

Comment Report

Project Name: 2018-01 Canadian-specific Revisions to TPL-007-2
Comment Period Start Date: 8/10/2018
Comment Period End Date: 9/6/2018
Associated Ballots:

There were 9 sets of responses, including comments from approximately 36 different people from approximately 28 companies representing 10 of the Industry Segments as shown in the table on the following pages.

Questions

1. The SDT developed a Canadian Variance to Requirement R7 to accommodate for required regulatory approvals in different Canadian jurisdictions. For example, Canadian entities may be required to obtain a regulatory approval for investments associated with Corrective Action Plans (CAPs). Such approval may limit the scope or modify the timeline of a CAP. Do you agree that the proposed Variance to Requirement R7 allows for the necessary flexibility to take into account the required regulatory approvals within your jurisdiction? If you do not agree, or if you agree but have comments or suggestions for the Variance, provide your recommendation, explanation, and proposed modification.

2. Do you agree that the language in the 'Background' and 'General Considerations' sections of Attachment 1-CAN adequately describes the Canadian Variance? If you do not agree, or if you agree but have comments or suggestions, provide your recommendation, explanation, and proposed modification.

3. The SDT developed the Attachment 1-CAN, as an alternative to Attachment 1, for defining a 1-in-100 year GMD planning event to be used in the benchmark and supplemental GMD Vulnerability Assessment(s). The proposed alternative approach in Attachment 1-CAN for the GMD planning event is to be based on regionally specific data and statistical analyses. Do you agree that the proposed approach to define a 1-in-100 year GMD event is sufficiently clear and flexible for Canadian entities while achieving an equivalent level of reliability of TPL-007-2? If you do not agree, or if you agree but have comments or suggestions for defining a GMD event, provide your recommendation, explanation, and proposed modification.

4. The SDT proposed that the calculation of the geoelectric fields, which is based on geomagnetic field variations and earth transfer function, must be based on technically justified information. Technically justified information may include technical documents written by governmental entities, technical papers published in peer-reviewed journals, or measurements based on sound geophysical principles. Do you agree that technical documents as defined in Attachment 1-CAN are credible sources of technically justified information? If you do not agree, or if you agree but have comments or suggestions for defining what constitute a technically justified information, provide your recommendation, explanation, and proposed modification.

5. If you have any additional comments regarding the completeness, the adequacy, and the accuracy of the proposed modifications for the SDT to consider, provide them here.

Organization Name	Name	Segment(s)	Region	Group Name	Group Member Name	Group Member Organization	Group Member Segment(s)	Group Member Region
Northeast Power Coordinating Council	Ruida Shu	1,2,3,4,5,6,7,8,9,10	NPCC	RSC no Dominion	Guy V. Zito	Northeast Power Coordinating Council	10	NPCC
					Randy MacDonald	New Brunswick Power	2	NPCC
					Wayne Sipperly	New York Power Authority	4	NPCC
					Glen Smith	Entergy Services	4	NPCC
					Brian Robinson	Utility Services	5	NPCC
					Alan Adamson	New York State Reliability Council	7	NPCC
					Edward Bedder	Orange & Rockland Utilities	1	NPCC
					David Burke	Orange & Rockland Utilities	3	NPCC
					Michele Tondalo	UI	1	NPCC
					Laura Mcleod	NB Power	1	NPCC
					David Ramkalawan	Ontario Power Generation Inc.	5	NPCC
					Helen Lainis	IESO	2	NPCC
					Michael Schiavone	National Grid	1	NPCC
					Michael Jones	National Grid	3	NPCC
Michael Forte	Con Ed - Consolidated Edison	1	NPCC					
Peter Yost	Con Ed - Consolidated Edison Co. of New York	3	NPCC					

Sean Cavote	PSEG	4	NPCC
Kathleen Goodman	ISO-NE	2	NPCC
Quintin Lee	Eversource Energy	1	NPCC
Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1,5	NPCC
Dermot Smyth	Con Ed - Consolidated Edison Co. of New York	1,5	NPCC
Salvatore Spagnolo	New York Power Authority	1	NPCC
Shivaz Chopra	New York Power Authority	6	NPCC
David Kiguel	Independent	NA - Not Applicable	NPCC
Silvia Mitchell	NextEra Energy - Florida Power and Light Co.	6	NPCC
Caroline Dupuis	Hydro Quebec	1	NPCC
Chantal Mazza	Hydro Quebec	2	NPCC
Gregory Campoli	New York Independent System Operator	2	NPCC
Paul Malozewski	Hydro One Networks, Inc.	3	NPCC

1. The SDT developed a Canadian Variance to Requirement R7 to accommodate for required regulatory approvals in different Canadian jurisdictions. For example, Canadian entities may be required to obtain a regulatory approval for investments associated with Corrective Action Plans (CAPs). Such approval may limit the scope or modify the timeline of a CAP. Do you agree that the proposed Variance to Requirement R7 allows for the necessary flexibility to take into account the required regulatory approvals within your jurisdiction? If you do not agree, or if you agree but have comments or suggestions for the Variance, provide your recommendation, explanation, and proposed modification.

Terry Volkmann - Glencoe Light and Power Commission - 1

Answer No

Document Name

Comment

All utilities have some form of regulatory approval of investments. This variance should be applicable across all of NERC, not just Canada.

Likes 0

Dislikes 0

Response

Laura McLeod - NB Power Corporation - 1,5

Answer Yes

Document Name

Comment

The wording in R7 should be modified slightly such that obtaining regulatory approval is an optional requirement and not mandatory requirement of the standard. An entity should not be held non-compliant if they do not seek regulatory approval prior to implementing a corrective action plan.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Québec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

see question 5 for comments and suggestions.

Likes 0

Dislikes 0

Response

David Ramkalawan - Ontario Power Generation Inc. - 5

Answer

Yes

Document Name

Comment

The proposed revision does not account for the case when no approval is provided by the regulator.

Likes 0

Dislikes 0

Response

Wayne Guttormson - SaskPower - 1

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

2. Do you agree that the language in the 'Background' and 'General Considerations' sections of Attachment 1-CAN adequately describes the Canadian Variance? If you do not agree, or if you agree but have comments or suggestions, provide your recommendation, explanation, and proposed modification.

Terry Volkmann - Glencoe Light and Power Commission - 1

Answer No

Document Name

Comment

This is good section, but if the Canadians find a different methodology that is more accurate it needs to apply to all under TPL-007.

Much of the existing methodology is derived from the Canadian events and data.

So if the Canadian find some thing better it need to apply to more than Canada.

Likes 0

Dislikes 0

Response

David Ramkalawan - Ontario Power Generation Inc. - 5

Answer Yes

Document Name

Comment

OPG suggest to revise the following statement from Attachment 1-CAN as follow: "Where the information available is insufficient to support an alternative approach, Canadian registered entities **shall** (instead of "should") use the methodology in Attachment 1."

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Quebec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

see question 5 for comments and suggestions.

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Laura McLeod - NB Power Corporation - 1,5

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Wayne Guttormson - SaskPower - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

3. The SDT developed the Attachment 1-CAN, as an alternative to Attachment 1, for defining a 1-in-100 year GMD planning event to be used in the benchmark and supplemental GMD Vulnerability Assessment(s). The proposed alternative approach in Attachment 1-CAN for the GMD planning event is to be based on regionally specific data and statistical analyses. Do you agree that the proposed approach to define a 1-in-100 year GMD event is sufficiently clear and flexible for Canadian entities while achieving an equivalent level of reliability of TPL-007-2? If you do not agree, or if you agree but have comments or suggestions for defining a GMD event, provide your recommendation, explanation, and proposed modification.

Terry Volkmann - Glencoe Light and Power Commission - 1

Answer No

Document Name

Comment

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Much of the existing methodology is derived from the Canadian events and data.

So if the Canadian find some thing better it need to apply to more than Canada.

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

see question 5 for comments and suggestions.

Likes 0

Dislikes 0

Response

Wayne Guttormson - SaskPower - 1

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Laura McLeod - NB Power Corporation - 1,5

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer

Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion

Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Payam Farahbakhsh - Hydro One Networks, Inc. - 1,3	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
David Ramkalawan - Ontario Power Generation Inc. - 5	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

4. The SDT proposed that the calculation of the geoelectric fields, which is based on geomagnetic field variations and earth transfer function, must be based on technically justified information. Technically justified information may include technical documents written by governmental entities, technical papers published in peer-reviewed journals, or measurements based on sound geophysical principles. Do you agree that technical documents as defined in Attachment 1-CAN are credible sources of technically justified information? If you do not agree, or if you agree but have comments or suggestions for defining what constitute a technically justified information, provide your recommendation, explanation, and proposed modification.

Terry Volkmann - Glencoe Light and Power Commission - 1

Answer No

Document Name

Comment

Technical papers published in peer-reviewed journals without the publishing review comments do not necessarily represent an industry accepted position. It should state technical papers and review comments published in peer-reviewed journals. Should follow the IEEE paper model.

Likes 0

Dislikes 0

Response

David Ramkalawan - Ontario Power Generation Inc. - 5

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

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

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Ruida Shu - Northeast Power Coordinating Council - 1,2,3,4,5,6,7,8,9,10 - NPCC, Group Name RSC no Dominion

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Michael Godbout - Hydro-Qu?bec TransEnergie - 1 - NPCC

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Leonard Kula - Independent Electricity System Operator - 2

Answer Yes

Document Name

Comment

Likes 0

Dislikes 0

Response

Laura McLeod - NB Power Corporation - 1,5

Answer Yes

Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Maryanne Darling-Reich - Black Hills Corporation - 1,3,5,6 - WECC	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	
Wayne Guttormson - SaskPower - 1	
Answer	Yes
Document Name	
Comment	
Likes 0	
Dislikes 0	
Response	

5. If you have any additional comments regarding the completeness, the adequacy, and the accuracy of the proposed modifications for the SDT to consider, provide them here.

Michael Godbout - Hydro-Québec TransEnergie - 1 - NPCC

Answer

Document Name

[Comments-HQT-RC-TPL-007-2-CAN.docx](#)

Comment

see attached file for comments.

Likes 0

Dislikes 0

Response

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

Answer

Document Name

Comment

The research and development in this field continues to evolve. More remains to be learned which will result in tool refinements to support more precise analysis and study conclusions. Hence, it should be emphasized that the interpretation of assessment results should account for the maturity of methodologies and software toolset applied.

Likes 0

Dislikes 0

Response

David Ramkalawan - Ontario Power Generation Inc. - 5

Answer

Document Name

Comment

OPG has the following additional comments:

Field readings can be used for validation of the physical modeling assumption (earth transfer function and network modeling) at the first opportunity (i.e. GMD events).

There should be a timeline related to the submission associated with the regulatory approval of the CAP implementation.

Likes 0	
Dislikes 0	
Response	

Comments received from Independent Electricity System Operator (IESO)

“A comment like: The thoughts in the variance would flow more clearly if expressed in a manner similar to the following:

One particular GMD Vulnerability Assessment approach and a specific data set is specified in Attachment 1. Canadian registered entities have access to additional data sets that enable the development of other approaches to more accurately characterize their planning areas. Such data includes geomagnetic field (from magnetometer measurements), earth conductivity information and GIC measurements. Canadian registered entities should use the approach and data set specified in Attachment 1 unless sufficient information is available to support an alternative approach. Attachment 1-CAN provides the necessary conditions to employ an alternative approach.

Assumptions used in an alternate approach to a GMD Vulnerability Assessment must be clearly documented and technically justified. A sensitivity analysis should be provided to identify how assumptions affect results. To facilitate planning studies simplified models should be employed only when they produce more conservative results than more detailed models.”