to be a requirement. Otherwise, I offer the following alternative to R8.

Each Generator Owner shall provide training to personnel on their roles and responsibilities for implementing the cold weather preparedness plan(s) developed in R7. "

Likes 0

Dislikes 0

Response	
Thank you for your comments. Requirement R8 has been modified to further clarify the intent.	
W. Dwayne Preston - Austin Energy - 3	
Answer	No
Document Name	
Comment	
<p><i>Austin Energy is concerned with locating training requirements in a Standard other than the PER suite of standards. Adding training requirements to other non-training standards creates a condition that makes training requirements hard to find and easy to lose; a condition that is not conducive to a quality standard. Locating training requirements outside of PER Standards is also not following industry precedent, such as the Standards Efficiency Review recommendations and the recent Project 2007-06.2 that moved training requirements from PRC Standards to the new PER-006-1 Standard.</i></p> <p><i>Currently, PER-006 includes training for the GOP and respective plant personnel. A simple fix to this issue is to strike Requirement R8 from the EOP-011 standard and place it into the appropriate PER-006 standard. If PER-006 is not allowed to be modified due to the scope of the SAR, then a new SAR to address this training requirements should be created.</i></p>	
Likes 2	Wike Jennie On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merre; Austin Energy, 6, Martin Lisa
Dislikes 0	
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.	
Glen Farmer - Avista - Avista Corporation - 5	
Answer	No
Document Name	
Comment	

Having a cold weather plan should be enough from a regulatory point. Reaching to far into the business. Its not clear who all should be trained.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The proposed standards are consistent with the recommendations of the FERC/NERC Staff report and the SAR. In addition, the FERC\NERC report recommended unit-specific awareness training be provided by the GO and GOP. The SDT revised Requirement R8 to clarify the intent.	
Marty Hostler - Northern California Power Agency - 3,4,5,6	
Answer	No
Document Name	
Comment	
NO. Requiring GO/GOP Market participants to perform activities that non-registered generator market participants do not have to perform, nor pay for, runs afoul with NERC Market Interference Principles., namely: "A reliability standard shall not give any market participant an unfair competitive advantage".	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The proposed standards are applicable to all BES generation and the SDT doesn't agree that the proposed standards violate NERC Market Interface Principles in the manner of which you reference.	
Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	No
Document Name	

Comment

Reclamation disagrees with placement of a training requirement in an Emergency Operations standard. As identified by NERC’s Standards Efficiency Review Team in 2019, training requirements should be consolidated into the Personnel Performance, Training and Qualifications (PER) family of standards to not only help prevent an entity from inadvertently overlooking a training requirement but to avoid the churn required to review and revise inefficiently written standards.

Reclamation disagrees with a continent-wide reliability standard to address cold weather preparation. Because different geographic locations require different levels of cold weather preparation, the fact that entities in geographic locations that commonly experience cold weather may already have adequate preparations in place, but are now required to provide extra documentation of these preparations simply to support compliance, is an added administrative burden that does not directly improve reliability and is therefore inappropriate for a continent-wide standard.

Likes 0

Dislikes 0

Response

Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.

Scott Berry - Scott Berry On Behalf of: Jack Alvey, Indiana Municipal Power Agency, 1, 4; - Scott Berry

Answer

No

Document Name

Comment

The GOP is not required to have a cold weather preparedness plan as per requirement R7. The two requirements, R7 and R8, need to be aligned. The GOP should be added to requirement R7, especially when considering that the GOP is very likely the party to operate and maintain the generating unit(s) for the GO.

After fixing the applicability and alignment issue, the requirement for training should be moved to the PER standard family, more than likely in the PER-006 standard. If there is an issue with the SAR for addressing this recommendation, the SAR should be corrected to allow for this training requirement to be included in the proper group of standards.

Likes 1	Wike Jennie On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merre
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Dislikes 0	
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Response

Thank you for your comments. The SDT determined that the GO is responsible for the cold weather preparedness plan pursuant to the responsibilities outlined in the Functional Model and the GOP is responsible to train its staff on the plan. The SDT has revised Requirement R8 to clarify the coordination required between the GO and GOP to implement the training requirement. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.

Erin Green - Western Area Power Administration - 1,6

Answer	No
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Document Name	
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Comment

WAPA supports the comments submitted by BPA.
 Erin Green, WAPA, Segment 6

Likes 0	
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Dislikes 0	
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Response

Please see the SDT's response to BPA.

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer	No
Document Name	
Comment	
<p>AEPC agrees with this revision as applicable to the GO, however we do not agree with inclusion of the GOP in EOP-011. AEPC recommends that the GOP applicability be added as R2 in PER-006. PER-006 is the current standard applicable to the GOP for “Specific Training for Personnel” that we believe meets and fits the intent of this requirement, and furthermore does not add a new/additional Standard for GOP applicability.</p> <p>AEPC has signed on to ACES comments.</p>	
Likes 0	
Dislikes 0	
Response	
<p>Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development. Please see the response to ACES.</p>	
John Babik - JEA - 5	
Answer	No
Document Name	
Comment	
<p>In support of LPPC comments</p>	
Likes 0	
Dislikes 0	
Response	
<p>Please see the SDT’s response to LPPC.</p>	

Joe McClung - JEA - 1	
Answer	No
Document Name	
Comment	
We support LPPC's comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to LPPC.	
LeRoy Patterson - Public Utility District No. 2 of Grant County, Washington - 6	
Answer	No
Document Name	
Comment	
<p>The requirement for each Generator Operator (GOP) or Generator Owner (GO) to provide generating unit-specific training to its maintenance or operations personnel responsible for implementing cold weather preparedness plan(s) annually conflicts with PER-005 requirements that expect training to be task-based with training requirements related to the difficulty, importance, and frequency of each task. In addition, NERC has modified other standards to remove training requirements from individual standards in favor of placing them within PER standards. The EOP-011-2 requirement ignores that effort, which is unfortunate considering PER-006 deals specifically with GO and GOP training expectations. Finally, proposed training requirements deal with cold weather only. Training for all applicable extreme weather events should be included in the requirement, not just cold weather.</p> <p>Place the training requirement in a new PER standard or add it to the PER-006 standard.</p>	
Likes 0	

Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.	
Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro	
Answer	No
Document Name	
Comment	
Thank you for the opportunity to review and comment. BC Hydro supports the comments made by CenterPoint Energy Houston Electric, LLC in regards to the placement of these requirements in a new FAC standard. BC Hydro supports Sacramento Municipal Utility District (SMUD)'s comments in regards to placing the training requirements in PER-006-1.	
Likes	0
Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.	
Lisa Martin - Austin Energy - 6	
Answer	No
Document Name	
Comment	
I support comments made by W. Dwayne Preston, Austin Energy, Segment 3.	
Likes	0

Dislikes	0
Response	
Please see the SDT's response to Dwayne Preston, Auston Energy.	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations	
Answer	No
Document Name	
Comment	
<p>ACES agrees with this revision as applicable to the GO, however we do not agree with inclusion of the GOP in EOP-011. ACES recommends that the GOP applicability be added as R2 in PER-006. ACES recommends that the GOP applicability be added as R2 in PER-006. PER-006 is the current standard applicable to the GOP for "Specific Training for Personnel" that we believe meets and fits the intent of this requirement, and furthermore does not add a new/additional Standard for GOP applicability.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development.	
Glenn Pressler - CPS Energy - 3	
Answer	No
Document Name	
Comment	
<p>No, CPSE supports concerns of LPPC, SMUD, TVA, and others, including being concerned with locating training requirements in a Standard other than the PER suite of standards. While OK with the inclusion of the Cold Weather requirements in EOP-011, we disagree with the inclusion of the training requirement associated with cold weather preparedness in the EOP-011 standard and believe more appropriate</p>	

to be included in the PER suite of training standards. Adding training requirements to other non-training standards creates a condition that makes training requirements hard to find and easy to lose; a condition that is not conducive to a quality standard. Locating training requirements outside of PER Standards is also not following industry precedent, such as the Standards Efficiency Review recommendations and the recent Project 2007-06.2 that moved training requirements from PRC Standards to the new PER-006-1 Standard.

Currently, PER-006 includes training for the GOP and respective plant personnel. A simple fix to this issue is to strike Requirement R8 from the EOP-011 standard and place it into the appropriate PER-006 standard. If PER-006 is not allowed to be modified due to the scope of the SAR, then a new SAR to address this training requirements should be created.

Training requirements for the GO/GOP should be placed into the PER-006 standard. There was a concerted effort a few years ago to have all training requirements within one standard so that Registered Entities would know where to look to find all the requirements associated with training.

New training requirements should be in PER; concerned with placing new training requirements in EOP-011, PER-006 may be a better location.

There is confusion regarding who (GO or GOP) is required to have the plan, who owns the plan and who must train to who's plan when GO/GOP not same entity, nor required under R7.

Likes	0
Dislikes	0
Response	
Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development. The SDT has revised Requirement R8 to clarify the intent of the training.	
Dennis Sismaet - Northern California Power Agency - 6	
Answer	No
Document Name	
Comment	

NERC should not create a reliability standard that applies to all regional entities. Since cold weather is geographic specific, NERC should let the regional entities decide how best to implement any cold weather regional standards specific to their geographic area. For example, in California, there are no cold weather issues that other parts of the country are facing.

Also, requiring GO/GOP Market participants to perform activities that non-registered generator market participants do not have to perform, nor pay for, runs afoul with NERC Market Interference Principles., namely: "A reliability standard shall not give any market participant an unfair competitive advantage".

Likes 0

Dislikes 0

Response

Thank you for your comment. FERC recommended industry wide requirements. The SDT recommends you approach the appropriate Regional Entity with your request for a regional standard. The proposed standards are applicable to all BES generation and the SDT doesn't agree that the proposed standards violate NERC Market Interface Principles in the manner of which you reference.

Gladys DeLaO - CPS Energy - 1

Answer

No

Document Name

Comment

No, CPSE supports concerns of, SMUD, TVA, and others, including being concerned with locating training requirements in a Standard other than the PER suite of standards. While OK with the inclusion of the Cold Weather requirements in EOP-011, we disagree with the inclusion of the training requirement associated with cold weather preparedness in the EOP-011 standard and believe more appropriate to be included in the PER suite of training standards. Adding training requirements to other non-training standards creates a condition that makes training requirements hard to find and easy to lose; a condition that is not conducive to a quality standard. Locating training requirements outside of PER Standards is also not following industry precedent, such as the Standards Efficiency Review recommendations and the recent Project 2007-06.2 that moved training requirements from PRC Standards to the new PER-006-1 Standard.

Currently, PER-006 includes training for the GOP and respective plant personnel. A simple fix to this issue is to strike Requirement R8 from the EOP-011 standard and place it into the appropriate PER-006 standard. If PER-006 is not allowed to be modified due to the scope of the SAR, then a new SAR to address this training requirements should be created.

Training requirements for the GO/GOP should be placed into the PER-006 standard. There was a concerted effort a few years ago to have all training requirements within one standard so that Registered Entities would know where to look to find all the requirements associated with training.

New training requirements should be in PER; concerned with placing new training requirements in EOP-011, PER-006 may be a better location.

There is confusion regarding who (GO or GOP) is required to have the plan, who owns the plan and who must train to who's plan when GO/GOP not same entity, nor required under R7.

Likes 0

Dislikes 0

Response

Thank you for your comments. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development. The SDT has revised Requirement R8 to clarify the intent of the training.

Michael Whitney - Northern California Power Agency - 3, Group Name NCPA

Answer No

Document Name

Comment

See Marty Hostler's comments.

Likes 0

Dislikes 0

Response	
Please see the SDT's response to Marty Hostler.	
Amy Jones - Public Utility District No. 2 of Grant County, Washington - 1,4,5,6	
Answer	No
Document Name	
Comment	
<p>Changes to requirements 1 and 2 single out cold weather conditions from other extreme weather events. This creates additional effort, tracking, and training for Balancing Authorities and Transmission Operators without providing benefit since determining reliability concerns and impacts provide reliability benefit only to the extent conditions, cold weather or otherwise, are beyond those normally or routinely encountered. Similarly, adding requirement 7 for GOs should relate to extreme weather conditions, of which cold weather is one aspect to be considered. Data sharing requirements of R7 appear useful, but should include generator equipment that may be affected by all applicable extreme weather events not just cold weather.</p> <p>As presently worded, changed requirements cause entities that already deal with ongoing cold weather conditions to produce plans, tracking processes, training, etc. for routine and/or annual events rather than focusing on consequences of extreme events.</p> <p>Regarding training, the requirement for each Generator Operator (GOP) or Generator Owner (GO) to provide generating unit-specific training to its maintenance or operations personnel responsible for implementing cold weather preparedness plan(s) annually conflicts with PER-005 requirements that expect training to be task-based with training requirements related to the difficulty, importance, and frequency of each task. In addition, NERC has modified other standards to remove training requirements from individual standards in favor of placing them within PER standards. The EOP-011- 2 requirement ignores that effort, which is unfortunate considering PER-006 deals specifically with GO and GOP training expectations. Finally, proposed training requirements deal</p>	

with cold weather only. Training for all applicable extreme weather events should be included in the requirement, not just cold weather.

Likes 0

Dislikes 0

Response

Thank you for your comments. The scope of the SAR is limited to cold weather and is consistent with the FERC recommendations contained in the FERC\NERC report. The SDT will forward your suggestion for including all extreme weather in preparation plans to NERC for further review. Given the timeframe and questions regarding the scope of the SAR, the SDT will forward your comments regarding the PER standards onto NERC for further consideration and development. The SDT has revised Requirement R8 to clarify the intent of the training.

Kendra Buesgens - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer

Yes

Document Name

Comment

The NSRF agrees with splitting out the training requirement in R7 to R8.

Likes 0

Dislikes 0

Response

Thank you for your support.

Larry Heckert - Alliant Energy Corporation Services, Inc. - 4

Answer

Yes

Document Name

Comment

Alliant Energy supports the comments submitted by the MRO NSRF.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Brian Evans-Mongeon - Utility Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
<p>With the 'or' language within Requirement R8 (i.e. Generator Operator or Generator Owner), when the GOP and GO functional registrations are not both retained by one registered entity, the responsibility for who must implement training is not clearly defined and may lead to missed compliance obligations.</p> <p>Suggest looking at TPL-007-4 R1 language that describes a way for multiple functional registrations to determine responsibilities (i.e. "Each PC in conjunction with its TP shall identify the individual and joint responsibilities..."). Proposed EOP-011 R8 language:</p> <p>Each Generator Operator in conjunction with its Generator Owner shall identify the organization responsible for providing the generating unit-specific training, and that identified entity shall provide the training to its maintenance or operations personnel, as needed, for the implementation of the cold weather preparedness plan(s).</p>	
Likes	2
Dislikes	0
City Utilities of Springfield, Missouri, 4, Allen John; Taunton Municipal Lighting Plant, 1, Tremont Devon	
Response	

Thank you for your support. The SDT has revised Requirement R8 to clarify the intent and has incorporated language similar to your suggested change.

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer Yes

Document Name

Comment

The NSRF agrees with splitting out the training requirement in R7 to R8.

Likes 0

Dislikes 0

Response

Thank you for your support.

Donald Lock - Talen Generation, LLC - 5

Answer Yes

Document Name

Comment

R8 does not say whether training is a one-time obligation or must be renewed each year. If annual refresher training is intended the standard should say so.

Likes 0

Dislikes 0

Response

Thank you for your support. The SDT voted to include further clarification on the timing of training requirements in the Implementation Guidance.

Julie Hall - Entergy - 6, Group Name Entergy	
Answer	Yes
Document Name	
Comment	
Entergy agrees with the recommendation but suggests the inclusion of “Each Generator Operator and/or Generator Owner” to clarify the applicability to both the GO and the GOP. Perhaps additional clarity is needed to suggest entities collaborate when they are not both a GO and GOP.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support. The SDT revised Requirement R8 to clarify the intent.	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
N/A.	
Likes 0	
Dislikes 0	
Response	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
Answer	Yes

Document Name	
Comment	
MPC supports MRO NERC Standards Review Forum comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to MRO NSRF.	
Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company	
Answer	Yes
Document Name	
Comment	
Southern Company supports this change to EOP-011.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support.	
Martin Sidor - NRG - NRG Energy, Inc. - 6	
Answer	Yes
Document Name	
Comment	

<p>NRG Energy agrees with the addition of R8 to train personnel to implement cold-weather preparedness plans. The location of the training requirement in EOP-011 is acceptable, providing a direct link to R7 for content.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your support.</p>	
<p>Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion</p>	
Answer	Yes
Document Name	
Comment	
<p>If tasks that are performed by maintenance personnel within a "cold weather plan" are the same as daily/routine tasks, however on specific components, would additional "specific" training be required per this Requirement or would the regular training evidence be sufficient?</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT believes the responsible entity is in the best position to decide which training to provide to meet the basic requirements.</p>	
<p>Patricia Lynch - NRG - NRG Energy, Inc. - 5</p>	
Answer	Yes
Document Name	
Comment	

<p>NRG Energy agrees with the addition of R8 to train personnel to implement cold-weather preparedness plans. The location of the training requirement in EOP-011 is acceptable, providing a direct link to R7 for content.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your support.</p>	
<p>Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1</p>	
Answer	Yes
Document Name	
Comment	
<p>MEC supports the MRO NSRF comments.</p>	
Likes	0
Dislikes	0
Response	
<p>Please see the SDT's response to MRO NSRF.</p>	
<p>Meaghan Connell - Public Utility District No. 1 of Chelan County - 5, Group Name CHPD</p>	
Answer	Yes
Document Name	
Comment	
<p>CHPD agrees with moving the generator unit-specific training from Requirement R7 and placing it in the new Requirement R8. CHPD however believes the use of "or" in the statement "shall provide generating unit-specific training to its maintenance OR operations</p>	

personnel responsible for implementing cold weather preparedness plan(s)” causes confusion as to what the compliance obligation is if an entity is both registered as a Generator Owner and Generator Operator and implies there is a choice of who is trained.

Likes 0

Dislikes 0

Response

Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent.

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer

Yes

Document Name

Comment

The NAGF agrees with placement of the generator unit-specific training Requirement R8 in the EOP-11 standard.

Likes 0

Dislikes 0

Response

Thank you for your support.

Joshua Andersen - Salt River Project - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

SRP agrees it should be the GO's responsibility to ensure the facilities are reaonably prepared for expected cold weather for the facility. SRP also agrees that it may be the GO or GOP's that are best situated to be the ones to activate cold weather preparations.

Likes	0
Dislikes	0
Response	
Thank you for your support.	
Jennifer Flandermeyer - Jennifer Flandermeyer On Behalf of: Allen Klassen, Evergy, 6, 1, 3, 5; Derek Brown, Evergy, 6, 1, 3, 5; Marcus Moor, Evergy, 6, 1, 3, 5; Thomas ROBBEN, Evergy, 6, 1, 3, 5; - Jennifer Flandermeyer	
Answer	Yes
Document Name	
Comment	
While we agree with the training requirement, the additional change in R7 (also included in IRO-010) specifically 7.3 requires additional discussion and consideration to effectively accomplish the best approach. Agree with the need and pressure to address, however, it is complex and shouldn't be pushed through last minute without due consideration.	
Likes	0
Dislikes	0
Response	
Thank you for your support and comments. The SDT has discussed and give due consideration to yours and other entities comments. 7.3 was added to provide additional clarity/framework around the phrase "operating limitations", using existing language from EOP-011.	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	

Xcel Energy agrees with the new training Requirement and the close proximity to R7. Including this training Requirement in PER-006 may not adequately address the specific nature of the training.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Jamie Johnson - California ISO - 2	
Answer	Yes
Document Name	
Comment	
The California ISO agrees with comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to ISO/RTO Counsel Standards Review Committee.	
Bobbi Welch - Midcontinent ISO, Inc. - 2	
Answer	Yes
Document Name	
Comment	
MISO supports comments submitted by the ISO/RTO Council Standards Review Subcommittee (IRC SRC). In addition, we are submitting additional comments on behalf of MISO as an individual entity.	

With regard to placement of the requirement, i.e. whether in **EOP-011-2: Emergency Preparedness and Operations** or **PER-006-1: Specific Training for (Generator Operator) Personnel**, MISO is neutral.

Enhance the training requirement to clarify accountability and specify a periodicity to ensure awareness and preparedness of generator personnel - MISO believes it is more important to focus on the content of the training requirement as opposed to the placement of the requirement. To that end, we recommend the following changes to clarify accountability and require a periodicity in training as we believe the proposed requirement does not go far enough in these areas:

1. Clarify Accountability for Performing Training - As proposed, requirement R8 applies to the Generator Operator (GOP) *or* Generator Owner (GO) but not both (as this would require the use of “*and*”). This leaves the door open to only one of the GO/GOP functions having to provide training to its maintenance *or* operations personnel but not both (as this would require the use of “*and*”). Typically, maintenance and operations are separate functions where maintenance is the function of the GO and operations the function of the GOP. Therefore, to ensure applicability to each function, MISO recommends the requirement be modified to be inclusive of all functions whereby use of the word “its” limits applicability to employees of the relevant function.

2. Require a Periodicity for Preparedness Plan Training – As proposed, requirement R8 only requires the GO or GOP to perform training on preparedness plans one time. Over time, this could result in generator personnel falling out of familiarity and not being apprised of revisions to preparedness plans. To remedy this, MISO recommends the training be performed annually similar to the inspection and maintenance of freeze protection measures as required under Part 7.2.

Recommendation: Revise the language to read as follows

R8. Each Generator Operator *and* Generator Owner shall provide *annual* generating unit-specific training to its maintenance *and* operations personnel responsible for implementing cold weather preparedness plan(s). [Violation Risk Factor: Medium] [Time Horizon: Longterm Planning, Operations Planning]

Likes	0
Dislikes	0

Response

Thank you for your support. The SDT voted to include further clarification on the timing/periodicity of training requirements in the Implementation Guidance. Additionally, the SDT revised Requirement R8 to clarify accountability and intent.

David Jendras - Ameren - Ameren Services - 3	
Answer	Yes
Document Name	
Comment	
<p>Ameren generally agrees with the SDT's recommendation but has some comments. Since changes are being made to both standards, an error in one standard could lead to an error in another standard, which doesn't make much sense and seems repetitive.</p> <p>Ameren would like to know what is going to be done with all the data that needs to be collected. If the data is not being used for a specified purpose why does it need to be collected?</p> <p>Ameren would like to know how the potential conflict would be resolved if the data is requested but the GOP isn't required to send it and denies the request?</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your support. The SDT believes that the RC/BA/TOP function will utilize the data provided pursuant to the data specifications in its planning and real-time assessment consistent with the standards. Pursuant to the standards, the GOP is required to provide the specified data to the RC/BA/TOP. Any conflicts would be resolved pursuant to the process to resolve other data specification issues.</p>	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	Yes
Document Name	
Comment	

As much as we would like to see all training related requirements in the PER standard family, we understand why the Standards Drafting Team chose its placement in EOP-011 R8.	
Likes	0
Dislikes	0
Response	
Thank you for your support. The SDT is forwarding the PER issue to NERC for further consideration and development.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee No Dominion	
Answer	Yes
Document Name	
Comment	
<p>With the 'or' language within Requirement R8 (i.e. Generator Operator or Generator Owner), when the GOP and GO functional registrations are not both retained by one of the registered entities, the responsibility for who must implement training is not clearly defined and may lead to missed compliance obligations.</p> <p>Suggest looking at TPL-007-4 R1 language that describes a way for multiple functional registrations to determine responsibilities (i.e. "Each PC in conjunction with its TP shall identify the individual and joint responsibilities..."). Proposed EOP-011 R8 language:</p> <p>Each Generator Operator in conjunction with its Generator Owner shall identify the organization responsible for providing the generating unit-specific training, and that identified entity shall provide the training to its maintenance or operations personnel, as needed, for the implementation of the cold weather preparedness plan(s).</p>	
Likes	0
Dislikes	0
Response	

Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent using vernacular similar to your suggestion.

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

Answer Yes

Document Name

Comment

EEl supports the proposed changes to EOP-011-2 R7.

Likes 0

Dislikes 0

Response

Thank you for your support.

Devon Tremont - Taunton Municipal Lighting Plant - 1

Answer Yes

Document Name

Comment

The Taunton Municipal Lighting Plant supports the comments submitted by Utility Services, Inc., which state:

With the ‘or’ language within Requirement R8 (i.e. Generator Operator or Generator Owner), when the GOP and GO functional registrations are not both retained by one registered entity, the responsibility for who must implement training is not clearly defined and may lead to missed compliance obligations.

Suggest looking at TPL-007-4 R1 language that describes a way for multiple functional registrations to determine responsibilities (i.e. “Each PC in conjunction with its TP shall identify the individual and joint responsibilities...”). Proposed EOP-011 R8 language:

Each Generator Operator in conjunction with its Generator Owner shall identify the organization responsible for providing the generating unit-specific training, and that identified entity shall provide the training to its maintenance or operations personnel, as needed, for the implementation of the cold weather preparedness plan(s).

Likes 0

Dislikes 0

Response

Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent using vernacular similar to your suggestion.

George Brown - Acciona Energy North America - 5

Answer Yes

Document Name

Comment

Acciona Energy USA Global, LLC (Acciona) would like to suggest the following requirement language.

R8. Each Generator Operator or Generator Owner shall provide generating unit-specific training on its cold weather preparedness plan(s) developed in Requirement R7 to its maintenance or operations personnel responsible for implementing cold weather preparedness plan(s).

Likes 0

Dislikes 0

Response

Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent using vernacular similar to your suggestion.

Shannon Ferdinand - Capital Power Corporation - 5 - MRO,WECC,Texas RE,SERC

Answer Yes

Document Name

Comment	
R7 only requires a GO to develop and implement a cold weather preparedness plan. For consistency, R7 should be revised to include GOP OR R8 should be revised to only exclude GOP.	
Likes	0
Dislikes	0
Response	
Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent. The SDT determined that the GO is the correct entity to prepare the cold weather preparedness plan and so Requirement R7 remains only applicable to the GO.	
Daniel Gacek - Exelon - 1	
Answer	Yes
Document Name	
Comment	
Exelon supports the proposed changes to EOP-011-2 R7 and the creation of R8.	
Submitted on behalf of Exelon, Segments 1, 3, 5, 6	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Constantin Chitescu - Ontario Power Generation Inc. - 5	
Answer	Yes
Document Name	

Comment	
OPG supports NPCC RSC's comments.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	
ERCOT agrees with the addition of GOPs to the functional entities responsible for training.	
With respect to the current draft revisions to EOP-011-2, Requirement R7, Part 7.3, ERCOT suggests switching "operating limitations" in Part 7.3.1 with "capability and availability" in Part 7.3.1.1. because "capability and availability" are determined by operating limitations, fuel supply, environmental constraints, etc. ERCOT views "operating limitations" as one of the factors that determines "capability and availability," not the other way around.	
Likes	0
Dislikes	0
Response	
Thank you for your support. Thank you for your support. In light of the support received for the language during this posting, and the determination by the SDT that your proposed language would be a substantive change, the SDT determined not to include it. The SDT has forwarded your recommendations to NERC for consideration in future projects.	
Gul Khan - Gul Khan On Behalf of: Lee Maurer, Oncor Electric Delivery, 1; - Gul Khan	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Laura Nelson - Laura Nelson	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes	0
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Kathleen Goodman - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thomas Foltz - AEP - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Jamie Monette - Allete - Minnesota Power, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Anthony Jablonski - ReliabilityFirst - 10	
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	
Keith Jonassen - Keith Jonassen On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Keith Jonassen	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Michael Dillard - Austin Energy - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jun Hua - Austin Energy - 4	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Aidan Gallegos - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dan Roethemeyer - Vistra Energy - 5	
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	
James Baldwin - Lower Colorado River Authority - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jamison Cawley - Nebraska Public Power District - 1	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Elizabeth Davis - Elizabeth Davis On Behalf of: Tom Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	

Answer	
Document Name	
Comment	
<p>Texas RE agrees with adding a specific training requirement. Texas RE recommends adding a more specific part to document the roles and responsibilities of the personnel. Additionally, there should be a periodicity for personnel to receive training on the cold weather preparedness plan as well as a provision that training be conducted prior to the winter season. Texas RE notes that the 2019 FERC and NERC Staff Report on the South Central United States Cold Weather BES Event of January 18, 2018 (“2019 Cold Weather Event Report”) mentions in several places the importance of training and states training should be done annually (page 135).</p> <p>Additionally, Texas RE is concerned that Requirement R8 requires training for the GOP <i>or</i> GO for its maintenance <i>or</i> operations personnel. As the requirement is written, an entity can choose to train the GOP or GO but is not explicitly required to train both. In Texas RE’s experience, GOP personnel should understand the GOs’ cold weather preparedness plans and a requirement specifying training for appropriate personnel for both functions is appropriate.</p>	
Likes 0	
Dislikes 0	
Response	
<p>Thank you for your support. The SDT has revised Requirement R8 to further clarify the intent. The SDT voted to include additional clarification on timing/periodicity of training within the Implementation Guidance.</p>	
Kenya Streeter - Edison International - Southern California Edison Company - 1,3,5,6	
Answer	
Document Name	
Comment	
<p>See comments submitted by Edison Electric Institute</p>	
Likes 0	

Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Neil Shockey - Edison International - Southern California Edison Company - 5	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Romel Aquino - Edison International - Southern California Edison Company - 3	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	

2. In response to comments from the first posting, the SDT added cold weather data specification requirements for the BA within TOP-003, similar to what is required of the RC and TO. Do you agree with the inclusion of these requirements in the TOP-003 standard? If you do not agree, please provide an alternative to address the comments. If you agree but have comments or suggestions on the SDT's recommendation, please provide your explanation and suggested language.

Amy Jones - Public Utility District No. 2 of Grant County, Washington - 1,4,5,6

Answer	No
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Document Name	
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Comment

IRO-010-4 Comments

The added sub-requirement singles out cold weather conditions only rather than making cold weather one of several possible extreme weather events, which could benefit by providing Reliability Coordinators with additional information.

TOP-003-5 Comments

The added sub-requirements single out cold weather conditions only rather than making cold weather one of several possible extreme weather events, which could benefit by providing Balancing Authorities and Transmission Operators with additional information.

Likes	0
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Dislikes	0
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Response

Thank you for your comment. Given the scope of the SAR, the SDT is unable to address readiness plans for all types of extreme weather; however, the issue will be forwarded to NERC for further review.

Michael Whitney - Northern California Power Agency - 3, Group Name NCPA

Answer	No
Document Name	
Comment	
See Marty Hostler's comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to Marty Hostler.	
Gladys DeLaO - CPS Energy - 1	
Answer	No
Document Name	
Comment	
No, CPSE does not agree and in general supports the responses by NCPA, Seattle, and Reclamation recommends.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to NCPA and Reclamation.	
Dennis Sismaet - Northern California Power Agency - 6	
Answer	No
Document Name	
Comment	

NERC Standards already allow registered entities to ask for this data if they need it.

Requiring entities to request specific data they may not need, use, or have any awareness training on how to use adds expense and administrative burden to all GO/GOPs and has no value.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Glenn Pressler - CPS Energy - 3

Answer

No

Document Name

Comment

CPSE does not agree and in general and supports the responses by NCPA, Seattle, and Reclamation.

Likes 0

Dislikes 0

Response

Please see the SDT's response to NCPA, Seattle, and Reclamation.

LeRoy Patterson - Public Utility District No. 2 of Grant County, Washington - 6

Answer

No

Document Name

Comment

<p>Adding the BA is acceptable, but the added sub-requirements single out cold weather conditions only rather than making cold weather one of several possible extreme weather events, which could benefit by providing Balancing Authorities and Transmission Operators with additional information.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT doesn't disagree with your premise; however, the SDT is limited to cold weather by the project's scope. The issue will be forwarded to NERC for further review.</p>	
David Jendras - Ameren - Ameren Services - 3	
Answer	No
Document Name	
Comment	
<p>Ameren would like to know what is going to do be done with the data collected? Why does this need to be added to TOP, and what are they expecting them to do with that info? Why would we want to have the info if it doesn't serve a purpose? Why should TO collect it if RC already has it?</p>	
Likes	0
Dislikes	0
Response	
<p>The SDT believes that the RC/BA/TOP function will utilize the data provided pursuant to the data specifications in its planning and real-time assessment consistent with the standards. The project scope includes the addition of the TOP and industry has supported the inclusion.</p>	
Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	No

Document Name	
Comment	
<p>Reclamation recommends TOP-003 R1.3 be revised to include the word “status” to align with TOP-003 R2.3.</p> <p>Important questions have arisen in the industry about what the BA will do with the referenced data. Reclamation is concerned about the required collection of a substantial amount of data coupled with the unidentified purpose for which it is to be used. For example, there have already been modeling standards that resulted in delivery of data that the recipient was not using in any way, creating a regulatory burden for all involved parties with no reliability benefit. Reclamation recommends all requirements should directly support or improve BES reliability and the reliability purpose of all requirements should be readily ascertainable. Requirements should not be imposed that have no identifiable reliability benefit.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT believes that the RC/BA/TOP function will utilize the data provided pursuant to the data specifications in its planning and real-time assessment consistent with the standards.</p>	
Marty Hostler - Northern California Power Agency - 3,4,5,6	
Answer	No
Document Name	
Comment	
<p>NO. Requiring entities to request specific data they may not need, use, or have any awareness training on how to use adds expense and administrative burden to all GO/GOPs and has no value.</p>	
Likes	0
Dislikes	0
Response	

Thank you for your comment. The SDT believes that the RC/BA/TOP function will utilize the data provided pursuant to the data specifications in its planning and real-time assessment consistent with the standards, which will benefit their awareness during cold weather.

Glen Farmer - Avista - Avista Corporation - 5

Answer No

Document Name

Comment

Having a cold weather plan should be enough from a regulatory point. Reaching to far into the business.

Likes 0

Dislikes 0

Response

Thank you for your comment.

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

Answer No

Document Name

Comment

Dominion Energy fully supports addressing cold weather planning and communication but has concerns over some of the recent additions to the proposed changes to the Standards. Adding requirements requiring the GO/GOP to put fuel supply in its cold weather preparedness plan is not within the scope of the project. The SAR is very specific that communication regarding fuel constraints in operations during cold weather is in scope, but the suggested language places requirements far beyond communication on the GO/GOP. A number of fuel supplies for various types of generators are real-time, for example gas, wind and solar. Asking a GO/GOP to include fuel supply in its cold weather plan is extremely problematic as the fuel supply is dependent on either nature, which changes with little warning, or on a third party supplier (i.e. gas) that does not necessarily communicate or even know about supply issues to generators on the planning horizon. The SAR for this project is about communicating capabilities and expanding the scope to items such as fuel supply

should not occur. Dominion Energy recommends striking the language in the existing standard addressing BA operational plans accounting for fuel supply from the proposed additions.

Likes 0

Dislikes 0

Response

Thanks for your comment. As stated in the previous team meetings and on the webinar, the SDT believes that the inclusion of standards that promotes the GO/GOP/RC/BA/TOP awareness of fuel availability issues and potential constraints during cold weather will benefit reliability and is within the scope of the SAR. As per the proposed Implementation Guidance, the standards relate to data and are not a resource adequacy or must-sun requirement.

Rich Hydzik - Rich Hydzik On Behalf of: Scott Kinney, Avista - Avista Corporation, 3, 5, 1; - Rich Hydzik

Answer

No

Document Name

Comment

If the request specified under TOP-003 includes generators, why is that different than any other cold weather effects on any BES equipment? Reasonably, if the BA requests data on generator cold weather performance, should the TOP request data on SF6 breaker tank heater performance? It is assumed that a generator owner or operator has some idea as to whether the facility will operate in extreme cold and that awareness is reflected in its availability or schedule to operate.

Likes 0

Dislikes 0

Response

Thank you for your comment. The FERC\NERC report stipulates which types of information should be included in the data specification and the SDT decided not to expand on those minimal requirements for purposes of a nation-wide standard. The SDT team believes the generator's winter preparedness plan should be the place where the GO may address the concerns expressed in the comment (e.g., freeze protection measures), but the SDT declines to expand the data specification requirements as currently written.

Julie Hall - Entergy - 6, Group Name Entergy	
Answer	No
Document Name	
Comment	
<p>Entergy does not agree with this inclusion. As was expressed in the first round of comments, Entergy also does not agree with the inclusion of cold weather-specific generation data as proposed for R1.3. This applies to the proposed R2.3 as well. It should be left up to the individual BA to request additional data as system conditions dictate.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. As noted, the proposed standards are in response to the recommendations contained in the FERC\NERC report.</p>	
Chris Wagner - Santee Cooper - 1, Group Name Santee Cooper	
Answer	No
Document Name	
Comment	
<p>The requirements in TOP-003 R1.3 should be removed. Can the SDT explain how a TOP should be using this data? A TOP does not need this data to perform its OPA. We agree that these should be included in TOP-003 R2.3 for a BA.</p>	
Likes	0
Dislikes	0
Response	

Thank you for your comments. The TOP was added as a party to receive information during the development of the SAR and has been supported by industry. The TOP will utilize the data in its planning and operations as appropriate.

Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

Duke Energy supports the following NAGF comment:

“The NAGF requests clarification regarding Requirement R7.3.1.2 “fuel supply and inventory concerns”. The data to be provided is not so much concerns but has to be actionable/usable for planning models and real-time operations. Generating facility NG pipeline pressure trip limit, % of contract firm gas supply, number of run hrs available on alternate/backup fuel, river flow with current/anticipated ice conditions, and available battery storage MW/Hrs are far more usefull than “concerns”.”

Likes 0

Dislikes 0

Response

Please see the SDT’s response to NAGF.

Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC

Answer No

Document Name

Comment

Seattle understands the desire the create a continental standard but remains concerned about the “one-size-fits-all” nature of the data specification language of TOP-003 R1.3 and R2.3, and suggests the following change (in CAPS):

R1.3 (and R2.3) Provisions for notification of BES generating unit(s) status during local forecasted cold weather to include, AS APPROPRIATE:

The reasoning for this change is to allow reasonable flexibility to accommodate the relevant information while avoiding administrative burden and trivia for the wide variety of generation units across North America. The vast majority of units are incapable of fuel switching, for instance, including nuclear, hydroelectric, wind, and solar, among others. Seasonal irrigation-based hydroelectric units that do not operate during winter months (due to lack of irrigation flow) represent another category about which detailed cold weather information may be un-useful to anyone and burdensome to acquire and maintain.

Likes 0

Dislikes 0

Response

Thank you for your comment. Consistent with the recommendations contained in the FERC\NERC report, the SDT drafted the standards to be applicable to BES generation and contain a consistent approach to data specification between the GO/GOP and the RC/BA/TOP for use in their planning analysis processes.

Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2

Answer

Yes

Document Name

Comment

ERCOT agrees with the inclusion of these requirements in TOP-003.

Similar to its comments in connection with EOP-011-2, with respect to TOP-003, Requirement R1, Part 1.3.1, ERCOT suggests switching “operating limitations” in Part 1.3.1 with “capability and availability” in Part 1.3.1.1. because “capability and availability” are determined by operating limitations, fuel supply, environmental constraints, etc. ERCOT views “operating limitations” as one of the factors that determines “capability and availability,” not the other way around.

With respect to TOP-003, Requirement R1, Part 1.3.2, and Requirement R2, Part 2.3.2, ERCOT suggests revising this to require the data specification to include a generating unit minimum operating temperature that is based on design specification, historical performance, or other engineering analysis.

The language would read as follows:

1.3.2 Generating unit minimum operating temperature based on:

1.3.2.1 design specification; or

1.3.2.2 historical performance; or

1.3.2.3 engineering analysis.

Likes	0
Dislikes	0

Response

Thank you for your comment. The SDT has revised EOP-011 and TOP-003 requirements in a manner that may partly address your concerns.

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer	Yes
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Document Name	
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Comment

OPG supports NPCC RSC's comments.

Likes	0
Dislikes	0

Response

Thanks you for your support and see response to RSC.	
Daniel Gacek - Exelon - 1	
Answer	Yes
Document Name	
Comment	
Exelon supports the changes made to TOP-003.	
Submitted on behalf of Exelon, Segments 1, 3, 5, 6	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations	
Answer	Yes
Document Name	
Comment	
ACES agrees with the inclusion of these revisions in TOP-003, but does have concerns over the term “local forecasted cold weather,” which has not been defined and could become a burden for any entity over a large geographical area and/or within multiple Regional Entity, BA, TOP, and/or RC zones. Additionally, the revisions do not address the difference in “cold weather” unit parameters for units that are online versus offline, and how that data would be captured and implemented.	
Likes	0
Dislikes	0
Response	

Thank you for your support. The SDT will forward your concerns onto NERC for review.	
Devon Tremont - Taunton Municipal Lighting Plant - 1	
Answer	Yes
Document Name	
Comment	
<p>The Taunton Municipal Lighting Plant supports the comments submitted by Utility Services, Inc., which state:</p> <p>With the 'generator data specification' Requirement language in IRO-010 and TOP-003 the same for the RC/BA/TOP; which data specification the GO should follow and incorporate into their cold weather preparedness plan may be unclear.</p> <p>Suggest modifying EOP-011 R7.3 to clarify which data specification should be utilized:</p> <p>"7.3. Generating unit(s) cold weather data (from the RC, BA, or TOP data specification as needed), to include:"</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT determined to include in the GO plan the exact same vernacular that is included in the data specifications.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	Yes
Document Name	
Comment	
EEI supports the changes made to TOP-003 aligning the data requirements for local forecasted cold weather for TOs and BAs.	
Likes	0

Dislikes	0
Response	
Thank you for your support.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee No Dominion	
Answer	Yes
Document Name	
Comment	
<p>With the 'generator data specification' Requirement language in IRO-010 and TOP-003 the same for the RC/BA/TOP; which data specification the GO should follow and incorporate into their cold weather preparedness plan may be unclear.</p> <p>Suggest modifying EOP-011 R7.3 to clarify which data specification should be utilized:</p> <p>7.3. Generating unit(s) cold weather data (from the RC, BA, or TOP data specification, as needed), to include:....</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT determined to include in the GO plan the exact same vernacular that is included in the data specifications.	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	Yes
Document Name	
Comment	

We agree with the inclusion of the cold weather data specification requirements for the BA in the TOP-003 standard.	
Likes	0
Dislikes	0
Response	
Thank you for your comment.	
Bobbi Welch - Midcontinent ISO, Inc. - 2	
Answer	Yes
Document Name	
Comment	
<p>MISO supports comments submitted by the ISO/RTO Council Standards Review Subcommittee (IRC SRC). In addition, we are submitting additional comments on behalf of MISO as an individual entity.</p> <p>Process improvement opportunity regarding the placement of cold weather data requirements - MISO believes it is appropriate to include the day-ahead, current day and real-time aspects of the cold weather data requirements in IRO-010 and TOP-003; i.e. IRO-010-4, Parts 1.3.1.1 (operating capability and availability) and 1.3.1.2 (fuel supply and inventory concerns).</p> <p>Recommendation: The balance of proposed cold weather data requirements; e.g. fuel switching capabilities, environmental constraints, minimum design temperature, minimum historical operating temperature and engineering analysis to determine minimum cold weather temperature, are more static in nature and may better reside in another NERC standard.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT determined to only make non-substantive changes to the standards in order to preserve the positive ballot received; however, the SDT will forward your comment to NERC for further consideration.	

Jamison Cawley - Nebraska Public Power District - 1	
Answer	Yes
Document Name	
Comment	
The requirement for information related to cold weather is appropriate for the BA and RC data specifications, but not appropriate that the TOP should have these same requirements. Suggest removing R1.3. from the proposed TOP-003 requirements.	
Likes 0	
Dislikes 0	
Response	
Thanks you for your comment. Based on feedback from industry during development of the SAR and previous draft standards, the TOP is included as an entity that would benefit from receiving the cold weather information.	
Jamie Johnson - California ISO - 2	
Answer	Yes
Document Name	
Comment	
The California ISO agrees with comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comments. Please see response to SRC.	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC	
Answer	Yes

Document Name	
Comment	
Xcel Energy agrees with the inclusion of the requirements in TOP-003 and feels they align with IRO-010 and EOP-011. However, we do suggest modifications to R1.3 and R2 to add clarity to who is supposed to notify who.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support and comment. The SDT has previously discussed this issue and determined that the RC/BA/TOP all should receive the information and should communicate via a data specification to the appropriate entity, as determined by the RC/BA/TOP.	
Jennifer Flandermeyer - Jennifer Flandermeyer On Behalf of: Allen Klassen, Evergy, 6, 1, 3, 5; Derek Brown, Evergy, 6, 1, 3, 5; Marcus Moor, Evergy, 6, 1, 3, 5; Thomas ROBBEN, Evergy, 6, 1, 3, 5; - Jennifer Flandermeyer	
Answer	Yes
Document Name	
Comment	
Evergy endorses the EEI comments submitted in this comment period.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1	
Answer	Yes
Document Name	

Comment	
<p>AEPC agrees with the inclusion of these revisions in TOP-003, but does have concerns over the term “local forecasted cold weather,” which has not been defined and could become a burden for any entity over a large geographical area and/or within multiple Regional Entity, BA, TOP, and/or RC zones. Additionally, the revisions do not address the difference in “cold weather” unit parameters for units that are online versus offline, and how that data would be captured and implemented.</p> <p>AEPC has signed on to ACES comments.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your support.</p> <p>Joshua Andersen - Salt River Project - 1,3,5,6 - WECC</p>	
Answer	Yes
Document Name	
Comment	
<p>SRP agrees tha cold weather data requests from the TO and BA are best situated in the TOP-003 Standard. SRP sees that the existing standard provides the mechanism for those entities to gather the data without being expressing required to do so. Adding the requirement that GOs implement and maintain specific cold weather plans with specific requirements adds a burden to the GO and GOP that may not have reliability impacts. Sufficient unit capabilities should already be gathered with the existing data request in TOP-003, if not then it may be a shortcoming with the entities making the request.</p>	
Likes	0
Dislikes	0
Response	

Thank you for your comment. The implementation of cold weather plans by BES generation was a specific recommendation from the FERC\NERC report.

Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF

Answer Yes

Document Name

Comment

The NAGF agrees with the inclusion of the cold weather data specification requirements for the BA in the TOP-003 standard.

Likes 0

Dislikes 0

Response

Thank you for your support.

Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1

Answer Yes

Document Name

Comment

MEC supports the MRO NSRF comments.

Likes 0

Dislikes 0

Response

Please see the SDT's response to MRO NSRF.

Paul Mehlhaff - Sunflower Electric Power Corporation - 1

Answer	Yes
Document Name	
Comment	
Sunflower agrees with the comments ACES provided for question 2.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to ACES.	
Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC	
Answer	Yes
Document Name	
Comment	
No additional comments	
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	

Southern Company supports this change to TOP-003.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
Answer	Yes
Document Name	
Comment	
MPC supports MRO NERC Standards Review Forum comments.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
N/A.	
Likes	0

Dislikes	0
Response	
Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF, Group Name SIGE Project 2019-06	
Answer	Yes
Document Name	
Comment	
The inclusion of the requirements for the BA in TOP-003 aligns with the recommendations made in the 2019 FERC and NERC Staff Report and with the purpose of this Project 2019-06.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Ben Burnett - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	
The inclusion of the requirements for the BA in TOP-003 aligns with the recommendations made in the 2019 FERC and NERC Staff Report and with the purpose of this Project 2019-06.	
Likes	0
Dislikes	0
Response	

Thank you for your support.	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Note: Question correction. Should read," BA within TOP-003, similar to what is required of the RC and TOP." Not the TO.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. Your clarification of the intent of the question is correct.	
Brian Evans-Mongeon - Utility Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
With the 'generator data specification' Requirement language in IRO-010 and TOP-003 the same for the RC/BA/TOP; which data specification the GO should follow and incorporate into their cold weather preparedness plan may be unclear.	
Suggest modifying EOP-011 R7.3 to clarify which data specification should be utilized:	
7.3. Generating unit(s) cold weather data (from the RC, BA, or TOP data specification as needed), to include:....	
Likes	0
Dislikes	0
Response	

Thank you for your comment. The SDT determined to include in the GO plan the exact same vernacular that is included in the data specifications.	
Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
Alliant Energy supports the comments submitted by the MRO NSRF.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Kendra Buesgens - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Note: Question correction. Should read," BA within TOP-003, similar to what is required of the RC and TOP." Not the TO.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT determined to include in the GO plan the exact same vernacular that is included in the data specifications.	
Elizabeth Davis - Elizabeth Davis On Behalf of: Tom Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
George Brown - Acciona Energy North America - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
John Babik - JEA - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
James Baldwin - Lower Colorado River Authority - 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	
Dan Roethemeyer - Vistra Energy - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Erin Green - Western Area Power Administration - 1,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Meaghan Connell - Public Utility District No. 1 of Chelan County - 5, Group Name CHPD	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Aidan Gallegos - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Jun Hua - Austin Energy - 4	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
W. Dwayne Preston - Austin Energy - 3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Patricia Lynch - NRG - NRG Energy, Inc. - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Truong Le - Truong Le On Behalf of: David Owens, Gainesville Regional Utilities, 1, 5, 3; Neville Bowen, Ocala Utility Services, 3; - Truong Le	
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	
Anthony Jablonski - ReliabilityFirst - 10	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Martin Sidor - NRG - NRG Energy, Inc. - 6	
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	
Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jamie Monette - Allete - Minnesota Power, Inc. - 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	
Kathleen Goodman - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Donna Wood - Tri-State G and T Association, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	Yes
Document Name	
Comment	

Likes	0
Dislikes	0
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Laura Nelson - Laura Nelson	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - MRO,WECC	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
John Allen - City Utilities of Springfield, Missouri - 4	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Gul Khan - Gul Khan On Behalf of: Lee Maurer, Oncor Electric Delivery, 1; - Gul Khan	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes 0	
Response	
Shannon Ferdinand - Capital Power Corporation - 5 - MRO,WECC,Texas RE,SERC	
Answer	
Document Name	
Comment	
Capital Power has no comment on this revision	
Likes 0	
Dislikes 0	
Response	
Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro	
Answer	
Document Name	
Comment	
While BC Hydro agrees that the data specification requirements should be included for the BA, the specific data specification items should be improved as per our comments in Question 5.	
Likes 0	
Dislikes 0	
Response	

Thank you for your comment.	
Romel Aquino - Edison International - Southern California Edison Company - 3	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Neil Shockey - Edison International - Southern California Edison Company - 5	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Keith Jonassen - Keith Jonassen On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Keith Jonassen	
Answer	

Document Name	
Comment	
Yes, No Comment	
Likes 0	
Dislikes 0	
Response	
Kenya Streeter - Edison International - Southern California Edison Company - 1,3,5,6	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	
Comment	

Texas RE inquires as to whether the SDT considered updating the definitions of Real-time Assessment (RTA) and Operations Planning Analysis (OPA). The language “during local forecasted cold weather” in proposed TOP-003-5 Requirement Part 1.3 could be read to indicate this only applies to Real-time data, but this data is also needed in the operations horizon to prepare and plan for cold weather events. Texas RE notes that during Project 2007-06.2 Phase 2 of System Protection Coordination, these definitions were updated when IRO-010 and TOP-003 were updated.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT reviewed a similar suggestion in a previous iteration and determined that the definitions covered the information included in the proposed standards; however, the SDT will forward your suggestion onto NERC for further review.

3. In response to comments, the SDT modified the Implementation Plan to allow eighteen (18) months following the effective date to become compliant with EOP-011, IRO-010, and TOP-003. Do you agree with this modification? If you do not agree, please provide an alternative implementation timeframe. If you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

Laura Nelson - Laura Nelson

Answer No

Document Name

Comment

Idaho Power requests a phased implementation over 36 months, with 1/3 of BES facilities being implemented the first year; 1/3 the second year, and 1/3 the third year to reach full implementation. With the requirement of additional engineering analysis for each of our BES units, the implementation will need to vary from unit-to-unit. Although Idaho Power feels it has adequate cold weather protections in place, this information is not known to us at this time but would be available after the engineering analysis. Appropriate time needs allotted to budget for, and procure, the engineering analysis, as well as implement any recommendations from the engineering analysis.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data. Additionally, the SDT believes that a phased approach would not be as effective or efficient as a one-time implementation.

Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy

Answer No

Document Name

Comment

Suggest the proposed 18 month Implementation Plan not include immediate training roll-out compliance, but instead allow training initiation and completion that would be staggered at least one full year after the Implementation Plans effective date.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that a phased approach would not be as effective as a one-time implementation.

Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC

Answer No

Document Name

Comment

BPA supports Reclamation’s comments.

Likes 0

Dislikes 0

Response

Please see the SDT’s response to Reclamation.

Kathleen Goodman - ISO New England, Inc. - 2 - NPCC

Answer No

Document Name

Comment

12 months seems to be a sufficient amount of time to become compliant given that most of these new requirements have been recommended “best practices” for many years. Also note that the 18 month implementation plan would result in completion after the

second winter following approval (2022-2023). A 12 month implementation would only miss implementation for one winter (2021-2022).

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.

Brian Evans-Mongeon - Utility Services, Inc. - 4

Answer

No

Document Name

Comment

EOP-011 R7 contains data specification details that must be included in the cold weather preparedness plan, but without the direction from the BA/RC/TOP on what format this data should be documented, the GO's plan may be inconsistent with the expectations. Suggest IRO-010 and TOP-003 Implementation Plan be 12 months, and EOP-011 Implementation Plan be 18 months to allow GO time to incorporate the data specifications as requested into their plan.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that a phased approach would not be as effective or efficient as a one-time implementation.

Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6

Answer

No

Document Name

Comment

Comments: 18 months is an improvement however considering the complexity of the project a 24 month implementation plan may be more appropriate

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.

Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC

Answer

No

Document Name

Comment

All requirements go into effect at the same time under the proposed Implementation Plan.

If the data specifications from the TOP / BA or RC required in TOP-003-5 and IRO-010-4, respectively, aren't received until late into the proposed implementation period, it may not give the GO or GOP receiving the specifications enough time to meet or properly implement their new data requirements. As such, IRO-010-4 Requirement R3 and TOP-003-5 Requirement R5 (while unchanged) should have a later implementation period for the GO and GOP for these versions, to allow the entities to process and respond to the new data specifications from their BA, RC, TOP. The recommendation for this separate implementation period is to be at least 12-months.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that a phased approach would not be as effective or efficient as a one-time implementation.	
Anthony Jablonski - ReliabilityFirst - 10	
Answer	No
Document Name	
Comment	
As the requirements proposed do not require Registered Entities to install any specific freeze protections, rather, they require the entity to have a plan and provide training to its personnel, 18 months seems to be excessive. ReliabilityFirst believes 12 months may be more appropriate. Depending on the timing of the effective date, an 18 month period could potentially have Registered Entities going through two cold weather seasons without being required to perform the steps outlined within the requirements. ReliabilityFirst believes these requirements need to be in place to address cold weather readiness as soon as possible.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.	
Rich Hydzik - Rich Hydzik On Behalf of: Scott Kinney, Avista - Avista Corporation, 3, 5, 1; - Rich Hydzik	
Answer	No
Document Name	
Comment	
Eighteen months (18) seems to be a short time to make any required facility changes. Given capital budgeting processes, engineering, and construction timelines, and the inevitable re-prioritizing over the next 18 months, this time frame seems short. Three to four years is probably more feasible.	

Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option if chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.	
Sean Bodkin - Dominion - Dominion Resources, Inc. - 6, Group Name Dominion	
Answer	No
Document Name	
Comment	
Given the date is unknown for when the standard/requirements will go effective, each generating unit may not have enough historical data to 1) determine capability based on historical operating performance or 2) perform an adequate engineering analysis. Dominion Energy recommends a 24 month implementation period to allow for at least two cold weather seasons to pass and allow generators to gain the necessary information to ensure proper engineering analysis.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option if chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.	
Glen Farmer - Avista - Avista Corporation - 5	
Answer	No
Document Name	
Comment	

two years minimum. or 1/2 first year (Thermal Plants) and 1/2 second year (Hydro plants).	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data. Additionally, the SDT believes that a phased approach would not be as effective or efficient as a one-time implementation.	
Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - ISO New England, Inc. - 2 - NPCC	
Answer	No
Document Name	
Comment	
ISO-NE believes that 12-months would be a sufficient amount of time to become compliant given that most of these new requirements have been recommended “best practices” for many years. Also note that the 18-month implementation plan would result in completion after the second winter following approval (2022-2023). A 12-month implementation would only miss implementation for one winter (2021-2022).	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.	
Marty Hostler - Northern California Power Agency - 3,4,5,6	
Answer	No
Document Name	

Comment

NO. See prior NCPA comments. Two to three years is need.

Likes 0

Dislikes 0

Response

Please see the SDT's response to NCPA.

Wendy Center - U.S. Bureau of Reclamation - 5

Answer

No

Document Name

Comment

Reclamation recommends a 24-month implementation plan to allow entities appropriate time to comply with new requirements. Reclamation is concerned that the hasty implementation of requirements that are not carefully thought out will not support or improve BES reliability and in fact could divert entities from performing tasks that do support or improve BES reliability. This is especially important as proposed requirements become more complex. The cold weather modifications project began with the concepts of having a plan and training staff on it periodically. Now, data communications among entities, an annual inspection and maintenance program, and *unit-specific* training have been added to the proposed requirements. Even a 24-month implementation plan would not allow sufficient time for entities with a large number of facilities, generators, and/or personnel to successfully implement all these new mandates.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.

Jamison Cawley - Nebraska Public Power District - 1	
Answer	No
Document Name	
Comment	
Recommend a 24 month implementation period.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.	
Bobbi Welch - Midcontinent ISO, Inc. - 2	
Answer	No
Document Name	
Comment	
MISO supports comments submitted by the ISO/RTO Council Standards Review Subcommittee (IRC SRC). In addition, we are submitting additional comments on behalf of MISO as an individual entity.	
12 months is a sufficient amount of time to implement the proposed changes – The original Implementation Plan proposed a 12 month implementation timeline. Following industry comments, the implementation timeline was extended to 18 months based on feedback provided by the GO/GOP community. This fails to demonstrate a sense of urgency in resolving cold weather issues to ensure reliable operations.	
In addition, a 6-month delay in implementing these standards, would likely place the effective date (assuming FERC adopts them expeditiously) as April 1, 2023 (just after the winter season); whereas a 12-month implementation would place the effective date as	

October 1, 2022 (just prior to the winter season), leaving the industry to operate through another entire cold weather season without the benefit of these provisions.

As many of these practices have been recommended by NERC for years, some dating back to the February 2011 Southwest Cold Weather Event, the proposed requirements are largely expense items; i.e. the development of preparedness plans, delivery of training to personnel and the provision of cold weather data, the amount of effort should be minimal. There is no requirement for generators to make capital investments; i.e. install freeze protection measures, which would justify the need for more time to implement.

As a Reliability Coordinator (RC) and Balancing Authority (BA), MISO is prepared to receive cold weather data from the GO and GOP as described under EOP-011, Part 7.3 within a 12 month timeframe. It is important to for reliable grid operations and situational awareness that this information be provided to reliability entities. This will enforce the current provisions that MISO has under its existing business practices for generators to provide this information.

Recommendation: Revise the Implementation Plan to reinstate a 12-month implementation period

Likes	0
Dislikes	0

Response

Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro

Answer	No
Document Name	

Comment

BC Hydro appreciates this opportunity to comment. However, without additional changes to the EOP-011 language, BC Hydro’s assessment at this time is that the EOP-011 standard implementation would take 24 months from adoption due to initial assessment of equipment specifications. Please see our comments to Question 5.

Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee No Dominion	
Answer	No
Document Name	
Comment	
EOP-011 R7 contains data specification details that must be included in the cold weather preparedness plan, but without the direction from the BA/RC/TOP on what format this data should be documented, the GO's plan may be inconsistent with the expectations. Suggest IRO-010 and TOP-003 Implementation Plan be 12 months, and EOP-011 Implementation Plan is 18 months to allow GO time to incorporate the data specifications as requested into their plan.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT believes that a phased approach would not be as effective or efficient as a one-time implementation.	
Devon Tremont - Taunton Municipal Lighting Plant - 1	
Answer	No
Document Name	
Comment	

The Taunton Municipal Lighting Plant supports the comments submitted by Utility Services, Inc., which state:

EOP-011 R7 contains data specification details that must be included in the cold weather preparedness plan, but without the direction from the BA/RC/TOP on what format this data should be documented, the GO's plan may be inconsistent with the expectations. Suggest IRO-010 and TOP-003 Implementation Plan be 12 months, and EOP-011 Implementation Plan be 18 months to allow GO time to incorporate the data specifications as requested into their plan.

Likes	0
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Dislikes	0
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Response

Please see the SDT's response to Utility Services, Inc.

Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee

Answer	No
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Document Name	
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Comment

12 months seems to be a sufficient amount of time to become compliant given that most of these new requirements have been recommended "best practices" for many years. Also note that the 18 month implementation plan would result in completion after the second winter following approval (2022-2023). A 12 month implementation would only miss implementation for one winter (2021-2022).

*** CAISO did not join this group response. ***

Likes	0
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Dislikes	0
----------	---

Response

Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer No

Document Name

Comment

OPG supports NPCC RSC's comments.

Likes 0

Dislikes 0

Response

Please see the SDT's response to NPCC RSC.

Dennis Sismaet - Northern California Power Agency - 6

Answer No

Document Name

Comment

See prior NCPA comments. Two to three years is needed.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.

Michael Whitney - Northern California Power Agency - 3, Group Name NCPA	
Answer	No
Document Name	
Comment	
See Marty Hostler's comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to Marty Hostler.	
John Allen - City Utilities of Springfield, Missouri - 4	
Answer	Yes
Document Name	
Comment	
It's unclear why 18 months is needed if we only have administrative obligations to create a plan and identify design parameters based on what we already have implemented.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT believes that 18 months will allow sufficient time for implementation (including conducting an engineering analysis to determine current cold weather performance if this option is chosen for cold weather data), while balancing the need to respond to the recommendations from the FERC/NERC report in a timely manner.	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - MRO,WECC	

Answer	Yes
Document Name	
Comment	
18 Months will be acceptable depending on the Reliability Coordinator data specifications.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support.	
Thomas Foltz - AEP - 5	
Answer	Yes
Document Name	
Comment	
AEP appreciates the changes made in extending the Implementation Plan to 18 months, and thanks the SDT for their consideration of our suggestion.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support.	
Ben Burnett - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	Yes
Document Name	

Comment	
Implementation of currently proposed changes to TOP-003 and EOP-011 would require considerable coordination with interconnected resources, assessment and comparison of current practices to proposed changes, and additional time for training personnel on new processes and procedures. As such, CEHE would prefer a minimum of 24 months to implement the changes, but understands the desire for an accelerated timeline.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF, Group Name SIGE Project 2019-06	
Answer	Yes
Document Name	
Comment	
Implementation of currently proposed changes to TOP-003 and EOP-011 would require considerable coordination with interconnected resources, assessment and comparison of current practices to proposed changes, and additional time for training personnel on new processes and procedures. As such, SIGE would prefer a minimum of 24 months to implement the changes, but understands the desire for an accelerated timeline.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes

Document Name	
Comment	
N/A.	
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	
Southern Company supports this change to the Implementation Plan.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support.	
Martin Sidor - NRG - NRG Energy, Inc. - 6	
Answer	Yes
Document Name	
Comment	

<p>NRG agrees with the 18 months. It will take much time to develop a plan, implement the plan and needed changes, then develop and train personnel on the site-specific plan for each site. The time issue becomes magnified in larger fleets with diverse generators in varying locations.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your support.</p>	
<p>Keith Jonassen - Keith Jonassen On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Keith Jonassen</p>	
Answer	Yes
Document Name	
Comment	
<p>No,</p> <p>12 months seems to be a sufficient amount of time to become compliant given that most of these new requirements have been recommended “best practices” for many years. Also note that the 18 month implementation plan would result in completion after the second winter following approval (2022-2023). A 12 month implementation would only miss implementation for one winter (2021-2022).</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.</p>	
<p>Patricia Lynch - NRG - NRG Energy, Inc. - 5</p>	

Answer	Yes
Document Name	
Comment	
NRG agrees with the 18 months. It will take much time to develop a plan, implement the plan and needed changes, then develop and train personnel on the site-specific plan for each site. The time issue becomes magnified in larger fleets with diverse generators in varying locations.	
Likes 0	
Dislikes 0	
Response	
Thank you for your support.	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	Yes
Document Name	
Comment	
MEC supports the MRO NSRF comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to MRO NSRF.	
Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF	
Answer	Yes
Document Name	

Comment

The NAGF agrees with modifying the Implementation Plan to allow for eighteen (18) months to become compliant following the effective date.

Likes 0

Dislikes 0

Response

Thank you for your support.

Joshua Andersen - Salt River Project - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

SRP agrees that entities that do not already have the Cold weather plans and the associated training can benefit from the 18 month implementation period. SRP also feels that any imediate unit capabilities can be required through the existing TOP-003 and IRO-010 data requests.

Likes 0

Dislikes 0

Response

Thank you for your support.

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer

Yes

Document Name

Comment

AEPC has signed on to ACES comments.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to ACES.	
Jennifer Flandermeyer - Jennifer Flandermeyer On Behalf of: Allen Klassen, Evergy, 6, 1, 3, 5; Derek Brown, Evergy, 6, 1, 3, 5; Marcus Moor, Evergy, 6, 1, 3, 5; Thomas ROBBEN, Evergy, 6, 1, 3, 5; - Jennifer Flandermeyer	
Answer	Yes
Document Name	
Comment	
Evergy endorses the EEI comments submitted in this comment period.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to EEI.	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	
The 18 month implementation period provides sufficient time to become compliant.	

Likes	0
Dislikes	0
Response	
Thank you for your support.	
David Jendras - Ameren - Ameren Services - 3	
Answer	Yes
Document Name	
Comment	
Ameren agrees with the change to extend the implementation plan to 18 months	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	Yes
Document Name	
Comment	
We agree with modifying the Implementation Plan to allow for eighteen (18) months to become compliant following the effective date and appreciate the extra time.	
Likes	0
Dislikes	0

Response

Thank you for your support.

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

Answer

Yes

Document Name

Comment

EI supports the SDT's proposal to modify the Implementation Plan to 18 months.

Likes 0

Dislikes 0

Response

Thank you for your support.

Shannon Ferdinand - Capital Power Corporation - 5 - MRO,WECC,Texas RE,SERC

Answer

Yes

Document Name

Comment

In regards to EOP-011, Capital Power agrees with 18 month timeline for the development of the plan; however, implementation and training may take longer. Capital Power recommends a phased in implementation plan – Phase 1) Development of Plan (18 monts) 2) Implementation & Training (24 months).

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT believes that a phased approach would not be as effective as a one-time implementation.

Elizabeth Davis - Elizabeth Davis On Behalf of: Tom Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis	
Answer	Yes
Document Name	
Comment	
<p>PJM understands additional resources and commitments may be required to develop and distribute revised data specifications and develop and implement cold weather preparedness plans. Nevertheless, PJM continues to urge the immediate implementation of the revised standards with a subsequent twelve-month period before auditable compliance is required. If the SDT rejects this request and requires implementation of the revised standard 18 months after the adoption of the standard, PJM requests that NERC clearly state in its submission of the standard to the NERC Board and FERC that NERC strongly encourages Responsible Entities to voluntarily implement the revised standard as soon as possible to enhance winter readiness at the earliest date practicable within the Responsible Entity's region.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT maintains that its proposed implementation period is reasonable, particularly for those entities that need to conduct engineering studies in order to identify their cold weather operating temperatures. However, the SDT agrees that entities should implement the standard on a voluntary basis as soon as possible to enhance winter readiness.</p>	
Daniel Gacek - Exelon - 1	
Answer	Yes
Document Name	
Comment	
<p>Exelon supports an 18 month Implementation Plan.</p> <p>Submitted on behalf of Exelon, Segments 1, 3, 5, 6</p>	

Likes	0
Dislikes	0
Response	
Thank you for your support.	
Gladys DeLaO - CPS Energy - 1	
Answer	Yes
Document Name	
Comment	
Yes, CPS Energy agrees.	
Likes	0
Dislikes	0
Response	
Thank you for your support.	
Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	
ERCOT agrees with this modification given the system changes that may be necessary in order to implement the revised Reliability Standards.	
Likes	0
Dislikes	0

Response	
Thank you for your support.	
Gul Khan - Gul Khan On Behalf of: Lee Maurer, Oncor Electric Delivery, 1; - Gul Khan	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Kendra Buesgens - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Donna Wood - Tri-State G and T Association, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
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	
Jamie Monette - Allete - Minnesota Power, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE	
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	
Julie Hall - Entergy - 6, Group Name Entergy	
Answer	Yes
Document Name	
Comment	

Likes	0
Dislikes	0
Response	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
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	
Paul Mehlhaff - Sunflower Electric Power Corporation - 1	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Truong Le - Truong Le On Behalf of: David Owens, Gainesville Regional Utilities, 1, 5, 3; Neville Bowen, Ocala Utility Services, 3; - Truong Le	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
W. Dwayne Preston - Austin Energy - 3	
Answer	Yes
Document Name	
Comment	

Likes	0
Dislikes	0
Response	
Jun Hua - Austin Energy - 4	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Aidan Gallegos - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Meaghan Connell - Public Utility District No. 1 of Chelan County - 5, Group Name CHPD	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Erin Green - Western Area Power Administration - 1,6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dan Roethemeyer - Vistra Energy - 5	
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	
Jamie Johnson - California ISO - 2	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
James Baldwin - Lower Colorado River Authority - 1	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
John Babik - JEA - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
George Brown - Acciona Energy North America - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Glenn Pressler - CPS Energy - 3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	

Comment

Texas RE understands that the principal rationale for extending the implementation timeline was to provide additional timelines for generators to perform engineering studies of their resources. Texas RE does not agree modification to the implementation timeline is needed and instead believes the original 12-month timeline provides a sufficient window for generators to perform initial assessments based on design or minimum historical operating experience. Generators will then have the option to update that analysis with engineering information, but the interim operational information will enhance cold weather reliability during the period in which more detailed information is being developed.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT settled on 18 months for implementation, to allow time for entities to schedule/conduct an engineering analysis to determine current cold weather performance if they choose this option for cold weather data.

Kenya Streeter - Edison International - Southern California Edison Company - 1,3,5,6

Answer

Document Name

Comment

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

Response

Please see the SDT's response to EEI.

Neil Shockey - Edison International - Southern California Edison Company - 5

Answer

Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Romel Aquino - Edison International - Southern California Edison Company - 3	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	

4. The SDT has provided draft Implementation Guidance to address some issues identified by industry during the previous comment period. Recognizing that Implementation Guidance is not subject to ballot body approval, do you agree with the SDT proceeding with the development of the Implementation Guidance? If you do not agree, or have additional topics you would like the SDT to consider in the Implementation Guidance, please provide your explanation and suggested language.

Michael Whitney - Northern California Power Agency - 3, Group Name NCPA

Answer No

Document Name

Comment

See Marty Hostler's comments.

Likes 0

Dislikes 0

Response

Please see the SDT's response to Marty Hostler.

Dennis Sismaet - Northern California Power Agency - 6

Answer No

Document Name

Comment

Conforming to/with Implementation guidance is not considered during audits.

Likes 0

Dislikes 0

Response	
Thank you for your comment.	
George Brown - Acciona Energy North America - 5	
Answer	No
Document Name	
Comment	
Acciona Energy USA Global, LLC (Acciona) does not believe additional guidance is necessary.	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT has developed the IG based on comments from industry. NERC will decide whether to endorse or not.	
LeRoy Patterson - Public Utility District No. 2 of Grant County, Washington - 6	
Answer	No
Document Name	
Comment	
If approved, entities will be held to requirements. Implementation Guidance is not binding on auditors when they review evidence for compliance. Requirements should be modified to address issues identified by industry during the previous comment period.	
Likes	0
Dislikes	0
Response	

Thank you for your comment. The SDT has developed the IG based on comments from industry where consensus could not be reached whether to include the information in the standards.

Jamison Cawley - Nebraska Public Power District - 1

Answer No

Document Name

Comment

The information included in the Implementation Guidance should be included in the Standard, to ensure its consideration during compliance monitoring activities. For example, Requirement R7 includes vague requirements (freeze protection measures) that are open to interpretation. The clarification provided by the Implementation Guidance is helpful, but since it is not part of the Standard it may be disregarded. Request the information be included in the Standard rather than an additional document.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT has developed the IG based on comments from industry where consensus could not be reached whether to include the information in the standards.

Marty Hostler - Northern California Power Agency - 3,4,5,6

Answer No

Document Name

Comment

Conforming to/with Implementation guidance is not considered during audits.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT has developed the IG based on comments from industry where consensus could not be reached whether to include the information in the standards. NERC will decide whether to endorse or not.

Glen Farmer - Avista - Avista Corporation - 5

Answer No

Document Name

Comment

Need more time.

Likes 0

Dislikes 0

Response

Anthony Jablonski - ReliabilityFirst - 10

Answer No

Document Name

Comment

ReliabilityFirst supports providing guidance to the Registered Entities and developing Implementation Guidance. However, if the guidance is only intended to provide additional explanation and context of the requirements, ReliabilityFirst believes the SDT should rather focus on clarifying the actual Requirements, Measures etc. while the standard is still draft form. Requirements, Measures, etc. should be written to remove any ambiguity and should be written in a clear and concise manner. If the guidance is purely explaining examples on how a Registered Entity may go about meeting the requirements, this is potentially something for the SDT to consider.

Likes 0

Dislikes	0
Response	
Thank you for your comment. The SDT has developed the Implementation Guidance based on comments from industry and where consensus could not be reached whether to include the information in the standards and, in the opinion of the SDT, contains examples how an entity may go about meeting the requirements. NERC will decide whether to endorse or not.	
Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC	
Answer	No
Document Name	
Comment	
As a general rule, Implementation Guidance is a good thing. However, it doesn't override or provide enforceable requirements. As such, having the recommendation for 5 years of historical operating temperatures in the guidance document doesn't prevent an auditor from expecting (requiring) the history to go back to initial commercial operation. As such, this limitation must be included in EOP-011 Requirement 7.3.2.2 and not in a non-enforceable guidance document. It must also be included in IRO-010 Requirement 1.3.2.2 and TOP-003 Requirements 1.3.2.2 and 2.3.2.2 to keep RCs, BAs, and TOPs from requiring something more than 5 years.	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT, based on comments from industry, did not come to consensus on establishing a time frame for historical data within the standards; however, the majority of industry does support including the recommendation in the Implementation Guidance.	
Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2	
Answer	Yes
Document Name	
Comment	

ERCOT supports the development of Implementation Guidance. ERCOT suggests information concerning how minimum operating temperature information would be utilized in connection with Operational Planning Analysis and Real-time Assessment be included in the Implementation Guidance.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT does not see the additional need for implementation guidance on how the minimum operating temperature and other related limitations data of the generating unit during cold weather would be utilized with OPA and RTA. The FERC\NERC report states: "The need for Balancing Authorities and Reliability Coordinators to be aware of specific generating units' limitations, such as ambient temperatures beyond which they cannot be expected to perform or lack of firm gas transportation, and take such limitations into account in their operating processes to determine contingency reserves, and in performing operational planning analyses, respectively." The SDT does not read the report to specifically state what should be done with the information. The team drafted the language leaving it up to each entity to determine how the information will be utilized for its operational planning processes.

Gladys DeLaO - CPS Energy - 1

Answer

Yes

Document Name

Comment

Yes, CPS Energy agrees.

Likes 0

Dislikes 0

Response

Thank you for your support.

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer	Yes
Document Name	
Comment	
OPG supports NPCC RSC's comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to NPCC RSC.	
Daniel Gacek - Exelon - 1	
Answer	Yes
Document Name	
Comment	
Exelon support EEI's comment:	
<ul style="list-style-type: none"> Among the areas where expanded guidance would provide greater clarity is the intent of Requirement R7, subpart 7.3. 	
Exelon support NAGF's comments:	
<ul style="list-style-type: none"> The Implementation Guidance document should reference existing cold weather best practice documents available from NERC and industry. 	
Submitted on behalf of Exelon, Segments 1, 3, 5, 6	
Likes 0	
Dislikes 0	

Response	
Please see the SDT's response to EEI.	
Elizabeth Davis - Elizabeth Davis On Behalf of: Tom Foster, PJM Interconnection, L.L.C., 2; - Elizabeth Davis	
Answer	Yes
Document Name	
Comment	
<p>PJM requests the SDT consider including the following in the development of the Implementation Guidance:</p> <ol style="list-style-type: none"> 1. Specific guidance for the Generator Owner to provide the host Regional Entity/RC/TOP upon request or on a periodic basis (annually, seasonally or some other periodicity) with the Generator Owner's cold weather preparedness plans and associated data that the Generator Owner uses to ensure the freeze protection measures are designed to be consistent with the geography and meteorology for the location of the unit. The requirement to have Generator Owners provide cold weather preparedness plans to the RC/TOP allows the RC/TOP to have increased visibility into the plans of the Generator Owners and to incorporate Generator Owner's cold weather preparedness plans into the RC's/TOP's operational assessments. 2. A specific requirement that a Generator Owner's document supporting source data as assurance that the preparedness plans are based on equipment limitations, historical performance, and other relevant data to ensure the effectiveness of the plans. To the extent that weather forecasts or historical weather information other than those prepared by NOAA are relied upon, the Generator Owners should be required to provide an explanation in the supporting materials explaining why such an alternative forecast or historic data was utilized. 3. A provision that authorizes periodic spot checks outside audit cycles conducted by the host Regional Entity and results coordinated with the host BA/TOP/RC. 4. A provision that clearly states that the Generator Owner cold weather preparedness plans be based on unit size, type, and fuel sources as appropriate. 5. Provisions that ensure there are standard requirements and increased transparency in each Generator Owner's cold weather preparedness plans that allows comparability between such plans for equivalent generation types. Without more specifics in terms of the winterization contents and the data used in its development, there will be little ability for reviewers and auditors to determine whether a 	

particular plan was sufficient or insufficient relative to plans covering similar generation technology in the same or similar geographic area.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee

Answer

Yes

Document Name

Comment

The IRC/SRC recommends the SDT considers the following in the development of the of additional guidance in the Implementation Guidance document:

The IRC/SRC recommends the Generator Owner’s cold weather preparedness plans to be based on unit size, type, and fuel sources as appropriate.

The IRC/SRC recommends the Generator Owner document supporting data as assurance that the preparedness plans are based on equipment limitations, historical performance and other relevant data to ensure the effectiveness of the plans.

The IRC/SRC recommends the Implementation Guidance ensures that there are basic requirements and more transparency that allows comparability between such plans for equivalent generation types. Without more specifics in terms of the winterization contents and the data used in its development, there will be little ability for reviewers and auditors to determine whether a particular plan was sufficient or insufficient relative to plans covering similar generation technology in the same or similar geographic area.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Shannon Ferdinand - Capital Power Corporation - 5 - MRO,WECC,Texas RE,SERC	
Answer	Yes
Document Name	
Comment	
Capital Power appreciates the flexibility in allowing entities to define cold weather. However, this flexibility may introduce the potential for subjectivity during an audit or guided self-certification. Capital Power would like to see additional guidance regarding a risk based approach to compliance with this standard which may include differences in defining and preparing for cold weather vs. extreme cold weather. In many instances it is within an entities standard operating procedure to operate in 'cold weather' and it is only extreme weather or abnormal weather (cold or hot) that may require an entity to make different / additional preparations. Regulating conditions that are within an entities standard operating procedure and present little risk to the grid is inconsistent with the principals of NERC's Risk Based Compliance Monitoring and Enforcement Plan.	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	Yes
Document Name	
Comment	
EEI supports plans to develop implementation guidance. Among the areas where expanded guidance would provide greater clarity is the intent of Requirement R7, subpart 7.3.	
Likes	0

Dislikes	0
Response	
Thank you for your support.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee No Dominion	
Answer	Yes
Document Name	
Comment	
<p>Requesting that the Guidance document contains examples of freeze protection measures that are existing.</p> <p>Please consider adding EOP-011-2 Implementation Guidance for Requirement R7.3 and its subparts involving Generating unit(s) cold weather data, in regard to cold weather preparedness plan(s). For example, does the plan simply involve the communication of data to the Reliability Coordinator, Transmission Operator, and Balancing Authority, or does it involve more than a plan to communicate the data that is required by IRO-010-4 and TOP-003-5? Please consider explaining why it is necessary to have the cold weather data within the cold weather preparedness plan(s). The reason for the data in the cold weather preparedness plan(s) could be subject to different interpretations.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	Yes
Document Name	
Comment	

DTEE supports the comments made by the NAGF.

Likes 0

Dislikes 0

Response

Please see the SDT's response to NAGF.

David Jendras - Ameren - Ameren Services - 3

Answer

Yes

Document Name

Comment

Ameren generally agrees with the SDT's course of action, but we think the development of the Implementation Guidance is being rushed through an aggressive schedule.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your comments onto NERC for further consideration.

Bobbi Welch - Midcontinent ISO, Inc. - 2

Answer

Yes

Document Name

Comment

MISO would like to acknowledge the Standard Drafting Team (SDT) for seeking to incorporate its recommendation in part; i.e. to establish a national reference with geographic locational emphasis that can be used as a standard for consistency of application across the NERC

footprint. Page 1 of the **Implementation Guidance for Reliability Standard EOP-011-2** includes a suggestion for Generator Owners (GOs) to: *“utilize an additional resource to develop their definition of cold weather, such as one or more commonly used industry resources (e.g. the National Weather Service Climate Predictions Center maps sponsored by the National Oceanic and Atmospheric Administration which depicts average annual extreme minimum temperatures within the United States);”* however, stops short of dictating any specific definition for cold weather.

Likewise, the proposed standard, **EOP-011-2**, stops short of requiring GOs to use a national reference in establishing the level of winterization measures required to enable its facility to operate through extreme temperatures as recommended by MISO in its comments submitted on March 12, 2021.

Lack of a “cold weather” definition means we may not see much of a reliability benefit – In the absence of a “cold weather” definition, each individual GO/GOP is left to define “cold weather” for themselves. As the recommendation contained in the **Implementation Guidance for Reliability Standard EOP-011-2** is merely a suggestion, it does not compel the GO/GOP to use the National Weather Service Climate Predictions Center maps as a reference. This could result in a wide variation of generator interpretations and compliance applications across the footprint with no means for NERC to enforce a minimum application of performance.

Recommendation: MISO reiterates its recommendation for NERC to establish a national reference with geographic locational emphasis that can be used as a standard for consistency of application across the NERC footprint.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Jamie Johnson - California ISO - 2

Answer

Yes

Document Name

Comment

The California ISO agrees with comments submitted by the ISO/RTO Counsel (IRC) Standards Review Committee.

Likes	0
Dislikes	0
Response	
Thank you for your support.	
Jennifer Flandermeyer - Jennifer Flandermeyer On Behalf of: Allen Klassen, Evergy, 6, 1, 3, 5; Derek Brown, Evergy, 6, 1, 3, 5; Marcus Moor, Evergy, 6, 1, 3, 5; Thomas ROBBEN, Evergy, 6, 1, 3, 5; - Jennifer Flandermeyer	
Answer	Yes
Document Name	
Comment	
If Requirement 7.3 is not addressed as requested / suggested above, I recommend the SDT take this up with Implementation Guidance.	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1	
Answer	Yes
Document Name	
Comment	
AEPC has signed on to ACES comments.	
Likes	0
Dislikes	0

Response	
Please see the SDT's response to ACES.	
Joshua Andersen - Salt River Project - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
SRP agrees that these guidance documents assist the industry in understanding the intent of the drafting team. However, as noted in the questions these guidance documents are not auditable or resources for entities to base compliance plans on.	
Likes	0
Dislikes	0
Response	
Thank you for your comment.	
Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF	
Answer	Yes
Document Name	
Comment	
<p>The NAGF supports the development of Implementation Guidance to provide example approaches for achieving compliance with EOP-011-2. The NAGF provides the following comments for consideration:</p> <ul style="list-style-type: none"> • The Implementation Guidance document should reference existing cold weather best practice documents available from NERC and industry. • The draft Implementation Guidance document as written is very basic and should incorporate additional clarification for the items listed under Question #5. 	

Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	Yes
Document Name	
Comment	
<p>Reclamation supports the development of implementation guidance; however, the problem with the proposed cold weather modifications is the universal application of a compliance burden to solve a problem in a limited geographic area that is limited to certain types of generation facilities. Reclamation observes the lack of specificity in the proposed implementation guidance does little to guide the implementation of the new requirements. Lack of solid guidance almost certainly guarantees conflict between entities and auditors based on varying interpretations.</p> <p>The implementation guidance states that Generator Owners will determine their own definition of cold weather and identify any associated protection measures. By avoiding prescriptive requirements to address a very specific problem, the result is requirements that are simply administrative in nature and that do not significantly improve reliability. Reclamation observes that this approach is not dissimilar from the current industry approach, which purportedly led to the recent cold weather reliability problems; i.e., that market factors “could” encourage entities in warm climates to proactively prepare for cold weather but the reality that those entities were not adequately prepared.</p> <p>Reclamation recommends entities that are already adequately protected against cold weather do not need a reliability standard to require cold weather protections and entities that are not adequately protected against cold weather need clear, definitive requirements to meet NERC and FERC’s objectives of electric reliability during extreme cold weather. This is appropriately achieved by a regional reliability standard or by excluding certain geographic locations and/or certain types of generators. The fact that an entity can write its cold weather preparedness plan to be as little or as much detailed as it wants gives little support to genuinely improving reliability.</p>	
Likes	0

Dislikes	0
Response	
Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	Yes
Document Name	
Comment	
MEC supports the MRO NSRF comments.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	
ISO-NE recommends the SDT considers the following in the development of the of additional guidance in the Implementation Guidance document:	
ISO-NE recommends the Generator Owner's cold weather preparedness plans to be based on unit size, type, and fuel sources as appropriate.	

ISO-NE recommends the Generator Owner document supporting data as assurance that the preparedness plans are based on equipment limitations, historical performance and other relevant data to ensure the effectiveness of the plans.

ISO-NE recommends the Implementation Guidance ensures that there are basic requirements and more transparency that allows comparability between such plans for equivalent generation types. Without more specifics in terms of the winterization contents and the data used in its development, there will be little ability for reviewers and auditors to determine whether a particular plan was sufficient or insufficient relative to plans covering similar generation technology in the same or similar geographic area.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Keith Jonassen - Keith Jonassen On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Keith Jonassen

Answer

Yes

Document Name

Comment

The IRC/SRC recommends the SDT considers the following in the development of the of additional guidance in the Implementation Guidance document:

The ISO-NE recommends the Generator Owner’s cold weather preparedness plans to be based on unit size, type, and fuel sources as appropriate.

The ISO-NE recommends the Generator Owner document supporting data as assurance that the preparedness plans are based on equipment limitations, historical performance and other relevant data to ensure the effectiveness of the plans.

The ISO-NE recommends the Implementation Guidance ensures that there are basic requirements and more transparency that allows comparability between such plans for equivalent generation types. Without more specifics in terms of the winterization contents and the

data used in its development, there will be little ability for reviewers and auditors to determine whether a particular plan was sufficient or insufficient relative to plans covering similar generation technology in the same or similar geographic area.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Rich Hydzik - Rich Hydzik On Behalf of: Scott Kinney, Avista - Avista Corporation, 3, 5, 1; - Rich Hydzik

Answer

Yes

Document Name

Comment

Implementation guidance for a new requiriement is always helpful.

Likes 0

Dislikes 0

Response

Thank you for your comment.

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

Answer

Yes

Document Name

Comment

Southern Company supports the drafting of Implementation Guidance.

Likes 0

Dislikes	0
Response	
Thank you for your support.	
Leonard Kula - Independent Electricity System Operator - 2	
Answer	Yes
Document Name	
Comment	
N/A.	
Likes	0
Dislikes	0
Response	
Donald Lock - Talen Generation, LLC - 5	
Answer	Yes
Document Name	
Comment	
<p>We agree that GOs should not have to retrofit existing generation units to meet cold weather criteria different from those for which plants were designed, but the statement, "Requirement R7 does not requires a Generator Owner to install any specific freeze protections measures on their generating unit(s)," appears to invite those building new facilities to ignore the subject and report for EOP-011 a freeze protection design temperature of 33 F. New units should be designed for at least the lowest historical ambient air temperature for their locations, plus a substantial wind speed.</p> <p>NERC should explain that the preparedness plans cited in R7 and R8 pertain solely to pre-winter equipment preparations, and do not address non-equipment issues (e.g. checking inventories of food, cots and blankets for operators, hiring a snowplowing contractor) and</p>	

actions taken during winter storms (e.g. criteria for calling-out extra personnel, expanded operator’s rounds, turning-on heaters at various temperature trigger-points, cold-weather lay-up practices following shutdown).

NERC should explain that the preparedness plan of R7 and R8 is to address all wintertime equipment protection measures, not just those related to the freezing of water, despite use of the term, “freeze protection measures,” in R7.1 and R7.2. Alternatively, replace, “freeze protection,” in the standard with, “winterization,” or, “cold weather.”

The Implementation Guidance document should provide recommended best practices for key winter storm survival issues supplemental to those addressed in the requirements of EOP-011, such as keeping CTG inlet air filters from becoming blocked by snow.

The Implementation Guidance document should educate readers as to why freeze prevention measures often fail to function as designed, in particular the fact that the IEEE-515 formula for piping represents an insulation-encapsulated system suspended in midair. Substantial additional heating is needed in places for heat lost through supports and clamps, and for bare surfaces on valves. Again recommended best practices should be discussed.

Likes	0
Dislikes	0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE

Answer	Yes
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Document Name	
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Comment

OKGE agrees with the creation of an Implementation Guidance. However, we suggest adding clarification on R8 regarding the periodicity of training required. Currently, the language is not clear and it is open to interpretation during an audit as to how often training is required.

Also, we are not certain if the proposed Implementation Guidance (IG) will be approved as part of the whole package when the project receives approval from the industry. Our understanding is that Implementation Guidance follows a separate process, different from the

standard development process. So, we want to emphasize that it is important for the IG to be endorsed by the ERO prior to the effective date of the three standards so that registered entities are able to use it to adequately plan and implement by the effective date.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6

Answer

Yes

Document Name

Comment

Comments: *Guidance likely to be usefull*

Likes 0

Dislikes 0

Response

Thank you for your comment.

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

Answer

Yes

Document Name

Comment

The Implementation Guidance is helpful. The analysis to determine the “minimum historical operating temperature” still includes the 5 years of operational data which was removed from the standard. It also requires you to use the most recent extreme cold weather event

even if that was 10 years ago. For Registered Entities in the South cold weather is rare and there may not be data available from the Registered Entity for the most recent cold weather event.

Likes 0

Dislikes 0

Response

Thank you. The SDT has included multiple options to determine the operability and capability of the unit, of which the minimum historical operating temperature is just one.

Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC

Answer

Yes

Document Name

Comment

Seattle appreciates the efforts of the SDT to develop implementation guidance for EOP-011. However, we find the guidance provided to contradict itself. EOP-011 Implementation Guidance for R7 indicates “but the requirement does not dictate any specific definition for cold weather” whereas that provided for R8 states “The cold weather preparedness plan must contain, however, information on freeze protection measures currently in place...” By connecting freeze protection with cold weather in the guidance for R8, the SDT directly implies that freezing conditions must be included in any definition of cold weather. This directly contradicts the R7 guidance.

Seattle is concerned about this contradiction because we remain confused by the expectations of new EOP-011 for generation units located in naturally cold locations, designed for cold conditions, and with long histories of successful operation in winter. Some of our hydroelectric units are located high in mountains and have operated in all winter conditions over more than 100 years. The guidance for R7 directs that we would be able to define “cold weather” as “abnormally cold weather” and focus our preparation plans on such conditions. The guidance of R8, however, directs that we include all existing freeze protection measures in such plans, which implies that cold weather plans should accommodate all conditions below freezing.

Seattle finds this contradictory thinking to pervade all aspects of Project 2019-06 and asks that the SDT resolve in its mind which is meant: that entities may define cold weather for themselves and develop appropriate preparedness plans, or that cold weather is defined as

“below freezing” and entities must plan for and document how they address freezing conditions and below. Seattle strongly prefers the former interpretation.

Seattle also asks that the guidance clarify the flexibility in definitions and plans envisioned by the SDT. For example, is an entity is permitted to develop different definitions for cold weather for different units located in different areas with different cold weather conditions, or is each entity is expected to have a common definition for cold weather and a common preparedness plan. Is a summer-only unit, such as a hydroelectric unit powered by irrigation flows that does not operate during winter, required to document and train on a comprehensive cold weather operating plan?

Likes 1	Wike Jennie On Behalf of: Hien Ho, Tacoma Public Utilities (Tacoma, WA), 3, 1, 4, 5, 6; John Merre
Dislikes 0	

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

John Allen - City Utilities of Springfield, Missouri - 4

Answer	Yes
Document Name	

Comment

I fully support the SDT drafting Implementation Guidance to describe one or more ways to implement this standard. If it moves forward, then it will need more detail.

Likes 0	
Dislikes 0	

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Glenn Pressler - CPS Energy - 3

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Devon Tremont - Taunton Municipal Lighting Plant - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes	0
Response	
John Babik - JEA - 5	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
James Baldwin - Lower Colorado River Authority - 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	
Dan Roethemeyer - Vistra Energy - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Meaghan Connell - Public Utility District No. 1 of Chelan County - 5, Group Name CHPD	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Aidan Gallegos - PNM Resources - Public Service Company of New Mexico - 1,3	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Jun Hua - Austin Energy - 4	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
W. Dwayne Preston - Austin Energy - 3	
Answer	Yes
Document Name	

Comment	
Likes 0	
Dislikes 0	
Response	
Patricia Lynch - NRG - NRG Energy, Inc. - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Truong Le - Truong Le On Behalf of: David Owens, Gainesville Regional Utilities, 1, 5, 3; Neville Bowen, Ocala Utility Services, 3; - Truong Le	
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	
Paul Mehlhaff - Sunflower Electric Power Corporation - 1	
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	
Martin Sidor - NRG - NRG Energy, Inc. - 6	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Julie Hall - Entergy - 6, Group Name Entergy	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF, Group Name SIGE Project 2019-06	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Ben Burnett - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	Yes
Document Name	
Comment	

Likes 0	
Dislikes 0	
Response	
Jamie Monette - Allele - Minnesota Power, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

Brian Evans-Mongeon - Utility Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Thomas Foltz - AEP - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Kathleen Goodman - ISO New England, Inc. - 2 - NPCC	
Answer	Yes
Document Name	
Comment	

Likes	0
Dislikes	0
Response	
Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Donna Wood - Tri-State G and T Association, Inc. - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC	

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy	
Answer	Yes
Document Name	
Comment	
Likes 0	

Dislikes	0
Response	
Kendra Buesgens - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
LaTroy Brumfield - American Transmission Company, LLC - 1	
Answer	Yes
Document Name	
Comment	
Likes	0
Dislikes	0
Response	
Laura Nelson - Laura Nelson	
Answer	Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - MRO,WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Gul Khan - Gul Khan On Behalf of: Lee Maurer, Oncor Electric Delivery, 1; - Gul Khan	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	

Response	
Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro	
Answer	
Document Name	
Comment	
BC Hydro supports the comments of Seattle City Light.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to Seattle City Light.	
Romel Aquino - Edison International - Southern California Edison Company - 3	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Neil Shockey - Edison International - Southern California Edison Company - 5	

Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Kenya Streeter - Edison International - Southern California Edison Company - 1,3,5,6	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	
Comment	

Texas RE understands the purpose of implementation guidance is to include “examples or approaches to illustrate how registered entities could comply with a standard.” (Compliance Guidance Policy, page 3). This implementation guidance does not include any specific examples or approaches for complying with proposed EOP-011 Requirements R7 and R8. In general, it is preferable for the requirement language to set clear compliance expectations as is noted on page 5 of the Compliance Guidance Policy: “Compliance expectations should be made as clear as possible through the standards development process which should minimize the need for guidance after final ballot approval of a standard.”

Likes 1	OGE Energy - Oklahoma Gas and Electric Co., 6, Tay Sing
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Dislikes 0	
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Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

5. Please provide any additional comments for the SDT to consider, if desired.

John Allen - City Utilities of Springfield, Missouri - 4

Answer

Document Name

Comment

Overall, I believe the new requirements are not results-based and instead mostly administrative without a clear measurable reliability objective. This makes it unclear if any of the new requirements will actually benefit reliability. However, I will vote affirmative to move this project forward so the SDT can meet their mandate to the NERC BOT.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Matthew Nutsch - Seattle City Light - 1,3,4,5,6 - WECC

Answer

Document Name

Comment

Seattle appreciates the efforts of the SDT to address the many comments of industry while accommodating the mandates of FERC and NERC surrounding this project, especially in light of the recent cold weather event in the Texas area. It's a challenging effort.

Seattle does not believe that all changes have improved the proposed Standards. In particular, Seattle asks that the language of EOP-011 R1.2.6.2 be restored, such that the term "and other" remains to modify "extreme weather conditions." As currently written, R1.2.6.1 and R1.2.6.2 taken together imply that "cold weather" is an extreme weather condition. Which may be true in Texas and many southern states,

but is manifestly not true in northern parts of North America such as Minnesota or New York or Washington or Canada. Although restoring the modifier “and other” to R1.2.6.2 does not fully clarify what is meant by “cold weather,” it does suggest that the type of cold weather of concern for EOP-011 (and by extension IRO-010 and TOP-003) is the “extreme” variety, i.e., not those conditions that occur annually but rather those that occur once every 5 or 10 or 20 years, perhaps.

Seattle furthermore asks, as in our prior comments, that the SDT better clarify the intent regarding “cold weather conditions” for Project 2019-06 by replacing everywhere in EOP-011, IRO-010, and TOP-003 the term “cold weather” with “abnormally cold weather.” This change would make clear the intent and reach of these revised and new requirements, resolve confusion about how to apply these changes to the majority of North American generation units, and minimize purely administrative, trivial activities having no reliability benefit.

Seattle’s comments for item 4, above, also discuss clarification of what is meant by “cold weather,” in this case as exposed by a contradiction in the draft implementation guidance for EOP-011 R7 and R8. Clearing up the contradiction here would help clarify what is intended in the proposed changes to EOP-011 R1, R7, and R8, and by extension IRO-010 and TOP-003.

Thank you for your consideration.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT will forward your recommendations onto NERC for further consideration.

Kendra Buesgens - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer

Document Name

Comment

IRO-010-5, R1 Sub requirement numbering correction.

1.3.2. Generating unit(s):

- 2.3.2.1. minimum design temperature; or
- 2.3.2.2. minimum historical operating temperature; or
- 2.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

These should be 1.3.2.1, 1.3.2.2 and 1.3.2.3 respectively.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT has updated the requirement number accordingly.

Kim Thomas - Duke Energy - 1,3,5,6 - SERC,RF, Group Name Duke Energy

Answer

Document Name

Comment

Regarding the Transmission Operator data specification requirements within TOP-003-5 R1.3:

1. For TOP-003-5 R1.3, suggest removal of the phrase “generating unit-specific design specification or minimum historical performance during cold weather” because this information is only valuable if the facility has a single cold weather design specification.

Regarding the Reliability Coordinator data specification requirements within IRO-010-4 R1.3:

1. The proposed change is made redundant by the proposed change in TOP-003 and existing coordination required between the RC, BA, and TOP in IRO-008-2 R2. Since the BAs and TOPs will be required to include cold weather considerations as part of their data specifications and into their Operational Planning Analyses, the RC will have to consider the potential cold weather impacts of the generators that have been accounted for in the Operating Plans of the respective BAs and TOPs. Suggest removal of R1.3 Reliability Coordinator data specification requirements.

Additionally, Duke Energy supports the following NAGF comments:

“The NAGF provides the following comments for consideration:

EOP-011-2:

1. The NAGF requests clarifying the term “extreme weather conditions” referenced in R1.2.6.2 and R2.2.9.2. For example, does the term address non-temperature related cold weather conditions (heavy snowfall, ice storms, freezing fog, etc.) and/or warm extreme weather conditions (tornados, hail storms, derecho, etc.)? Clarifying this term will help to confirm the conditions that the TOP and BA operating plans need to address as well as the data to be provided by the GO/GOPs.
2. The NAGF requests clarification regarding the Requirement 7.3.1 request for “Generating unit(s) cold weather data, to include”. We suggest that NERC specify that this requirement pertains only to known, measurable effects on capacity, start-up capability or operational reliability.
3. The NAGF requests clarification regarding the terms “capability and availability” referenced in R7.3.1.1.
4. The NAGF requests clarification regarding Requirement R7.3.1.2 “fuel supply and inventory concerns”. The data to be provided is not so much concerns but has to be actionable/usable for planning models and real-time operations. Generating facility NG pipeline pressure trip limit, % of contract firm gas supply, number of run hrs available on alternate/backup fuel, river flow with current/anticipated ice conditions, and available battery storage MW/Hrs are far more usefull than “concerns”.
5. The NAGF requests clarification regarding Requirement R7.3.2.2 “minimum historical operating temperature” with respect to wind speed and wet-bulb temperatures affecting the generator unit operation. Generator facilities may be able to operate at -1 deg F with little or no wind but could suffer a freeze-related forced outage at -1 deg F with sustained 20 mph winds (-23 deg F wind chill).”

Likes	0
Dislikes	0

Response

Thank you for your comments. The SDT responds to your questions with the following general comments: The FERC\NERC report recommended specific information be provided to the RC for use in its operational planning analysis, and the SDT believes the current proposal responds consistent with the recommendations. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Mark Garza - FirstEnergy - FirstEnergy Corporation - 4, Group Name FE Voter	
Answer	
Document Name	
Comment	
N/A	
Likes 0	
Dislikes 0	
Response	
Andrea Jessup - Bonneville Power Administration - 1,3,5,6 - WECC	
Answer	
Document Name	
Comment	
BPA believes this should be a regional standard. Many areas in the country experience extreme weather regularly and are prepared to maintain reliability during extreme weather. In those areas, the standard would be additional compliance burden without a reliability benefit.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The current proposed standards are based on a recommendation by the FERC\NERC report for a nationwide standard. The SDT recommends you forward your concern to the appropriate Regional Entity for further consideration.	
Larry Heckert - Alliant Energy Corporation Services, Inc. - 4	
Answer	

Document Name	
Comment	
Alliant Energy supports the comments submitted by the MRO NSRF.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to MRO NSRF.	
Kathleen Goodman - ISO New England, Inc. - 2 - NPCC	
Answer	
Document Name	
Comment	
EOP-11	
<p>ISO-NE believes weatherization must be addressed. We support the inclusion of preparedness requirements in EOP-011; however, we think that the proposed language in requirement R7 does not go far enough. Without a clear, measurable objective, the requirement may not achieve its intended outcome or provide a measurable reliability benefit. The proposed draft of EOP-011 R7 shown below illustrates how the SDT might incorporate comments #1-6 (shown below recommended language).</p> <p>Recommended language:</p> <p>R7. Each Generator Owner shall develop, implement and maintain, and implement one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: <i>[Violation Risk Factor:</i></p>	

High] [Time Horizon: Operations Planning and Real-Time Operations]

7.X (new) An evaluation of each generating unit's capability to operate:

7.X.1 (new) At the lowest temperature in the previous 40 years as recorded at the generator's physical location (or nearest physical location for which temperature data exists); and

7.X.2 (new) during extreme weather conditions as recorded at the generator's physical location (or nearest physical location for which temperature data exists) which includes temperatures and other meteorological conditions (e.g. wind, precipitation, icing, flooding) which exceed the most severe conditions on record

7.1. Generating unit(s) freeze protection measures based on unique factors

such as geographical location and plant configuration;

7.2. Annual maintenance and inspection and maintenance of generating unit(s) freeze

protection measures;

7.3. Generating unit(s) cold weather data, to include:

7.3.1. Generating unit(s) operating limitations in cold weather (including impacts of precipitation) to include:

7.3.1.1. capability and availability;

7.3.1.2. fuel supply and inventory concerns; and

7.3.1.3. environmental constraints and air permitting limitations.

7.3.2. Generating unit(s):

7.3.2.1. minimum design temperature; or,

7.3.2.2 minimum historical operating temperature; or

7.3.2.3 engineering analysis to determine current minimum cold weather performance temperature

7.3.2.4. fuel switching capabilities; and

1) Within R7, add a new sub-bullet under “the cold weather preparedness plan shall include, at a minimum,” which states the following “an evaluation of the resource’s ability to operate the lowest recorded temperature in the previous 40 years at the generator’s physical location (or nearest location where temperature was recorded for which data exists)”.

2) In addition, “Extreme Weather” (if added based on our other comments below) should be clearly defined as temperatures exceeding the lowest (or highest) recorded temperature at the generator’s physical location (or nearest location where temperature was recorded for which data exists) for a sustained period greater than or equal to one day.

3) R1 1.2.6.2 requires the TO to have Operating Plans that mitigate operating Emergencies and these Operating Plans must include provisions to determine the reliability impacts of **extreme weather** conditions, while the GO requirement for having a cold weather plan, as prescribed within R7, only requires a cold weather plan addressing “cold weather” (not “extreme”) conditions. Consideration should be given to having the GO requirement under R7 include the identification of limitations in more extreme weather conditions (including impacts of temperature, wind, precipitation, icing, flooding) similar to those experienced in ERCOT earlier this year.

4) R7 As part of 7.3.1 recommend including a requirement that the GO’s cold weather preparedness plan includes data related to the impacts of precipitation (e.g. icing, snowpack)

5) R7 Recommend moving 7.3.1.3 to under 7.3.2 since “fuel switching capabilities” is not a **limitation** (7.3.1 is “Generating unit(s) operating limitations in cold weather to include:”). Alternatively, clarify that, as written, this 7.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).

6) R7 As part of 7.3.1.4 or as another item, recommend including air permitting constraints. The reason for this is that some generators cannot utilize alternate fuels unless RC/BA declares specific abnormal/emergency conditions and these limitations might not be captured as an “environmental constraint”.

7) R8 Recommend including an annual periodicity requirement for the cold weather preparedness plan training – as written, this requirement could be interpreted as being a one time requirement. Also recommend clarifying that the training on the cold weather preparedness plan

must be provided to “new” maintenance and operations personnel prior to the first winter in which each individual has assumed responsibility for maintenance or operation of the plant.

IRO-010

1.3 Suggest rewording as “Provisions for notification of BES generating unit(s) operating limitations during cold and extreme weather conditions to include:”

1.3.1 Recommend moving 1.3.1.3 to under 1.3.2 since “fuel switching capabilities” is not a **limitation** (1.3.1 is “Generating unit(s) operating limitations in cold weather to include:”). Alternatively, clarify that, as written, this 1.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).

TOP-003

Same comments as those listed above for IRO-010. Comments apply to R1 (TO) and R2 (BA).

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Thomas Foltz - AEP - 5

Answer

Document Name

Comment

EOP-011:

The meaning of the phrase “provision to determine” in R’s 1.2.6 and 2.2.9 is unclear due to the subjectivity of the word “provision.” As

currently proposed, the obligation might be inconsistently interpreted among entities. AEP believes the original text “Reliability impacts of...” is far superior, and recommends the SDT refrain from changing it and retaining the original text as part of R’s 1.2.6 and 2.2.9.

Newly proposed R 1.2.6 and R 2.2.9 state that the Transmission Operator’s and Balancing Authority’s Operating Plans must include “provisions to determine” the reliability impacts of cold weather conditions and extreme weather conditions, however nothing is stated which requires action taken as a result of any determinations which might require them. The team might wish to consider whether or not a potential reliability gap exists as a result of not requiring that action be taken, for those determinations made which would require that action(s) be taken.

AEP believes that R 7.3.1 could be improved by making it clear that operations limitations in cold weather are dependent on the unit’s operating status. AEP suggests that R 7.3.1 be revised to state “7.3.1. Generating unit(s) operating limitations in cold weather (including units in-service and units out-of-service) to include...”

The terms “capability” and “availability” as proposed for 7.3.1.1 are of potential concern, as these terms are commercial in nature. The meaning of these terms within the commercial environment are obviously quite different than the meanings intended for this standard. As a result, the usage of these terms within this standard may result in confusion and would not provide the desired results. Rather than these terms, AEP recommends instead using “impact assessment” or perhaps “likelihood of availability.”

EOP-011 Violation Severity Levels for R8:

AEP is concerned by the reference to “personnel at a single generating unit” within the proposed Violation Severity Levels (VSLs). Personnel are typically assigned to a generating facility as opposed to a single generating unit. Therefore, AEP recommends changing “single generating unit” to “generating facility” across all VSLs.

In addition, AEP recommends SDT to consider the followings modifications to VSLs:

- 1) Revise the phrase of “5% or less of its total applicable personnel” in the Lower VSL to state “5% of its total applicable personnel”.
- 2) The VSL table should be revised to allow for a grace period to accommodate the scenarios where the identified applicable personnel may be returning from extended period of leave (e.g., sick, military service, etc.)
- 3) Add qualifiers to GO and GOP in each of the VSLs as in “The Generator Owner or Generator Operator that implemented the cold weather preparedness plan” failed to provide ...

EOP-011 Technical Rationale for R8:

AEP also recommends SDT to consider adding the following languages to the associated Technical Rationale to R8: "It is recommended that Generator Owner's and/or Generator Operator's cold weather preparedness plans address operator and maintenance training for all personnel specific to job functions outlined in these plans with roles including step-up employees and temporary roles that perform weatherization functions at the plant. In addition, it is recommended that Generator Owner and Generator Operator include the specific scenarios, in their training program, such as training requirements for maintenance and operations regional personnel who may travel to more than one site."

TOP-003:

As similarly stated for EOP-011, the terms "capability" and "availability" as proposed for 1.3.1.1 are of potential concern, as these terms are commercial in nature. The meaning of these terms within the commercial environment are obviously quite different than the meanings intended for this standard. As a result, the usage of these terms within this standard may result in confusion and would not provide the desired results. Rather than these terms, AEP recommends instead using "impact assessment" or perhaps "likelihood of availability."

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Dana Klem - MRO - 1,2,3,4,5,6 - MRO, Group Name MRO NSRF

Answer

Document Name

Comment

IRO-010-5, R1 Sub requirement numbering correction.

1.3.2. Generating unit(s):

2.3.2.1. minimum design temperature; or

2.3.2.2. minimum historical operating temperature; or

2.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

These should be 1.3.2.1, 1.3.2.2 and 1.3.2.3 respectively.

Likes 0

Dislikes 0

Response

Thank you for your comment. The SDT has corrected the respective numbering within the standard.

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

Answer

Document Name

Comment

R7.3.1.1 refers to cold weather data related to generating unit operating limitations in cold weather to include capability and availability. Specifically, what items should be addressed to meet this requirement?

The Technical Reference, under Rationale for Requirement R7 says, “The Generator Owner plans and procedures should include, but are not limited to, necessary and appropriate freeze protection measures, periodic maintenance and inspection of such measures, accurate ambient temperature design specifications, and generating unit limitations and expected performance in cold weather.” What is meant by accurate ambient temperature design specifications? The design ambient temperature was determined as part of the original design. Records for the design temperatures may not be available for older units. The basis of the design temperatures may also not be available. Recalculating these numbers based on current methods does not change the as built condition.

What is meant by Generating unit limitations and expected performance in cold weather? Does this mean that the Facility needs to be rated with respect to an expected net or gross output based on a range of temperatures?

The Technical Reference, under Rationale for Requirement R7, Paragraph 2 says, “The standard requires the cold weather preparedness plan to contain a generating-units operating limitations during cold weather and other availability and capability information, and an annual requirement to inspect with associated maintenance of the generating unit(s).

What does “other availability and capability information specifically refer to?

What does “an annual requirement to inspect with associated maintenance of the generating unit(s)” mean and specifically refer to?

If deficiencies are documented on the inspection, is there a time requirement related to correcting the deficiencies?

The Technical Reference, under Rationale for Requirement R7, Paragraph 3 says, “Additionally, Requirement R7 requires the Generator Owner to develop accurate data to include the generating unit(s)’ minimum design temperature (i.e., faceplate capability) during cold weather.”

What is an “accurate units design temperature”

When a temperature is cited on a combustion turbine nameplate along with a KW rating, it is for the purposes of determining if the turbine is performing as designed. The KW cited on a turbine nameplate is a mathematical conversion of horsepower. It does not necessarily refer to the unit’s electrical generating capability.

Likes 0

Dislikes 0

Response

Thank you for your comment. The DT took this into consideration when drafting the new Requirements, specifically that an entity may not have the unit’s original design temperature available or if they do have it, there may have been so many modifications to the unit over the years that the number (original design temp) no longer means anything. As such, entities have the option to also consider either providing a “minimum historical operating temperature” (our DT’s proxy for design temp) or a “minimum current cold weather performance temperature as determined by an engineering analysis”. The last option (engineering analysis) is really a revisit of the unit’s original design temp to determine what that minimum temp is now based on currently installed freeze protection measures and technologies, and any new limitations that may have been added as new equipment has been installed (such as environmental control equipment).

Joe O'Brien - NiSource - Northern Indiana Public Service Co. - 6

Answer	
Document Name	
Comment	
<i>The efforts of the SDT are appreciated</i>	
Likes 0	
Dislikes 0	
Response	
Thank you.	
Sing Tay - OGE Energy - Oklahoma Gas and Electric Co. - 6, Group Name OKGE	
Answer	
Document Name	
Comment	
<p>1) Technical Rationale and Justification for EOP-011-2:</p> <p>On page 1, under Rationale for Requirement R8, there are some spelling errors (highlighted in bold):</p> <p><i>See the Glossary terms for Generator Operator and Generator Owner.</i></p> <p>1. <i>Generator Operator – “The entitiy that operates generating Favility(ies) and performs the functions of supplying energy and Interconnected Opeartions Services.”</i></p> <p>2. <i>Geneartor Onwer – “Entity that owns and maintains generating Facility(ies).”</i></p> <p>2) OKGE recommends the SDT to expand the Technical Rationale to clarify the intent of the modifications to R7 and its subrequirements. Expanded technical rationale and Implementation Guidance will help prevent misinterpretations by both registered entities and auditors.</p>	

Likes	0
Dislikes	0
Response	
Thank you. The SDT will forward the standards to NERC for a quality review prior to final ballot.	
Rachel Coyne - Texas Reliability Entity, Inc. - 10	
Answer	
Document Name	
Comment	
<p>Texas RE appreciates the development of a specific standard for training. As stated in response to Question 1, Texas RE notes that Requirement R8 does not include a periodicity for training as was recommended in the 2019 Cold Weather Report.</p> <p>Proposed EOP-011-2 Requirement Parts 1.2.6 and Part 2.2.9 require the TOP and BA to provide provisions to determine the reliability impacts of cold weather conditions in their Emergency Operating Plans. Texas RE recommends the TOP and BA also be required to include actions to address those reliability impacts in their Emergency Operating Plans.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT has forwarded your recommendation to NERC for further consideration.	
Ben Burnett - CenterPoint Energy Houston Electric, LLC - 1 - Texas RE	
Answer	
Document Name	
Comment	
EOP-011-2:	

R1 and R2: CEHE appreciates the removal of the term “any other” from R1 and R2 of the first draft. However, the inclusion of the term “provisions to determine reliability impacts” seems vague. CEHE requests clarification from the SDT on the intent of this requirement, and would suggest using “methods” instead of “provisions”.

R8: The use of "or" between "maintenance" and "operations" in R8 leaves uncertainty as to which Registered Function is responsible for training which personnel. Both the Implementation Guidance and Technical Rationale use "and".

IRO-010-4:

R1.3.2: The R1.3.2 sub-requirements are miss-numbered. In the latest draft, the R1.3.2 sub-requirement numbers are currently 2.3.2.1, 2.3.2.2, and 2.3.2.3.

TOP-003-5:

CEHE questions the data specification requirements included in TOP-003 for all registered TOP functions. For those TOPs that do not own generation and only perform Real-time monitoring, the proposed data specification requirements would be an excessive administrative burden and only provide information for situational awareness. If the SDT determines that a TOP which performs Operational Planning Analyses and/or owns generation in its Transmission Operator Area has a reliability need for the data proposed in this modification, there should be a separate requirement with appropriate functional entity applicability. CEHE suggests the following modification:

R1. Each Transmission Operator that performs Real-time monitoring only shall maintain a documented specification for the data necessary for it to perform its Real-time monitoring. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

- 1.1. A list of data and information needed by the Transmission Operator to support its Real-time monitoring, including non-BES data and external network data as deemed necessary by the Transmission Operator.
- 1.2. Provisions for notification of current Protection System and Remedial Action Scheme (RAS) status or degradation that impacts System reliability.
- 1.3. A periodicity for providing data.
- 1.4. The deadline by which the respondent is to provide the indicated data.

R2. Each Transmission Operator that performs Operational Planning Analyses, Real-time monitoring, and Real-time Assessments shall maintain a documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

2.1. A list of data and information needed by the Transmission Operator to support its Operational Planning Analyses, Real-time Assessments, and Real-time monitoring, including non-BES data and external network data as deemed necessary by the Transmission Operator.

2.2. Provisions for notification of current Protection System and Remedial Action Scheme (RAS) status or degradation that impacts System reliability.

2.3. Provisions for notification of BES generating unit(s) during local forecasted cold weather to include:

2.3.1. Operating limitations based on:

2.3.1.1. capability and availability;

2.3.1.2. fuel supply and inventory concerns;

2.3.1.3. fuel switching capabilities; and

2.3.1.4. environmental constraints.

2.3.2. Generating unit(s):

2.3.2.1. minimum design temperature; or

2.3.2.2. minimum historical operating temperature; or

2.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

2.4. A periodicity for providing data.

2.5. The deadline by which the respondent is to provide the indicated data.

R3. Each Balancing Authority shall maintain a documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

3.1. A list of data and information needed by the Balancing Authority to support its analysis functions and Real-time monitoring.

3.2. Provisions for notification of current Protection System and Remedial Action Scheme status or degradation that impacts System reliability.

3.3. Provisions for notification of BES generating unit(s) status during local forecasted cold weather to include:

3.3.1. Operating limitations based on:

3.3.1.1. capability and availability;

3.3.1.2. fuel supply and inventory concerns;

3.3.1.3. fuel switching capabilities; and

3.3.1.4. environmental constraints.

3.3.2. Generating unit(s):

3.3.2.1. minimum design temperature; or

3.3.2.2. minimum historical operating temperature; or

3.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

3.4. A periodicity for providing data.

3.5. The deadline by which the respondent is to provide the indicated data.

R4. Each Transmission Operator shall distribute its data specification to entities that have data required by the Transmission Operator’s Operational Planning Analyses, Realtime monitoring, and Real-time Assessments. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

R5. Each Balancing Authority shall distribute its data specification to entities that have data required by the Balancing Authority’s analysis functions and Real-time monitoring. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

R6. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R3 or R4 shall satisfy the obligations of the documented specifications using: [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations]

6.1. A mutually agreeable format

6.2. A mutually agreeable process for resolving data conflicts

6.3. A mutually agreeable security protocol

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects. In addition, the subparts numbering has been corrected. The team thanks you for that catch!

Leslie Hamby - Southern Indiana Gas and Electric Co. - 3,5,6 - RF, Group Name SIGE Project 2019-06

Answer

Document Name

Comment

EOP-011-2:

- R1 and R2: SIGE appreciates the removal of the term “any other” from R1 and R2 of the first draft. However, the inclusion of the term “provisions to determine reliability impacts” seems vague. SIGE requests clarification from the SDT on the intent of this requirement, and would suggest using “methods” instead of “provisions”.
- R8: The use of "or" between "maintenance" and "operations" in R8 leaves uncertainty as to which Registered Function is responsible for training which personnel. Both the Implementation Guidance and Technical Rationale use "and".

IRO-010-4:

R1.3.2: The R1.3.2 sub-requirements are miss-numbered. In the latest draft, the R1.3.2 sub-requirement numbers are currently 2.3.2.1, 2.3.2.2, and 2.3.2.3.

TOP-003-5:

SIGE questions the data specification requirements included in TOP-003 for all registered TOP functions. For those TOPs that do not own generation and only perform Real-time monitoring, the proposed data specification requirements would be an excessive administrative burden and only provide information for situational awareness. If the SDT determines that a TOP which performs Operational Planning Analyses and/or owns generation in its Transmission Operator Area has a reliability need for the data proposed in this modification, there should be a separate requirement with appropriate functional entity applicability. SIGE suggests the following modification:

R1. Each Transmission Operator that performs Real-time monitoring only shall maintain a documented specification for the data necessary for it to perform its Real-time monitoring. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

1.1. A list of data and information needed by the Transmission Operator to support its Real-time monitoring, including non-BES data and external network data as deemed necessary by the Transmission Operator.

1.2. Provisions for notification of current Protection System and Remedial Action Scheme (RAS) status or degradation that impacts System reliability.

1.3. A periodicity for providing data.

1.4. The deadline by which the respondent is to provide the indicated data.

R2. Each Transmission Operator that performs Operational Planning Analyses, Real-time monitoring, and Real-time Assessments shall maintain a documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

2.1. A list of data and information needed by the Transmission Operator to support its Operational Planning Analyses, Real-time Assessments, and Real-time monitoring, including non-BES data and external network data as deemed necessary by the Transmission Operator.

2.2. Provisions for notification of current Protection System and Remedial Action Scheme (RAS) status or degradation that impacts System reliability.

2.3. Provisions for notification of BES generating unit(s) during local forecasted cold weather to include:

2.3.1. Operating limitations based on:

2.3.1.1. capability and availability;

2.3.1.2. fuel supply and inventory concerns;

2.3.1.3. fuel switching capabilities; and

2.3.1.4. environmental constraints.

2.3.2. Generating unit(s):

2.3.2.1. minimum design temperature; or

2.3.2.2. minimum historical operating temperature; or

2.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

2.4. A periodicity for providing data.

2.5. The deadline by which the respondent is to provide the indicated data.

R3. Each Balancing Authority shall maintain a documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

3.1. A list of data and information needed by the Balancing Authority to support its analysis functions and Real-time monitoring.

3.2. Provisions for notification of current Protection System and Remedial Action Scheme status or degradation that impacts System reliability.

3.3. Provisions for notification of BES generating unit(s) status during local forecasted cold weather to include:

3.3.1. Operating limitations based on:

3.3.1.1. capability and availability;

3.3.1.2. fuel supply and inventory concerns;

3.3.1.3. fuel switching capabilities; and

3.3.1.4. environmental constraints.

3.3.2. Generating unit(s):

3.3.2.1. minimum design temperature; or

3.3.2.2. minimum historical operating temperature; or

3.3.2.3. engineering analysis to determine current minimum cold weather performance temperature.

3.4. A periodicity for providing data.

3.5. The deadline by which the respondent is to provide the indicated data.

R4. Each Transmission Operator shall distribute its data specification to entities that have data required by the Transmission Operator’s Operational Planning Analyses, Realtime monitoring, and Real-time Assessments. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

R5. Each Balancing Authority shall distribute its data specification to entities that have data required by the Balancing Authority’s analysis functions and Real-time monitoring. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

R6. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R3 or R4 shall satisfy the obligations of the documented specifications using: [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations]

6.1. A mutually agreeable format

6.2. A mutually agreeable process for resolving data conflicts

6.3. A mutually agreeable security protocol

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Donald Lock - Talen Generation, LLC - 5

Answer

Document Name

Comment

1. R1.2 of EOP-011-2 should be supplemented with, “Identification of essential fuel supply infrastructure that shall not be subject to load shedding, including natural gas pipeline compressor stations, LNG storage plants, natural gas processing plants, natural gas field wellhead compressors and other critical gas system components.” This verbiage is drawn from NERC’s Reliability Guideline Gas and Electrical

Operational Coordination Considerations (see p.4, https://www.nerc.com/comm/OC_Reliability_Guidelines_DL/Gas_and_Electrical_Operational_Coordination_Considerations_20171213.pdf).

Blacking-out natural gas compression stations, thereby forcing NG-fueled generation units offline, was reportedly a major contributor to the Texas blackouts of February, 2021.

2. R1 should be supplemented by a plan to put additional generation units online in advance of severe winter storms, since keeping them running through extreme weather is far more reliable than waiting until temperatures have bottomed-out before requesting cold start-up. This is by far the best and easiest means of bolstering BES wintertime reliability, but for unknown reasons it is almost never used.

3. The phrase, “extreme weather conditions,” in Requirement 1.2.6.2 should be replaced by, “non-temperature-related winter challenges, e.g. heavy snowfall, ice storms and freezing fog.”

{4. Requirement 7.3.1 should be changed to, “Known generating unit(s) operating limitations in cold weather, to include....” Cold weather-related forced outages are caused principally by hidden vulnerabilities, e.g. mis-installed heat tracing, which cannot be detected in inspection and maintenance activities because it is covered by insulation. EOP-011-2 should not give the impression that GOs will be held responsible for knowing the unknowable.

5. R7.3.1.1 should be changed to, “capacity and start-up reliability.” The present references to “capability” and “availability” are excessively vague.

6. The qualifier, “real-time” should be added to R7.3.1.2. Inputs such as, “We’ll lose capacity if the NG pipeline pressure falls another 20 psi,” and, “Roads are closed, and we only have 10 hours of oil fuel left,” would be far more useful than, “MW output depends on fuel pressure,” and, “Need periodic oil truck deliveries.”

7. R7.3.2.1 should be changed to, “design ambient air temperature and wind speed for heat tracing/insulation systems.” This is the principal equipment of interest, and that plants can do something about. There can be many other items with design temperatures, such as lube oil reservoir heaters, fuel oil storage tank heaters, coal plant tripper floor roof heaters, oil gun ignitors, air preheat coils, ash handling systems, and aux boilers. Plants can consequently have a multitude of design temperatures, many of which are known only to the original equipment manufacturers and not to GOs.

8. R7.3.2.2 should be changed to, “minimum historical ambient dry bulb air temperature or (preferably) wind chill temperature.” Many plants have been able to ride-out weather dipping to, say, -5 F with little or no wind, only to later suffer a freeze-related forced outage at -1 F with sustained 20 mph winds (-23 F wind chill).
9. R7.3.2.3 should be deleted, because it gives the false impression that winter storm survivability can be determined solely via calculations. One needs accurate input data to obtain authoritative results, and it is often the case that:
 - No one knows how the heat tracing beneath piping and instrument system insulation was installed, e.g. as regards using the specified spiral pitch or looping it for extra heat input at valves and supports
 - No one knows if or how bare surfaces on valves were accounted-for in the heat tracing design.
 - Numerous elements come into play for which information is sparse or nonexistent, ref. comment #5 above
 - Temperature is not the issue when outages are caused by heavy snowfall rates, high winds, ice storms and freezing fog.
10. The expressions, “implement and maintain,” in R7 and, “implemented and maintained,” in M7 should be shortened to just reference implementation. One maintains equipment, not plans, and this obligation is addressed in R7.2.

Likes	0
Dislikes	0
Response	
Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.	
Julie Hall - Entergy - 6, Group Name Entergy	
Answer	
Document Name	
Comment	

Entergy would like the Standard Drafting Team to take into consideration that cold weather design limit is not helpful information. It is the mitigation activities that drive the ability to reliably operate in cold weather. Water cooled condensers cannot operate with water below about 32 degrees and generally sites do not shut down at a prescribed temperature. Some sites have more design features (trip critical small lines in buildings or insulated with heat trace protection, circulating water discharge recirculating to intake structures, cooling fan deicing modes, and etc). Other sites rely more on temporary insulation, heaters and scaffolding tents.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Leonard Kula - Independent Electricity System Operator - 2

Answer

Document Name

Comment

N/A.

Likes 0

Dislikes 0

Response

Andy Fuhrman - Andy Fuhrman On Behalf of: Theresa Allard, Minnkota Power Cooperative Inc., 1; - Andy Fuhrman

Answer

Document Name

Comment

MPC supports MRO NERC Standards Review Forum comments.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Pamela Hunter - Southern Company - Southern Company Services, Inc. - 1,3,5,6 - SERC, Group Name Southern Company	
Answer	
Document Name	
Comment	
<p>To ensure all sub-parts are worded consistently, Southern Company recommends re-wording 7.3.2.3 in EOP-011 to "Minimum cold weather performance temperature determined by an engineering analysis". This is also applicable to 2.3.2.3 in both TOP-003 and IRO-010.</p> <p>Also, the team should consider shortening M8 in EOP-011, similar to the way that M7 was shortened. For example, "Each Generator Operator or Generator Owner will have documented evidence that the applicable personnel completed training of the Generator Owner's cold weather preparedness plan(s)."</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. The SDT has revised the language similar to your suggestion.	
Martin Sidor - NRG - NRG Energy, Inc. - 6	
Answer	

Document Name	
Comment	
<p>For EOP-011-2, R7.3.2., NRG has concerns with the quality of the requested data and how it will be used. Generating units can be designed to operate down to a given temperature or have historical temperature information showing successful operation, but other weather factors can influence real-time operating performance. The addition of wind or precipitation to a unit operating at its defined cold temperature limit can have a significant impact on the unit's ability to perform. Any temperature limit data that is submitted to the TOP, BA, and RC should be considered a starting point for analysis and not an absolute.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The team took your comment into consideration when determining the next steps for our project.</p>	
Dennis Chastain - Tennessee Valley Authority - 1,3,5,6 - SERC	
Answer	
Document Name	
Comment	
<p>In all versions of the latest IRO-010-4, the sub-steps under section 1.3.2 are numbered incorrectly, i.e. they start with a 2 rather than a 1.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comment. The SDT corrected the respective numbering within the correct requirement.</p>	
Anthony Jablonski - ReliabilityFirst - 10	
Answer	

Document Name	
Comment	
<p>General Comment – ReliabilityFirst believes all cold weather requirements should be located in a new standard specifically dedicated to cold weather preparedness. One standard will promote continuity of the cold weather preparedness process and the responsibilities of the associated functional entities. Placing cold weather requirements across three different standards only dilutes the importance of cold weather preparedness and may lead to confusion and possible gaps in responsibilities.</p> <p>Specific feedback for EOP-011-2 R7. The concerns and suggested rewording/changes are listed below:</p> <ul style="list-style-type: none"> • The wording, “minimal historical operating temperature”, in 7.3.2.2 could be interpreted that historical cold weather information is only applicable when the generator is typically running/operational. Suggest to reword so that 7.3.2.2 is focused on cold weather experienced over a period of time at a plant location like, “minimum demonstrated historical cold weather experienced in the previous 10 years”. The timeframe of 10 years aligns with the language in BAL-0502-RF-03 to review resource adequacy based on “one day in ten year” loss of Load expectation. Other Reliability Coordinators/Planning Coordinators also has various assessment test methods that are designed to review risks associated with a “one day in ten year” type of event. This change may better cover geographic areas that do not frequently experience cold weather events. • The language in 7.3.2.3, “engineering analysis to determine current minimum cold weather performance temperature”, may prove difficult to enforce and provides enough flexibility that historical cold weather information is only applicable when the generator is typically running/operational. It is recommended to remove 7.3.2.3. 	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.</p>	
Paul Mehlhaff - Sunflower Electric Power Corporation - 1	
Answer	
Document Name	

Comment

Sunflower agrees with the comments ACES provided for question 5 plus we have additional comments below.

Sunflower Additional Comments:

The requirement 7.3.1.1 obligates each generation owner to implement and maintain a cold weather preparedness plan for generating units that must include undefined “cold weather data” which must include cold weather capability and availability.

Capability and availability are undefined terms that are not described within the IEEE 762 methodology nor within current or planned revised SPP testing criteria to my knowledge.

This is no different than the point about the undefined term “maintenance” and how it might contribute to a future audit dispute.

It appears the terms were well-intentioned, but without clear definition, the draft language has the potential for causing a lot of confusion. Here is a simple example:

Generally speaking, I would presume that the term availability would be similarly referenced to the defined term availability factor. The availability factor for a unit over a given period is simply the available hours a unit was capable of operation or was actually in service during a given period divided by the period hours. Simple enough. But let’s apply some different scenarios.

- 1) If a unit is in service before ambient temperatures drop and if the unit is allowed to continuously operate over this cold period, the unit could easily achieve a 100% availability factor.
 - a. Available hours = Service hours
 - b. Service hours = Period hours
 - c. Available hours = Period hours resulting in 100% Availability Factor
- 2) Take the same unit and leave it out of service as ambient temperatures collapse; then, issue dispatch orders for the unit to enter service at the worst possible time coinciding with the lowest ambient temperatures. This sets up conditions likely resulting in a unit start failure

resulting in no service hours and some accumulation of forced outage hours which results in a lower calculated availability factor over the same period with the exact same ambient conditions.

- a. Available hours = Period hours – Forced Outage hours associated with start failure
 - b. Resulting Availability Factor < 100%
- 3) Or pass ill-advised compliance rules forcing the owner to take a conservative approach to managing regulatory risk, and force the owner to develop a plan where this same unit is considered unavailable any time ambient temperatures drop below freezing if the unit isn't already in service – which results in a calculated availability factor that is very low during the winter season.
- a. Available hours = all hours of the period where ambient temperature is >32F
 - b. Availability Factor <<<100%
- 4) In all three scenarios, identical unit exposed to identical ambient conditions with the same owner and same operator.

So what is that generation owner/operator supposed to put into their cold weather operating plan that must address, at a minimum, the expected generator's availability and capability?

Is availability the same thing as IEEE 762 availability factor? Or some new concept? If new, where is availability defined/described?

Capability is similarly a new concept not reflected clearly in the draft standard, IEEE 762, or SPP criteria. Even under conditions where a unit is already in service, I'm not aware of any uniform methodology to determine unit output as temperatures drop. There are methodologies that can be used as temperatures increase such as condenser backpressure correction curves. So, predicting unit output during high temperatures extremes is "a thing." However, I'm not aware of concepts that work similarly as temperatures continue to drop.

Thank you for your hard work on this project and thank you for the opportunity to provide feedback.

Likes	0
Dislikes	0
Response	

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Rich Hydzik - Rich Hydzik On Behalf of: Scott Kinney, Avista - Avista Corporation, 3, 5, 1; - Rich Hydzik

Answer

Document Name

Comment

No further comments.

Likes 0

Dislikes 0

Response

Kenya Streeter - Edison International - Southern California Edison Company - 1,3,5,6

Answer

Document Name

Comment

See comments submitted by Edison Electric Institute

Likes 0

Dislikes 0

Response

Please see the SDT's response to EEI.

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

Answer	
Document Name	
Comment	
<p>It appears that the Registered Entities will define "cold weather". Will it be required for the definition of cold weather be the same across the entire fleet of generation or can it be specific to the generating units capabilities, design and/or fuel type? Many factors impact what what may be considered "cold weather" in the area of preparedness.</p>	
Likes 0	
Dislikes 0	
Response	
<p>Thank you for your comment. The preparedness plan is based on the unit's geographical location, which provides flexibility for the GO to construct its plan appropriately.</p>	
<p>Keith Jonassen - Keith Jonassen On Behalf of: Michael Puscas, ISO New England, Inc., 2; - Keith Jonassen</p>	
Answer	
Document Name	
Comment	
<p>EOP-11</p> <p>The ISO-NE believes weatherization must be addressed. We support the inclusion of preparedness requirements in EOP-011; however, we think that the proposed language in requirement R7 does not go far enough. Without a clear, measurable objective, the requirement may not achieve its intended outcome or provide a measurable reliability benefit. The proposed draft of EOP-011 R7 shown below illustrates how the SDT might incorporate comments #1-6 (shown below recommended language).</p> <p>Recommended language:</p>	

R7. Each Generator Owner shall develop, implement and maintain, and implement one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: *[Violation Risk Factor: High] [Time Horizon: Operations Planning and Real-Time Operations]*

7.X (new) An evaluation of each generating unit's capability to operate:

7.X.1 (new) At the lowest temperature in the previous 40 years as recorded at the generator's physical location (or nearest physical location for which temperature data exists); and

7.X.2 (new) during extreme weather conditions as recorded at the generator's physical location (or nearest physical location for which temperature data exists) which includes temperatures and other meteorological conditions (e.g. wind, precipitation, icing, flooding) which exceed the most severe conditions on record

7.1. Generating unit(s) freeze protection measures based on unique factors such as geographical location and plant configuration;

7.2. Annual maintenance and inspection and maintenance of generating unit(s) freeze protection measures;

7.3. Generating unit(s) cold weather data, to include:

7.3.1. Generating unit(s) operating limitations in cold weather (including impacts of precipitation) to include:

7.3.1.1. capability and availability;

7.3.1.2. fuel supply and inventory concerns; and

7.3.1.3. environmental constraints and air permitting limitations.

7.3.2. Generating unit(s):

7.3.2.1. minimum design temperature; or,

7.3.2.2 minimum historical operating temperature; or

7.3.2.3 engineering analysis to determine current minimum cold weather performance temperature

7.3.2.4. fuel switching capabilities; and

- 1) Within R7, add a new sub-bullet under “the cold weather preparedness plan shall include, at a minimum,” which states the following “an evaluation of the resource’s ability to operate the lowest recorded temperature in the previous 40 years at the generator’s physical location (or nearest location where temperature was recorded for which data exists)”.
- 2) In addition, “Extreme Weather” (if added based on our other comments below) should be clearly defined as temperatures exceeding the lowest (or highest) recorded temperature at the generator’s physical location (or nearest location where temperature was recorded for which data exists) for a sustained period greater than or equal to one day.
- 3) R1 1.2.6.2 requires the TO to have Operating Plans that mitigate operating Emergencies and these Operating Plans must include provisions to determine the reliability impacts of **extreme weather** conditions, while the GO requirement for having a cold weather plan, as prescribed within R7, only requires a cold weather plan addressing “cold weather” (not “extreme”) conditions. Consideration should be given to having the GO requirement under R7 include the identification of limitations in more extreme weather conditions (including impacts of temperature, wind, precipitation, icing, flooding) similar to those experienced in ERCOT earlier this year.
- 4) R7 As part of 7.3.1 recommend including a requirement that the GO’s cold weather preparedness plan includes data related to the impacts of precipitation (e.g. icing, snowpack)
- 5) R7 Recommend moving 7.3.1.3 to under 7.3.2 since “fuel switching capabilities” is not a **limitation** (7.3.1 is “Generating unit(s) operating limitations in cold weather to include:”). Alternatively, clarify that, as written, this 7.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).
- 6) R7 As part of 7.3.1.4 or as another item, recommend including air permitting constraints. The reason for this is that some generators cannot utilize alternate fuels unless RC/BA declares specific abnormal/emergency conditions and these limitations might not be captured as an “environmental constraint”.
- 7) R8 Recommend including an annual periodicity requirement for the cold weather preparedness plan training – as written, this requirement could be interpreted as being a one time requirement. Also recommend clarifying that the training on the cold weather preparedness plan must be provided to “new” maintenance and operations personnel prior to the first winter in which each individual has assumed responsibility for maintenance or operation of the plant.

IRO-010

1.3 Suggest rewording as “Provisions for notification of BES generating unit(s) operating limitations during cold and extreme weather conditions to include:”

1.3.1 Recommend moving 1.3.1.3 to under 1.3.2 since “fuel switching capabilities” is not a **limitation** (1.3.1 is “Generating unit(s) operating limitations in cold weather to include:”). Alternatively, clarify that, as written, this 1.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).

TOP-003

Same comments as those listed above for IRO-010. Comments apply to R1 (TO) and R2 (BA).

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Patricia Lynch - NRG - NRG Energy, Inc. - 5

Answer

Document Name

Comment

For EOP-011-2, R7.3.2., NRG has concerns with the quality of the requested data and how it will be used. Generating units can be designed to operate down to a given temperature or have historical temperature information showing successful operation, but other weather factors can influence real-time operating performance. The addition of wind or precipitation to a unit operating at its defined cold temperature limit can have a significant impact on the unit’s ability to perform. Any temperature limit data that is submitted to the TOP, BA, and RC should be considered a starting point for analysis and not an absolute.

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Michael Courchesne - Michael Courchesne On Behalf of: Michael Puscas, ISO New England, Inc., 2; - ISO New England, Inc. - 2 - NPCC

Answer

Document Name

Comment

EOP-11

The ISO/RTO Council Standards Review Committee (IRC SRC) believes weatherization must be addressed. We support the inclusion of preparedness requirements in EOP-011; however, we think that the proposed language in requirement R7 does not go far enough. Without a clear, measurable objective, the requirement may not achieve its intended outcome or provide a measurable reliability benefit. **The proposed draft of EOP-011 R7 shown below illustrates how the SDT might incorporate comments #1-6 (shown below recommended language).**

Recommended language:

R7. Each Generator Owner shall develop, implement and maintain, and implement one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: *[Violation Risk Factor: High] [Time Horizon: Operations Planning and Real-Time Operations]*

7.X (new) *An evaluation of each generating unit's capability to operate:*

7.X.1 (new) At the lowest temperature in the previous 40 years as recorded at the generator's physical location (or nearest physical location for which temperature data exists); and

7.X.2 (new) during extreme weather conditions as recorded at the generator's physical location (or nearest physical location for which temperature data exists) which includes temperatures and other meteorological conditions (e.g. wind, precipitation, icing, flooding) which exceed the most severe conditions on record

- 7.1. Generating unit(s) freeze protection measures based on unique factors such as geographical location and plant configuration;
 - 7.2. Annual maintenance and inspection and maintenance of generating unit(s) freeze protection measures;
 - 7.3. Generating unit(s) cold weather data, to include:
 - 7.3.1. Generating unit(s) operating limitations in cold weather (including impacts of precipitation) to include:
 - 7.3.1.1. capability and availability;
 - 7.3.1.2. fuel supply and inventory concerns; and
 - 7.3.1.3. environmental constraints and air permitting limitations.
 - 7.3.2. Generating unit(s):
 - 7.3.2.1. minimum design temperature; or,
 - 7.3.2.2 minimum historical operating temperature; or
 - 7.3.2.3 engineering analysis to determine current minimum cold weather performance temperature
 - 7.3.2.4. fuel switching capabilities; and
- 1) Within R7, add a new sub-bullet under “the cold weather preparedness plan shall include, at a minimum,” which states the following “an evaluation of the resource’s ability to operate the lowest recorded temperature in the previous 40 years at the generator’s physical location (or nearest location where temperature was recorded for which data exists)”.
- 2) In addition, “Extreme Weather” (if added based on our other comments below) should be clearly defined as temperatures exceeding the lowest (or highest) recorded temperature at the generator’s physical location (or nearest location where temperature was recorded for which data exists) for a sustained period greater than or equal to one day.
- 3) R1 1.2.6.2 requires the TO to have Operating Plans that mitigate operating Emergencies and these Operating Plans must include provisions to determine the reliability impacts of **extreme weather** conditions, while the GO requirement for having a cold weather plan, as prescribed within R7, only requires a cold weather plan addressing “cold weather” (not “extreme”) conditions. Consideration should be given to having

the GO requirement under R7 include the identification of limitations in more extreme weather conditions (including impacts of temperature, wind, precipitation, icing, flooding) similar to those experienced in ERCOT earlier this year.

4) R7 As part of 7.3.1 recommend including a requirement that the GO's cold weather preparedness plan includes data related to the impacts of precipitation (e.g. icing, snowpack)

5) R7 Recommend moving 7.3.1.3 to under 7.3.2 since "fuel switching capabilities" is not a **limitation** (7.3.1 is "Generating unit(s) operating limitations in cold weather to include:"). Alternatively, clarify that, as written, this 7.3.1.3 is meant to be "limitations when operating on alternate fuels" (not sure that is the intent though).

6) R7 As part of 7.3.1.4 or as another item, recommend including air permitting constraints. The reason for this is that some generators cannot utilize alternate fuels unless RC/BA declares specific abnormal/emergency conditions and these limitations might not be captured as an "environmental constraint".

7) R8 Recommend including an annual periodicity requirement for the cold weather preparedness plan training – as written, this requirement could be interpreted as being a one time requirement. Also recommend clarifying that the training on the cold weather preparedness plan must be provided to "new" maintenance and operations personnel prior to the first winter in which each individual has assumed responsibility for maintenance or operation of the plant.

IRO-010

1.3 Suggest rewording as "Provisions for notification of BES generating unit(s) operating limitations during cold and extreme weather conditions to include:"

1.3.1 Recommend moving 1.3.1.3 to under 1.3.2 since "fuel switching capabilities" is not a **limitation** (1.3.1 is "Generating unit(s) operating limitations in cold weather to include:"). Alternatively, clarify that, as written, this 1.3.1.3 is meant to be "limitations when operating on alternate fuels" (not sure that is the intent though).

TOP-003

Same comments as those listed above for IRO-010. Comments apply to R1 (TO) and R2 (BA).

Likes 0

Dislikes	0
Response	
Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.	
Terry Harbour - Berkshire Hathaway Energy - MidAmerican Energy Co. - 1	
Answer	
Document Name	
Comment	
MEC supports the MRO NSRF comments.	
Likes	0
Dislikes	0
Response	
Please see the SDT's response to MRO NSRF.	
Neil Shockey - Edison International - Southern California Edison Company - 5	
Answer	
Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes	0
Dislikes	0
Response	

Please see the SDT's response to EEI.

Marty Hostler - Northern California Power Agency - 3,4,5,6

Answer

Document Name

Comment

NO.

a. Another unfair violation of NERC Market Interference Principles is the fact that BAs and regional RC RTOs will be able to use requested information in bid stack analysis for award Day Ahead and real-time dispatch. Non-GO/GOPs will not have to submit the same information used in Modeling evaluations of their competitive bids.

b. The STD refuses to make reliability enhancement requirements for BA and RC Winterization training, load forecasting improvements, and reserve increases which the FERC/NERC Report also discusses.

c. STD responses to the last round of Stakeholder comments states a new SAR would be required to include these concerns. A couple months ago, during the SC meeting discussing SAR approval, NERC and the STD chair advertised that the SAR the was written broadly to address stakeholder concerns. Now the STD is refuses to address these concerns.

Likes 0

Dislikes 0

Response

Thank you for your comment. As stated in previous comments, market structures and mitigations are outside the scope of the SAR and not within NERC's purview. The SAR is written broadly so that the SDT can address the recommendations contained in the FERC\NERC report, but the SDT disagrees that every stakeholder concern could be addressed under the SAR. The FERC\NERC report does not require reliability enhancement requirements for BA and RC winterization training, load forecasting improvements, and reserve increases. The standards do not require a min reserve requirement but this could be pursuant to another SAR. The SDT recommends that commenter develop and submit a SAR which contains the scoping requirements described in the comment.

Wendy Center - U.S. Bureau of Reclamation - 5	
Answer	
Document Name	
Comment	
Reclamation again recommends the cold weather modifications not apply to hydroelectric generators and/or to certain geographic locations. Reclamation supports the comments provided by NAGF in response to Question 5.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comments. The SDT has forwarded your comments to NERC for further consideration.	
Wayne Sipperly - North American Generator Forum - 5 - MRO,WECC,Texas RE,NPCC,SERC,RF	
Answer	
Document Name	
Comment	
The NAGF provides the following comments for consideration:	
EOP-011-2:	
<ol style="list-style-type: none"> The NAGF recommends that R1.2 of EOP-011-2 be supplemented with, "Identification of essential fuel supply infrastructure that shall not be subject to load shedding, including natural gas pipeline compressor stations, LNG storage plants, natural gas processing plants, natural gas field wellhead compressors and other critical gas system components." This verbiage is drawn from NERC's Reliability Guideline Gas and Electrical Operational Coordination Considerations (see p.4): 	

https://www.nerc.com/comm/OC_Reliability_Guidelines_DL/Gas_and_Electrical_Operational_Coordination_Considerations_20171213.pdf

2. The NAGF requests clarifying the term “extreme weather conditions” referenced in R1.2.6.2 and R2.2.9.2. For example, does the term address non-temperature related cold weather conditions (heavy snowfall, ice storms, freezing fog, etc.) and/or warm extreme weather conditions (tornados, hail storms, derecho, etc.)? Clarifying this term will help to confirm the conditions that the TOP and BA operating plans need to address as well as the data to be provided by the GO/GOPs.
3. The NAGF requests clarification regarding the Requirement 7.3.1 request for “Generating unit(s) cold weather data, to include”. We suggest that NERC specify that this requirement pertains only to known, measurable effects on capacity, start-up capability or operational reliability.
4. The NAGF requests clarification regarding the terms “capability and availability” referenced in R7.3.1.1.
5. The NAGF requests clarification regarding Requirement R7.3.1.2 “fuel supply and inventory concerns”. The data to be provided is not so much concerns but has to be actionable/usable for planning models and real-time operations. Generating facility NG pipeline pressure trip limit, % of contract firm gas supply, number of run hrs available on alternate/backup fuel, river flow with current/anticipated ice conditions, and available battery storage MW/Hrs are far more usefull than “concerns”.
6. The NAGF requests clarification regarding Requirement R7.3.2.2 “minimum historical operating temperature” with respect to wind speed and wet-bulb temperatures affecting the generator unit operation. Generator facilities may be able to operate at -1 deg F with little or no wind but could suffer a freeze-related forced outage at -1 deg F with sustained 20 mph winds (-23 deg F wind chill).

Likes 0

Dislikes 0

Response

Thank you. Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Romel Aquino - Edison International - Southern California Edison Company - 3

Answer

Document Name	
Comment	
See comments submitted by Edison Electric Institute.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Joshua Andersen - Salt River Project - 1,3,5,6 - WECC	
Answer	
Document Name	
Comment	
SRP urges the drafting team to review the verbiage used in TOP-003 and IRO-008. As the requirement is written the entities responding to the data request are required to provide the requested items and status changes during cold weather. SRP requests flexibility be given to those requesting the data to determine the granularity of data necessary rather than requiring every unit to provide the specific information. Units that are not severely impacted by local forecasted cold weather may not have to provide the same level of detail as those that are more adversely impacted.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comment. The SDT has sought to implement the recommendations of the FERC\NERC report which calls for minimum reporting requirements. The SDT recommends the entity work with its RC/BA and TOP to determine periodicity of data specifications.	
Dan Roethemeyer - Vistra Energy - 5	

Answer	
Document Name	
Comment	
<p>EOP-011 R7 has been revised in the new draft to provide more specificity as requested by several commenters. However, the new wording still leaves unclear what data is required from the GO. Below are specific comments we provide for consideration.</p> <p>7.3.1 General Concern: As currently drafted, this provision could be read to require generating units to provide information regarding operating limitations that is not known to the generating units. For example, fuel supply and inventory concerns could arise from pipeline capacity limitations that generators would only be aware of if it were communicated by the pipeline. We believe that the intent of this provision is to require generators to only include such information that is known by the generating units. Thus, we propose the following revision to 7.3.1.</p> <p>7.3.1. Generating unit(s) operating limitations in cold weather to include, to the best of its/their knowledge,</p> <p style="padding-left: 40px;">7.3.1.1. capability and availability;</p> <p>7.3.1.2. fuel supply and inventory concerns;</p> <p>7.3.1.3. fuel switching capabilities; and</p> <p>7.3.1.4. environmental constraints.</p> <p>Additionally, we are highlighting specific comments regarding the subsections under 7.3.1 and 7.3.2.</p> <p><i>7.3.1.1 Capability and availability</i> – daily capability/availability numbers are routinely shared with the RC already; it’s not clear what is being asked for here</p> <p><i>7.3.1.2 Fuel supply and inventory concerns</i> – limitations on gas supply (i.e., compressor malfunction) depend on the gas supplier informing the GO</p>	

7.3.2.1 *Minimum design temperature* – it’s not clear if the Standard is asking for a single temperature for the entire generating unit. A generating unit has many components and auxiliary systems required to support generation, each with its own design criteria.

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Scott Berry - Scott Berry On Behalf of: Jack Alvey, Indiana Municipal Power Agency, 1, 4; - Scott Berry

Answer

Document Name

Comment

In Requirement R7, IMPA agrees with the use of “implementing” a cold weather preparedness plan but not the use of “maintain”. Even if the other previous requirements include this word it does not mean that this requirement should not be corrected since it is a new requirement. To maintain a plan is a pure administrative action and the focus should be on results based actions.

IMPA understands the priority of getting this standard approved and implemented, but we also believe in doing the standard in the correct fashion to prevent issues which will require additional time to fix.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Jennifer Bray - Arizona Electric Power Cooperative, Inc. - 1

Answer

Document Name

Comment

AEPC encourages the SDT to define the term “cold weather,” which is broadly used in each of these standards and may create confusion, discrepancies, and a compliance burden due the potentially numerous definitions, conditions, and parameters that entities across the NERC footprint could use.

We are also concerned about EOP-011 requirement 7.2 that requires entites to perform “annual inspection and maintenance.” As written it makes performing annual maintenance a requirement when there may not be any maintenance actually required. We recommend rephrasing and adding language to state that maintenance is only required when identified by the inspection i.e. “Annual inspection of generating unit(s) freeze protection measures and any maintenance identified during inspection.”

Thank you for the opportunity to provide feedback on this project.

AEPC has signed on to ACES comments.

Likes	0
Dislikes	0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects. The SDT reviewed the issue with inspection and maintenance and determined that the language provides reasonable expectation that maintenance is dependent on the outcome of the inspection; so the team opted to not include additional language.

Jennifer Flandermeyer - Jennifer Flandermeyer On Behalf of: Allen Klassen, Evergy, 6, 1, 3, 5; Derek Brown, Evergy, 6, 1, 3, 5; Marcus Moor, Evergy, 6, 1, 3, 5; Thomas ROBBEN, Evergy, 6, 1, 3, 5; - Jennifer Flandermeyer

Answer	
Document Name	

Comment

Evergy endorses the EEI comments submitted in this comment period.

Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to EEI.	
Amy Casuscelli - Xcel Energy, Inc. - 1,3,5,6 - MRO,WECC	
Answer	
Document Name	
Comment	
Additional clarification could be added to EOP-011 to differentiate between minimum operating temperatures and minimum starting temperatures.	
Likes 0	
Dislikes 0	
Response	
Thank you for your comments. The SDT team will forward your recommendations to NERC for further consideration in the Implementation Guidance.	
Jamie Johnson - California ISO - 2	
Answer	
Document Name	
Comment	
The California ISO requests the SDT consider that data being requested in TOP-003-4 R1.3.2 and R2.3.2 is not appropriately requested "during local forecasted cold weather" as stated in R1.3 and R2.3. The same comment relates to IRO-010-3 R1.3.2 for R1.3	
Likes 0	

Dislikes	0
Response	
Thank you for your comment.	
Jamison Cawley - Nebraska Public Power District - 1	
Answer	
Document Name	
Comment	
<p>Numerous entities already provide adequate cold weather measures due to being exposed regularly to freezing temperatures. Mandating compliance requirements for all registered entities overly applies compliance with a broad brush and does not properly address the specific risk to the BES of entities that are not exposed regularly to freezing temperatures. Recommend implementing an alternative approach by each State to allow States not experiencing these risks to be exempt and possibly removing Canadian entities completely from the requirements due to their current cold weather preparations. The proposed requirements are vague to allow flexibility, but more specific requirements for entities not regularly exposed to freezing temperatures will better address the risk. With an active investigation currently being conducted on the February 2021 Cold Weather Event, a sound approach would be to wait for the recommendations from that event before voting on new NERC Reliability requirements today. Also, proposed EOP-011 Requirement R1.2.6. includes provisions for impacts of both cold weather conditions and extreme weather conditions. Cold weather conditions should be considered when evaluating extreme weather conditions, and the requirement is therefore redundant. Suggest deletion of the cold weather sub-part of R1.2.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment. Given the NERC Board of Trustees deadline for this project, the SDT will forward your suggestions onto NERC for further consideration in future projects.	
Bobbi Welch - Midcontinent ISO, Inc. - 2	
Answer	
Document Name	

Comment

MISO supports comments submitted by the ISO/RTO Council Standards Review Subcommittee (IRC SRC). In addition, we are submitting additional comments on behalf of MISO as an individual entity.

Lack of a requirement to install freeze protection measures means we may not see much of a reliability benefit. Without a mandate to install relevant freeze protection measures; i.e. heat trace equipment, wind breaks, insulation, etc., no additional operational output will be realized. Notifications alone will merely serve to provide the RC and BA with a means to forecast impending emergencies with incremental advance notice.

Recommendation: Winterization must be addressed. Although we support the intent of the proposed requirements in EOP-011, IRO-010 and TOP-003 as they seek to move industry forward in the right direction, we don't think the proposed requirements are sufficient without clear, measurable objectives, i.e. a "cold weather" definition and performance requirements tied to that definition, the proposed standards may not achieve their intended outcome or provide a measurable reliability benefit. MISO offers some proposed language below; that language is offered consistent with the current scope of this drafting effort with its focus on the 2018 recommendations. MISO notes that the events of February 2021 will generate more lessons learned which may require additional modifications to this standard.

Recommended language:

R7. Each **Generator Owner** shall implement and maintain one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: [Violation Risk Factor: High] [Time Horizon: Operations Planning and Real-Time Operations]

7.1. Generating unit(s) freeze protection measures based on geographical location and plant configuration **that are adequate to operate through extreme temperatures and weather. The methodology used to establish extreme temperatures for each solely and joint owned unit shall be one or more industry standards to include temperature, wind, precipitation and other relevant factors for the geography.**

Likes 0

Dislikes 0

Response

Thank you for your comment. Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

LeRoy Patterson - Public Utility District No. 2 of Grant County, Washington - 6

Answer

Document Name

Comment

EOP-011-2 Comments:

Changes to requirements 1 and 2 single out cold weather conditions from other extreme weather events. This creates additional effort, tracking, and training for Balancing Authorities and Transmission Operators without providing benefit since determining reliability concerns and impacts provide reliability benefit only to the extent conditions, cold weather or otherwise, are beyond those normally or routinely encountered. Similarly, adding requirement 7 for GOs should relate to extreme weather conditions, of which cold weather is one aspect to be considered. Data sharing requirements of R7 appear useful, but should include generator equipment that may be affected by all applicable extreme weather events not just cold weather.

As presently worded, changed requirements cause entities that already deal with ongoing cold weather conditions to produce plans, tracking processes, training, etc. for routine and/or annual events rather than focusing on consequences of extreme events.

TOP-003-5 comments:

The added sub-requirements single out cold weather conditions only rather than making cold weather one of several possible extreme weather events, which could benefit by providing Balancing Authorities and Transmission Operators with additional information. Similarly, IRO-010 changes have the same affect related to Reliability Coordinators.

Likes 0

Dislikes 0

Response

Thank you for your comment.

Adrian Andreoiu - BC Hydro and Power Authority - 1, Group Name BC Hydro	
Answer	
Document Name	
Comment	
<p>On EOP-011-2: BC Hydro believes further clarification is required for the intent of the term “cold weather”. Provisions should be made to clarify whether “cold weather” is intended to capture normal seasonal preparations that many utilities take, or should be focusing only on extremes of cold weather when temperatures are outside of normal seasonal ranges. To include existing cold weather preparations (i.e. normal seasonal cold and freeze protection measures taken by many northern utilities seems excessive and not contributing to improving BES reliability). BC Hydro supports Seattle City Light’s comments on further defining ‘abnormally cold weather’ to ensure the focus is on the extreme cold issues.</p> <p>On IRO-010-5: BC Hydro is supportive of the comments made by Duke Energy to remove IRO-010 R1.3 as redundant to the TOP-003 requirements.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comment.	
Karie Barczak - DTE Energy - Detroit Edison Company - 3, Group Name DTE Energy - DTE Electric	
Answer	
Document Name	
Comment	
DTEE supports the extensive comments made by the NAGF.	
Likes	0

Dislikes	0
Response	
Please see the SDT's response to NAGF.	
Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name NPCC Regional Standards Committee No Dominion	
Answer	
Document Name	
Comment	
<p>In IRO-010-4 Evidence Retention (1.2), why are there 3 separate retention periods listed? It should be as same for all. "since the last compliance audit."</p> <p>The Reliability Coordinator (BA, GO, GOP, TOP, TO, & DP for R3, M3) shall retain its dated, current, in force documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments for Requirement R1, R2, R3 Measure M1, M2 & M3 as well as any documents in force since the last compliance audit.</p> <p>In TOP-003-5, why does the BA, GO, GOP, TOP, TO, & DP receiving data only have a 90-day retention period. It should be three calendar years to be consistent with the rest of the data retention period.</p> <p>Provide clarification in Section 7.2 that this is for equipment that is permanent. Provide clarification of what the definition of freeze protection "measures" is in relation to procedures and plans. Section 7.2 could be interpreted that the plans have to be maintained annually.</p>	
Likes	0
Dislikes	0
Response	
Thank you for your comments. The SDT team will forward your recommendations to NERC for further consideration.	
Mark Gray - Edison Electric Institute - NA - Not Applicable - NA - Not Applicable	
Answer	

Document Name	
Comment	
<p>In addition to expanding the current Implementation Guidance, the Technical Rationale should also be expanded to clarify the intent of the modifications to all parts and subparts of Requirement R7. Expanded technical rationale and Implementation Guidance will help prevent misinterpretations by both entities and auditors.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comments. The SDT team will forward your recommendations to NERC for further consideration.</p>	
George Brown - Acciona Energy North America - 5	
Answer	
Document Name	
Comment	
<p>Acciona Energy USA Global, LLC (Acciona) would like to thank the SDT on its hard work in the expedited time frame and understand that the priority is to have an enforceable standard regarding generator preparation for cold weather that can be further refined in future versions. Acciona does have the following question and suggestion:</p> <p>1: How has the SDT addressed the uniqueness of dispersed power producing resources identified through Inclusion I4 of the Bulk Electric System definition, such as wind generation Facilities, where each individual wind turbine generator could have a dozen or more possible freeze protections installed, as it relates to proposed EOP-011, Requirement 7.2. “annual inspection & maintenance of freeze protection measures”, especially considering that an outage of an individual generating unit (single wind turbine generator) would not cause adverse effects to the BES and the precedent set by Project 2014-01 Standards Applicability for Dispersed Generation Resources SDT?</p>	

2: In regards to EOP-011, Requirement R7.2 please consider adding the language “,as applicable based on the inspection,” after “and maintenance”. As currently written, the requirement requires a generator owner to perform maintenance on its freeze protection regardless of the results of the inspection.

Likes 0

Dislikes 0

Response

Thank you for your comments. The SDT structured the standards to be applicable to all BES generation units but did not directly address type but allows the GO to structure its plan based on its unit’s unique characteristics and geographical locations. Additionally, the SDT reviewed the issue with inspection and maintenance and determined that the language provides reasonable expectation that maintenance is dependent on the outcome of the inspection; so the team opted to not include additional language.

Shannon Ferdinand - Capital Power Corporation - 5 - MRO,WECC,Texas RE,SERC

Answer

Document Name

Comment

Capital Power appreciates the opportunity to participate in NERC’s stakeholder consultation process. We recognize the risk that severe weather can have on the grid and appreciate the desire to implement a regulation to mitigate the risk. However, Capital Power believes that EOP-011 R7, as it is currently written, does not set out a clear or measurable path for entities to meet the reliability objective.

1. Capital Power would like to see the incorporation of NERC’s risk based approach to grid reliability within Project 2019-06. Specifically, Capital Power believed that the integration of language related to abnormal / unusual / extreme weather vs. cold weather would:
 - **Focus resources on areas of highest risk:** Operating in cold weather conditions is standard / normal operating procedure for many entities and the inclusion of language specifically directed at extreme / abnormal / unusual weather may help ensure appropriate focus is placed on areas of highest risk.
 - **Clarity:** Although the current version of the standard allows entities to define ‘cold weather’, this flexibility creates ambiguity which may increase the likelihood of subjectivity during the audit process. The inclusion of language related to extreme / abnormal / unusual weather offers more clarity to the entities in forming their definition of ‘extreme weather’, and to auditors in assessing compliance.

- **Consistency:** Capital Power believes that the inclusion of more direct / clear language is consistent with NERC’s risk based approach to compliance as well as language in the 2019 FERC and NERC Staff Report: The South-Central United States Cold Weather BES Event of January 17, 2018:
 - “A mandatory Reliability Standard would require Generator Owner/Operators to properly prepare for extreme cold weather, and would help RCs and BAs identify units which may not be able to perform during an extreme weather event”^[1]
2. Capital Power requests clarification on R7.2 – This requirement requires the annual inspection and maintenance of generating units freeze protection measures, but if the entity does not have any freeze protection measures they will have nothing to implement. Capital Power recommends the inclusion of ‘as applicable’ in R7.2 to offset the ‘at a minimum’ language in R7
 3. Capital Power requests clarification on M7 – and the auditability of ‘implementation’. Based on the minimum requirements of the entities [Extreme] Cold Weather Preparedness plan (R7.1-7.3) the only element that can be ‘implemented’ (if applicable) is R7.2, the annual inspection and maintenance of generating unit(s). The rest of the ‘at a minimum’ requirements outlined in this requirement are essentially data related to the existing facility/ operational capability with nothing to actively implement.

^[1] https://www.nerc.com/pa/rrm/ea/Documents/South_Central_Cold_Weather_Event_FERC-NERC-Report_20190718.pdf

Likes 0

Dislikes 0

Response

Thank you for your comment. The GO preparedness plan must contain provisions to include the data specifications to be provided to the RC/BA and TOP. The SDT team reviewed the language about inspection and maintenance and opted to retain the language as is, and include consideration in the Implementation Guidance.

Gregory Campoli - New York Independent System Operator - 2, Group Name ISO/RTO Standards Review Committee

Answer

Document Name

Comment

EOP-11

The ISO/RTO Council Standards Review Committee (IRC SRC) believes weatherization must be addressed. We support the inclusion of preparedness requirements in EOP-011; however, we think that the proposed language in requirement R7 does not go far enough. Without a

clear, measurable objective, the requirement may not achieve its intended outcome or provide a measurable reliability benefit. **The proposed draft of EOP-011 R7 shown below illustrates how the SDT might incorporate comments #1-6 (shown below recommended language).**

Recommended language:

R7. Each Generator Owner shall develop, implement and maintain, and implement one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: *[Violation Risk Factor: High] [Time Horizon: Operations Planning and Real-Time Operations]*

7.X (new) An evaluation of each generating unit's capability to operate:

7.X.1 (new) At the lowest temperature in the previous 40 years as recorded at the generator's physical location (or nearest physical location for which temperature data exists); and

7.X.2 (new) during extreme weather conditions as recorded at the generator's physical location (or nearest physical location for which temperature data exists) which includes temperatures and other meteorological conditions (e.g. wind, precipitation, icing, flooding) which exceed the most severe conditions on record

7.1. Generating unit(s) freeze protection measures based on unique factors such as geographical location and plant configuration;

7.2. Annual maintenance and inspection and maintenance of generating unit(s) freeze protection measures;

7.3. Generating unit(s) cold weather data, to include:

7.3.1. Generating unit(s) operating limitations in cold weather (including impacts of precipitation) to include:

7.3.1.1. capability and availability;

7.3.1.2. fuel supply and inventory concerns; and

7.3.1.3. environmental constraints and air permitting limitations.

7.3.2. Generating unit(s):

7.3.2.1. minimum design temperature; or,

7.3.2.2 minimum historical operating temperature; or

7.3.2.3 engineering analysis to determine current minimum cold weather performance temperature

7.3.2.4. fuel switching capabilities; and

- 1) Within R7, add a new sub-bullet under “the cold weather preparedness plan shall include, at a minimum,” which states the following “an evaluation of the resource’s ability to operate the lowest recorded temperature in the previous 40 years at the generator’s physical location (or nearest location where temperature was recorded for which data exists)”.
- 2) In addition, “Extreme Weather” (if added based on our other comments below) should be clearly defined as temperatures exceeding the lowest (or highest) recorded temperature at the generator’s physical location (or nearest location where temperature was recorded for which data exists) for a sustained period greater than or equal to one day.
- 3) R1 1.2.6.2 requires the TO to have Operating Plans that mitigate operating Emergencies and these Operating Plans must include provisions to determine the reliability impacts of **extreme weather** conditions, while the GO requirement for having a cold weather plan, as prescribed within R7, only requires a cold weather plan addressing “cold weather” (not “extreme”) conditions. Consideration should be given to having the GO requirement under R7 include the identification of limitations in more extreme weather conditions (including impacts of temperature, wind, precipitation, icing, flooding) similar to those experienced in ERCOT earlier this year.
- 4) R7 As part of 7.3.1 recommend including a requirement that the GO’s cold weather preparedness plan includes data related to the impacts of precipitation (e.g. icing, snowpack)
- 5) R7 Recommend moving 7.3.1.3 to under 7.3.2 since “fuel switching capabilities” is not a **limitation** (7.3.1 is “Generating unit(s) operating limitations in cold weather to include:”). Alternatively, clarify that, as written, this 7.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).
- 6) R7 As part of 7.3.1.4 or as another item, recommend including air permitting constraints. The reason for this is that some generators cannot utilize alternate fuels unless RC/BA declares specific abnormal/emergency conditions and these limitations might not be captured as an “environmental constraint”.
- 7) R8 Recommend including an annual periodicity requirement for the cold weather preparedness plan training – as written, this requirement could be interpreted as being a one time requirement. Also recommend clarifying that the training on the cold weather preparedness plan must be provided to “new” maintenance and operations personnel prior to the first winter in which each individual has assumed responsibility for maintenance or operation of the plant.

IRO-010

1.3 Suggest rewording as “Provisions for notification of BES generating unit(s) operating limitations during cold and extreme weather conditions to include:”

1.3.1 Recommend moving 1.3.1.3 to under 1.3.2 since “fuel switching capabilities” is not a **limitation** (1.3.1 is “Generating unit(s) operating

limitations in cold weather to include:”). Alternatively, clarify that, as written, this 1.3.1.3 is meant to be “limitations when operating on alternate fuels” (not sure that is the intent though).

TOP-003

Same comments as those listed above for IRO-010. Comments apply to R1 (TO) and R2 (BA).

** CAISO and SPP did not join this group response. **

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Jodirah Green - ACES Power Marketing - 1,3,4,5,6 - MRO,WECC,Texas RE,SERC,RF, Group Name ACES Standard Collaborations

Answer

Document Name

Comment

ACES encourages the SDT to define the term “cold weather,” which is broadly used in each of these standards and may create confusion, discrepancies, and a compliance burden due the potentially numerous definitions, conditions, and parameters that entities across the NERC footprint could use. ACES also encourages the SDT to define “capability and availability” as used in EOP-011 R7.3.1.1. Additionally, we are concerned about EOP-011 requirement 7.2 that requires entites to perform “annual inspection and maintenance.” As written it makes performing annual maintenance a requirement when there may not be any maintenance actually required. We recommend rephrasing and adding language to state that maintenance is only required when identified by the inspection i.e. “Annual inspection of generating unit(s) freeze protection measures and any maintenance identified during inspection.”

Thank you for the opportunity to provide feedback on this project.

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects. The SDT reviewed the issue with inspection and maintenance and determined that the language provides reasonable expectation that maintenance is dependent on the outcome of the inspection; so the team opted to not include additional language.

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

Answer

Document Name

Comment

In addition to supporting the IRC SRC comments, PJM requests consideration of the following:

PJM requests the SDT to add EOP-011 Requirement for GOs to include the following additional items:

1. A specific requirement for the Generator Owner to provide the host Regional Entity/RC/TOP upon request or on a periodic basis (annually, seasonally or some other periodicity) with the Generator Owner’s cold weather preparedness plans and associated data that the Generator Owner uses to ensure the freeze protection measures are designed to be consistent with the geography and meteorology for the location of the unit. The requirement to have Generator Owners provide cold weather preparedness plans to the RC/TOP allows the RC/TOP to have increased visibility into the plans of the Generator Owners and to incorporate Generator Owner’s cold weather preparedness plans into the RC’s/TOP’s operational assessments.
2. A specific requirement that a Generator Owner’s document supporting source data as assurance that the preparedness plans are based on equipment limitations, historical performance, and other relevant data to ensure the effectiveness of the plans. To the extent that weather forecasts or historical weather information other than those prepared by NOAA are relied upon, the Generator Owners should be required to provide an explanation in the supporting materials explaining why such an alternative forecast or historic data was utilized.
3. A provision that authorizes periodic spot checks outside audit cycles conducted by the host Regional Entity and results coordinated with the host BA/TOP/RC.

4. A provision that clearly states that the Generator Owner cold weather preparedness plans be based on unit size, type, and fuel sources as appropriate.

Likes 0

Dislikes 0

Response

Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.

Daniel Gacek - Exelon - 1

Answer

Document Name

Comment

Exelon supports EEI's comment:

- In addition to expanding the current Implementation Guidance, the Technical Rationale should also be expanded to clarify the intent of the modifications to all parts and subparts of Requirement R7. Expanded technical rationale and Implementation Guidance will help prevent misinterpretations by both entities and auditors.

Submitted on behalf of Exelon, Segments 1, 3, 5, 6

Likes 0

Dislikes 0

Response

Please see the SDT's response to EEI.

Constantin Chitescu - Ontario Power Generation Inc. - 5

Answer

Document Name	
Comment	
OPG supports NPCC RSC's comments.	
Likes 0	
Dislikes 0	
Response	
Please see the SDT's response to NPCC RSC.	
Dennis Sismaet - Northern California Power Agency - 6	
Answer	
Document Name	
Comment	
<ol style="list-style-type: none"> 1. Another unfair violation of NERC Market Interference Principles is the fact that BAs and regional RC RTOs will be able to use requested information in bid stack analysis for awarded Day Ahead and real-time dispatch. Non-GO/GOPs will not have to submit the same information used in Modeling evaluations of their competitive bids. 2. The STD refuses to make reliability enhancement requirements for BA and RC Winterization training, load forecasting improvements, and reserve increases which the FERC/NERC Report also discusses. 3. STD responses to the last round of Stakeholder comments states a new SAR would be required to include these concerns. A couple months ago, during the SC meeting discussing SAR approval, NERC and the STD chair advertised that the SAR was written broadly to address stakeholder concerns. Now the STD is refusing to address these concerns. 	
Likes 0	
Dislikes 0	
Response	

See response to Marty Hostler.

Gladys DeLaO - CPS Energy - 1

Answer

Document Name

Comment

N/A, CPS Energy has no additional comment.

Likes 0

Dislikes 0

Response

Michael Whitney - Northern California Power Agency - 3, Group Name NCPA

Answer

Document Name

Comment

See Marty Hostler's comments.

Likes 0

Dislikes 0

Response

See response to Marty Hostler.

Brandon Gleason - Electric Reliability Council of Texas, Inc. - 2

Answer

Document Name	
Comment	
<p>ERCOT also proposes to revise IRO-010, Requirement R1, Parts 1.3.1 and 1.3.1.1, to switch “operating limitations” with “capability and availability” in order to be consistent with the changes suggested by ERCOT in response to Questions 1 and 2. ERCOT also suggests revising Part 1.3.2, to be consistent with the revisions proposed for TOP-003, Requirement R1, Part 1.3.2 in response to Question 2.</p> <p>ERCOT is supportive of the cold weather preparedness plan requirements. However, ERCOT continues to believe that a GOP requirement to communicate generator capability and availability due to cold weather would be more straightforward than a data specification requirement, and could be included as a new requirement in EOP-011, if the proposed R7 for GOs is adopted. The language of the new requirement could read as follows:</p> <p>R__. Each Generator Operator shall notify each impacted Balancing Authority and Transmission Operator of the capability and availability of each of its generating units based on any operating limitations or unit-specific design specifications during actual or anticipated cold weather conditions. [Violation Risk Factor: High] [Time Horizon: Operations Planning, Same Day Operations, and Real-Time Operations]</p> <p>If not included now, ERCOT suggests including this requirement in the future.</p>	
Likes	0
Dislikes	0
Response	
<p>Thank you for your comments. Based on the ballot results, the SDT team decided to forward all substantive recommendations to NERC for further consideration in future projects.</p>	

End of Report