

June 14, 2016

VIA OVERNIGHT MAIL

Sheri Young, Secretary of the Board National Energy Board 517 – 10th Avenue SW Calgary, Alberta T2R 0A8

Re: North American Electric Reliability Corporation

Dear Ms. Young:

The North American Electric Reliability Corporation hereby submits Notice of Filing of the North American Electric Reliability Corporation of Retirement of Regional Reliability Standard PRC-002-NPCC-01

Please contact the undersigned if you have any questions concerning this filing.

Respectfully submitted,

/s/ Holly A. Hawkins

Holly A. Hawkins
Associate General Counsel for the North
American Electric Reliability Corporation

Enclosure

3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326 404-446-2560 | www.nerc.com

BEFORE THE NATIONAL ENERGY BOARD

NORTH AMERICAN ELECTRIC)
RELIABILITY CORPORATION)

NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF RETIREMENT OF REGIONAL RELIABILITY STANDARD PRC-002-NPCC-01

Charles A. Berardesco
Senior Vice President and General Counsel
Shamai Elstein
Senior Counsel
Lauren A. Perotti
Counsel
North American Electric Reliability Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099– facsimile
charles.berardesco@nerc.net
shamai.elstein@nerc.net
lauren.perotti@nerc.net

Counsel for the North American Electric Reliability Corporation

June 14, 2016

TABLE OF CONTENTS

I.	NOTICES AND COMMUNICATIONS	2
II.	BACKGROUND	. 2
A	A. NPCC Framework	. 2
I	B. Procedural History	. 3
	Development and Approval of NPCC Regional Reliability Standard PRC-002- NPCC-01	3
	2. Approval of Continent-Wide Reliability Standard PRC-002-2	5
	3. Summary of PRC-002-NPCC-01 Retirement History	. 5
III.	. JUSTIFICATION	. 6
_	A. PRC-002-NPCC-01 Requirements for Sequence of Events Recording, Fault Recordin and Equipment Siting are Addressed by the Continent-wide Reliability Standard	
	B. PRC-002-NPCC-01 Requirements for Dynamic Disturbance Recording are Addressed by the Continent-wide Reliability Standard	
	C. The PRC-002-NPCC-01 Requirement for Time Synchronization is Addressed by the Continent-wide Reliability Standard	11
_	D. PRC-002-NPCC-01 Requirements for Data Specifications are Addressed by the Continent-wide Reliability Standard	12
	E. The PRC-002-NPCC-01 Requirement for Status of Recording Capability is Addressed by the Continent-wide Reliability Standard	
IV.	. EFFECTIVE DATE	13

Exhibit A Reliability Standards Criteria
 Exhibit B Comparison of PRC-002-NPCC-01 Regional Reliability Standard Requirements

to Continent-Wide Reliability Standard PRC-002-2 Requirements

Exhibit C Complete Record of Retirement Development

BEFORE THE NATIONAL ENERGY BOARD

NORTH AMERICAN ELECTRIC)
RELIABILITY CORPORATION)

NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF RETIREMENT OF REGIONAL RELIABILITY STANDARD PRC-002-NPCC-01

The North American Electric Reliability Corporation ("NERC") respectfully provides notice of the retirement of the Northeast Power Coordinating Council ("NPCC") Regional Reliability Standard PRC-002-NPCC-01 – Disturbance Monitoring and the two related NPCC regional definitions, Current Zero Time and Generating Plant.

The primary purpose of Regional Reliability Standard PRC-002-NPCC-01 is to ensure that adequate disturbance data is available to facilitate Bulk Electric System ("BES") event analyses. As discussed below, the issues addressed by Regional Reliability Standard PRC-002-NPCC-01 are addressed by the continent-wide Reliability Standard PRC-002-2 — Disturbance Monitoring and Reporting Requirements. Therefore, Regional Reliability Standard PRC-002-NPCC-01 is now redundant and unnecessary for reliability. The retirement of the regional standard and related regional definitions will have no adverse effect on the reliability of the Bulk-Power System and is in the public interest.

I. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:

Shamai Elstein
Senior Counsel
Lauren A. Perotti
Counsel
North American Electric Reliability Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099– facsimile
shamai.elstein@nerc.net
lauren.perotti@nerc.net

II. BACKGROUND

A. NPCC Framework

NPCC Reliability Standards are intended to apply only to that part of the Eastern

Interconnection within the NPCC geographical footprint. NPCC develops Regional Reliability

Standards in accordance with its *Regional Standard Processes Manual* ("RSPM"). NPCC's

RSPM provides a regional standard development process that has the following key

characteristics: fair due process; openness; inclusive; balanced; transparent; and conducted

without undue delay. Proposed NPCC Regional Reliability Standards are subject to approval by

NERC, as the ERO, and the applicable governmental authorities before becoming mandatory and

enforceable.

⁻

The NPCC RSPM is available at https://www.npcc.org/Standards/Regional%20Standards%20General/NPCC%20Regional%20%20Standard%20Proc esses%20Manual FERC Approved version 1 20141223.pdf.

B. Procedural History

This section provides a discussion of the development and approval of the standard being proposed for retirement, NPCC Regional Reliability Standard PRC-002-NPCC-01, as well as a brief discussion of the development and approval of the continent-wide disturbance monitoring standard, Reliability Standard PRC-002-2. This section concludes with an overview of the standard development process for the proposed retirement of the regional standard.

1. <u>Development and Approval of NPCC Regional Reliability Standard PRC-002-NPCC-01</u>

On June 8, 2011, NERC submitted Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring. The standard was developed to ensure that requirements exist in the NPCC region to ensure adequate disturbance data and equipment are available to facilitate BES event analyses. In developing the standard, NPCC drew upon previously-developed Regional Criteria regarding the placement of disturbance monitoring equipment.² The phased-in implementation plan provided for entities in the NPCC region to gradually become compliant

² See NPCC Document A-15, Disturbance Monitoring Equipment Criteria (adopted Aug. 23, 2007), available at https://www.npcc.org/Standards/Criteria/A-15.pdf.

The development of Regional Criteria is addressed in Section 313 of the NERC Rules of Procedure. NPCC Directories are developed in order to provide a consistent and comprehensive set of more stringent and specific reliability requirements for the NPCC region. NPCC Directories are developed in accordance with the *NPCC Directory Development and Revision Manual*, which is available on the NPCC website at: https://www.npcc.org/Standards/Directories/NPCC%20Directory%20Manual%20RSC%20approved%2020141003.pdf.

The NPCC Criteria contained within each NPCC Directory apply to NPCC Full Member organizations; however, compliance with NPCC Criteria is required by other rules and mechanisms, including FERC-approved independent system operator tariffs, generator interconnection agreements, and New York Public Service Commission approved rules that adopt the criteria as New York State Reliability Rules. (*See* Section 215(i)(3) of the United States Federal Power Act (16 U.S.C. § 824o(i)(3), which provides that the State of New York "may establish rules that result in greater reliability within that State, as long as such action does not result in lesser reliability outside the State than that provided by the reliability standards.")

Unlike NPCC Regional Reliability Standards, NPCC Criteria are not subject to NERC or FERC approval and there are no monetary sanctions for noncompliance. However, NPCC Criteria play an important role in ensuring an enhanced level of reliability in the NPCC region.

with the standard's requirements beginning in 2013, with full compliance expected since October 2015.

While the regional standard was being developed, efforts were underway at NERC through Project 2007-11 Disturbance Monitoring to develop a revised continent-wide Reliability Standard that would establish requirements for the collection and reporting of disturbance data to facilitate event analysis and verify system models. In Order No. 693, the Federal Energy Regulatory Commission ("FERC") approved 83 of the 107 Reliability Standards proposed by NERC, including Reliability Standard PRC-018-1 - Disturbance Monitoring Equipment Installation and Data Reporting.⁴ However, FERC declined to take action on certain proposed "fill-in-the-blank" Reliability Standards, including Reliability Standard PRC-002-1 - Define Regional Disturbance Monitoring and Reporting Requirements. 5 PRC-002-1, which never became mandatory and enforceable, would have required regional reliability organizations to establish: (i) installation requirements for sequence of event recording, fault recording, and dynamic disturbance recording; and (ii) reporting requirements for recorded disturbance data. NPCC Regional Reliability Standard PRC-002-NPCC-01 was intended to establish a standard for disturbance monitoring requirements in the NPCC region until such time that a revised continent-wide Reliability Standard could be developed through Project 2007-11.

_

Order No. 693, Mandatory Reliability Standards for the Bulk-Power System, FERC Stats. & Regs. ¶ 31,242 (2007), reh'g denied, Order No. 693-A, 120 FERC ¶ 61,053 (2007) ("Order No. 693").

⁴ Order No. 693 at PP 1550-51.

See Order No. 693 at P 1455. The term "fill-in-the blank" standards refers to those proposed Reliability Standards that required supplemental information from regional reliability organizations, such as regional criteria or procedures, that had not been submitted to the applicable governmental authorities for approval.

2. Approval of Continent-Wide Reliability Standard PRC-002-2

On December 30, 2014, NERC submitted the continent-wide Reliability Standard PRC-002-2 Disturbance Monitoring and Reporting Requirements, which was developed as a part of Project 2007-11.⁶ As stated by FERC in its approval of PRC-002-2, "Reliability Standard PRC-002-2 enhances reliability by imposing mandatory requirements concerning the monitoring and reporting of disturbances" and "provides greater continent-wide consistency regarding collection methods for data used in the analysis of disturbances on the Bulk-Power System." Consistent with other NERC Reliability Standards, the PRC-002-2 Reliability Standard provides a results-based approach to the capture of data, rather than prescriptive requirements on equipment necessary to capture the data.

3. Summary of PRC-002-NPCC-01 Retirement History

Following the NERC Board of Trustees adoption of Reliability Standard PRC-002-2 in November 2014, NPCC initiated a project to review the NPCC Regional Reliability Standard for potential revision or retirement. In accordance with NPCC's RSPM, a Regional Standard Authorization Request ("RSAR") to review PRC-002-NPCC-01 was approved by the NPCC Regional Standards Committee on February 18, 2015 and was posted publicly on February 23, 2015.

The purpose of the RSAR was as follows:

...to review the regional standard for potential revisions made necessary by the industry's adoption of the new NERC BES definition, the Paragraph 81 directive [8], and the development of

^{6 .} In addition, NERC also provided notice of the retirement of PRC-018-1 and the retirement of PRC-002-1 Reliability Standard.

Order No. 814, *Disturbance Monitoring and Reporting Requirements Reliability Standard*, 152 FERC ¶ 61,198 (2015) at P 13.

⁸ See N. Am. Elec. Reliability Corp., 138 FERC ¶ 61,193 (2012) at P 81 (inviting NERC to propose for revision or retirement Reliability Standards that provide little protection for Bulk-Power System reliability or that are redundant).

NERC's PRC-002-2 Disturbance Monitoring and Reporting Requirements standard. Retiring PRC-002-NPCC-01 is to be considered if it is determined that it can be retired without sacrificing the ability to capture post-disturbance data.⁹

The NPCC Task Force on System Protection, acting as a standard review/drafting team, performed a comprehensive comparison of Regional Reliability Standard PRC-002-NPCC-01 and the continent-wide Reliability Standard PRC-002-2. This review also included a comparison of NPCC Document A-15, *Disturbance Monitoring Equipment Criteria*. Following its review, the drafting team determined that the continent-wide Reliability Standard would be sufficient to achieve the reliability objectives of the regional standard and that the regional standard should be retired. In accordance with the NPCC RSPM, the proposed retirement of PRC-002-NPCC-01 was posted for a 30-day pre-ballot review beginning October 16, 2015, followed by a 10-day final ballot beginning November 16, 2015. The proposed retirement achieved a 69% quorum and 97.10% approval and received no negative ballots with comments.

In accordance with Section 312 of NERC's Rules of Procedure, NERC posted the proposed retirement of PRC-002-NPCC-01 for a 45-day comment period beginning January 6, 2016. Commenters agreed that NPCC's process was open, inclusive, balanced, transparent, and that due process was followed. The NPCC Board of Directors approved the retirement of PRC-002-NPCC-01 on March 23, 2016. The NERC Board of Trustees approved the retirement on May 5, 2016.

III. <u>JUSTIFICATION</u>

As discussed above, NPCC Regional Reliability Standard PRC-002-NPCC-01 was intended to establish a standard for disturbance monitoring requirements until such time that a

See Exhibit C Item 7.

See supra n. 2.

continent-wide Reliability Standard could be developed with equivalent and adequate requirements. Reliability Standard PRC-002-2 will become mandatory and enforceable on July 1, 2016 in accordance with the implementation plan.

Reliability Standard PRC-002-2 specifies disturbance data requirements for sequence of event recording ("SER"), fault recording ("FR"), and dynamic Disturbance recording ("DDR") and the recording specifications of these devices. The standard is results-based and technology neutral; it does not specify how to achieve the required disturbance monitoring capability or prescribe specific types of equipment. By contrast, the NPCC regional Reliability Standard specifies the equipment and identifies locations to achieve the adequate level of disturbance monitoring capability on the BES. The NPCC drafting team determined that the capability to capture the necessary disturbance monitoring data was the necessary component to protect reliability, not the specific equipment required for the capability.

Following a comprehensive review and comparison of the regional and the continent-wide Reliability Standards, the results of which are discussed more fully below and in **Exhibit B**, it was determined that the continent-wide Reliability Standard PRC-002-2 would ensure that the capabilities and availability of disturbance monitoring data are adequate to efficiently and effectively perform event analysis. NPCC's more stringent criteria (currently set forth in Document A-15, *Disturbance Monitoring Equipment Criteria*) would continue to apply to NPCC Full Members and those with other legal obligations to adhere to the criteria until superseded by an additional or revised NPCC Directory or alternately, made unnecessary by future Reliability Standard revisions. In light of the above, NPCC Regional Reliability Standard PRC-002-NPCC-01 is redundant and no longer necessary for reliability and should be retired.

NERC also provides notice of the retirement of the related NPCC regional definitions, Current Zero Time and Generating Plant. These terms are used only within the regional standard that is proposed for retirement, and there is no reliability need to maintain the definitions with the standard being retired. Their retirement would present no risk to reliability and is in the public interest.

A. PRC-002-NPCC-01 Requirements for Sequence of Events Recording, Fault Recording, and Equipment Siting are Addressed by the Continent-wide Reliability Standard

NPCC Regional Reliability Standard PRC-002-NPCC-01 contains detailed requirements that specify the locations at which disturbance monitoring data is to be captured. Requirement R1 specifies that Transmission Owners and Generator Owners provide SER capabilities, either by installing sequence of event recorders or as part of another device, at specified locations. Requirement R2 specifies that each Transmission Owner must provide FR capability at certain specified locations where fault recording equipment is required to be installed. Requirement R3 specifies that this FR capability must calculate Current Zero Time for loss of BES transmission Elements. Requirement R4 requires each Generator Owner to provide FR capabilities at certain specified Generating Plants. Requirements R5 and R6 specify the data that must be recorded and the recording specifications for that data, such as minimum recording rate and minimum trigger settings. 13

1

Current Zero Time is an NPCC regional definition and is defined as "the time of the final current zero on the last phase to interrupt."

Generating Plant is an NPCC regional definition and is defined as "one or more generators at a single physical location whereby any single contingency can affect all the generators at that location."

In addition, PRC-002-NPCC-01 Requirement R17 provides that each Reliability Coordinator, Transmission Owner, and Generator Owner shall maintain and provide to the Regional Entity upon request certain data on disturbance monitoring equipment installed to meet the standard. A similar requirement is contained in currently-effective Reliability Standard PRC-018-1 Requirement R3. Such a requirement is not reflected in the approved but not yet effective Reliability Standard PRC-002-2 as PRC-002-2 contains requirements for recorded data and not equipment.

Although the approaches of NPCC Regional Reliability Standard PRC-002-NPCC-01 and the continent-wide Reliability Standard PRC-002-2 differ, the requirements of Reliability Standard PRC-002-2 cover the same reliability objectives as the regional standard and are sufficient to ensure that adequate SER and FR data is available to conduct event analysis. Reliability Standard PRC-002-2 Requirement R1 requires Transmission Owners to identify BES buses for which SER and FR data is required, notify other owners of BES Elements connected to those particular BES buses where SER and FR data will be necessary, and to re-evaluate all BES buses at least every five calendar years. Attachment 1 to the standard provides the methodology for selecting buses for capturing SER and FR data. Requirement R2 requires Transmission Owners and Generator Owners to collect SER data for circuit breaker position at specified circuit breakers. Requirement R3 specifies that Transmission Owners and Generation Owners must have FR data to determine certain electrical quantities for each triggered FR, and Requirement R4 specifies the parameters of such data, such as minimum recording rate and cycles to be recorded. Because the continent-wide Reliability Standard will ensure that sufficient SER and FR data are collected, the NPCC Regional Reliability Standard requirements may be retired with no adverse effect on reliability.

B. PRC-002-NPCC-01 Requirements for Dynamic Disturbance Recording are Addressed by the Continent-wide Reliability Standard

NPCC Regional Reliability Standard PRC-002-NPCC-01 contains detailed requirements for capturing DDR data. PRC-002-NPCC-01 Requirement R7 provides that each Reliability Coordinator must establish its areas needs for DDR. Requirement R8 provides for each Reliability Coordinator to specify that DDR devices installed after the approval of the standard function as continuous recorders, and Requirement R9 specifies settings for DDR devices, including minimal recording duration, minimum sample rate, and triggers. Requirement R10

provides that each Reliability Coordinator shall establish requirements such that certain quantities are monitored or derived where DDR devices are installed, and Requirement R11 provides that each Reliability Coordinator shall document these monitored quantities as well as any additional settings or deviations from those specified in Requirement R9 and provide to the Regional Entity upon request. Requirement R12 provides that each Reliability Coordinator shall specify its DDR requirements to Transmission Owners and Generator Owners, and Requirement R13 provides that each Transmission Owner and Generator Owner shall install DDR capabilities as requested by the Reliability Coordinator.

The regional standard requirements will become redundant and unnecessary when continent-wide Reliability Standard PRC-002-2, which contains requirements for the capture of DDR data, becomes mandatory and enforceable. PRC-002-2 Requirement R5 provides that Responsible Entities¹⁴ shall: (i) identify the BES Elements for which DDR data is required, including those meeting certain criteria set out in Part 5.1; (ii) identify minimum DDR coverage; (iii) provide notifications to owners of the identified BES Elements; and (iv) re-evaluate all BES Elements at least once every five years. Requirements R6 and R7 require each Transmission Owner and Generator Owner, respectively, to have DDR data sufficient to determine certain specified electrical qualities for each BES Element that it owns and for which it has received notification under Requirement R5. Requirement R8 specifies that each Transmission Owner and Generator Owner responsible for DDR data shall have continuous recording and storage or else meet certain requirements for triggered data. Requirement R9 specifies that the DDR data shall meet a minimum input sampling rate and minimum output recording rate.

Reliability Standard PRC-002-2 Section 4 Applicability defines "Responsible Entities" as the Planning Coordinator, Reliability Coordinator, or Planning Coordinator or Reliability Coordinator, depending on the Interconnection.

The requirements of the continent-wide Reliability Standard are designed to ensure that adequate wide-area DDR data is available to facilitate accurate and efficient disturbance analysis. The DDR requirements of the NPCC Regional Reliability Standard will be made redundant with those requirements and should be retired.

C. The PRC-002-NPCC-01 Requirement for Time Synchronization is Addressed by the Continent-wide Reliability Standard

NPCC Regional Reliability Standard PRC-002-NPCC-01 contains requirements for Transmission Owners and Generator Owners to time-synchronize data. PRC-002-NPCC-01 Requirement R14 Part 14.4 provides that each Transmission Owner and Generator Owner shall establish a maintenance and testing program for stand-alone disturbance monitoring equipment that includes performing monthly verification of time synchronization. Because time synchronization is also addressed in the continent-wide disturbance monitoring Reliability Standard, the regional standard can be retired with no adverse effect on reliability. Specifically, currently-effective Reliability Standard PRC-018-1 Requirement R1 provides that disturbance monitoring equipment have internal clocks that are time-synchronized to within 2 milliseconds or less of Coordinated Universal Time ("UTC"). Reliability Standard PRC-002-2 Requirement R10 specifies time synchronization for SER, FR, and DDR data. 16

11

Recommendation 28 of the 2003 blackout report recommended requiring use of time-synchronized data recorders. See U.S.-Canada Power System Outage Task Force, Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations at 162 (Apr. 2004), available at http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/BlackoutFinal-Web.pdf.

Specifically, PRC-002-2 Requirement R10 provides as follows:

R10. Each Transmission Owner and Generator Owner shall time synchronize all SER and FR data for the BES buses identified in Requirement R1 and DDR data for the BES Elements identified in Requirement R5 to meet the following: [Violation Risk Factor: Lower] [Time Horizon: Long-term Planning]

^{10.1} Synchronization to Coordinated Universal Time (UTC) with or without a local time offset.

^{10.2} Synchronized device clock accuracy within \pm 2 milliseconds of UTC.

D. PRC-002-NPCC-01 Requirements for Data Specifications are Addressed by the Continent-wide Reliability Standard

NPCC Regional Reliability Standard PRC-002-NPCC-01 provides requirements for data sharing (Requirement R15) and data format and naming (Requirement R16). Data retrieval, sharing, and detailed data format specifications are specified in Reliability Standard PRC-002-2 Requirement R11. (Data retrieval and sharing requirements are also addressed in currently-effective Reliability Standard PRC-018-1 Requirements R1, R4, and R5.) As these continent-wide data specification requirements provide that entities are to provide disturbance monitoring data upon request and establish specific guidelines to ensure the usefulness of the data in analyzing events, the NPCC Regional Reliability Standard requirements for data specifications may be retired with no adverse effect on reliability.

E. The PRC-002-NPCC-01 Requirement for Status of Recording Capability is Addressed by the Continent-wide Reliability Standard

The NPCC Regional Reliability Standard requirement for status of recording capability is addressed in the continent-wide Reliability Standard and may be retired with no adverse effect on reliability. NPCC Regional Reliability Standard PRC-002-NPCC-01 Requirement R14 requires each Transmission Owner and Generator Owner to establish a maintenance and testing program for stand-alone disturbance monitoring equipment that includes, among other things, requirements for restoring failed units back to service within 90 days or keeping records of efforts to return to service if kept out of service for longer than 90 days. Reliability Standard PRC-002-2 Requirement R12 requires Transmission Owners and Generator Owners to either

restore failed SER, FR, or DDR data recording capability within 90 days or implement a Corrective Action Plan that it submits to its Regional Entity.¹⁷

IV. **EFFECTIVE DATE**

NPCC Regional Reliability Standard PRC-002-NPCC-01 and the related NPCC regional definitions of Current Zero Time and Generating Plant, will be retired effective as of July 1, 2016. This will align the retirement of PRC-002-NPCC-01 with the effective date for Reliability Standard PRC-002-2. Entities in the NPCC region have been required to be fully compliant with PRC-002-NPCC-01 since October 2015. NERC's proposal to align the effective dates would allow entities in the NPCC Region to efficiently transition from compliance with the NPCC Regional Reliability Standard to compliance with the continent-wide Reliability Standard.

-

Currently-effective Reliability Standard PRC-018-1 Requirement R6 requires each Transmission Owner and Generator Owner required to have disturbance monitoring equipment to have a maintenance and testing program for that equipment.

Respectfully submitted,

/s/ Lauren A. Perotti

Charles Berardesco
Senior Vice President and General Counsel
Shamai Elstein
Senior Counsel
Lauren A. Perotti
Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099– facsimile
charles.berardesco@nerc.net
shamai.elstein@nerc.net
lauren.perotti@nerc.net

Counsel for the North American Electric Reliability Corporation

June 14, 2016

EXHIBIT A

Reliability Standards Criteria

The discussion below explains how the proposed retirement of the Regional Reliability Standard meets or exceeds the Reliability Standards criteria.

1. Proposed Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve that goal.

This project proposes to retire Regional Reliability Standard PRC-002-NPCC-01 Disturbance Monitoring. The reliability-related objectives are now addressed in a recently-approved NERC Reliability Standard, PRC-002-2 - Disturbance Monitoring and Reporting Requirements.

The project to retire the PRC-002-NPCC-01 Disturbance Monitoring regional standard adhered to the applicable process contained within the *NPCC Regional Standard Processes Manual*. The drafting team, which was composed of subject matter experts, performed a detailed analysis of NERC Reliability Standard PRC-002-2. The purpose of continent-wide Reliability Standard PRC-002-2 is to ensure adequate data is available to facilitate analysis of Bulk Electric System ("BES") Disturbances. Following its review, the drafting team determined that the continent-wide Reliability Standard established adequate requirements for data recording capabilities and obviates the need for maintaining the NPCC regional standard. Therefore, it is technically sound to retire the regional standard.

The technical analysis is included in this filing as **Exhibit B** and may also be found on the NPCC website. Biographies of the drafting team members are provided with this filing in **Exhibit C**.

NPCC's process also includes a public iterative comment/response period. No negative comments were received from the industry regarding the proposed retirement.

2. Proposed Reliability Standards must be applicable only to users, owners and operators of the bulk power system, and must be clear and unambiguous as to what is required and who is required to comply.

The PRC-002-NPCC-01 Disturbance Monitoring standard applies only to applicable entities as stated in the standard and it clearly identifies the specific applicable entity assigned to an associated task.

Although this filing does not propose any added regulatory language, the drafting team made every endeavor to ensure the narrative describing its rationale for retirement of the PRC-002-NPCC-01 Disturbance Monitoring Standard was clear, unambiguous, and that the retirement itself would present no reliability-related concerns.

3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.

This project proposes to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring. The reliability-related objectives are addressed in NERC Reliability Standard PRC-002-2 - Disturbance Monitoring and Reporting Requirements. As such, addition or modification of compliance elements is not required.

4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner.

This project proposes to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring. The reliability-related objectives are addressed in NERC Reliability Standard PRC-002-2 - Disturbance Monitoring and Reporting Requirements. As such, addition or modification of measures is not required.

5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently — but do not necessarily have to reflect "best practices" without regard to implementation cost or historical regional infrastructure design.

This project is designed to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring because the reliability-related objectives are effectively and efficiently addressed in the continent-wide disturbance monitoring standard. There is no reliability or financial impact as a result of implementing the retirement of the standard.

6. Proposed Reliability Standards cannot be "lowest common denominator," i.e., cannot reflect a compromise that does not adequately protect Bulk-Power System reliability. Proposed Reliability Standards can consider costs to implement for smaller entities, but not at consequences of less than excellence in operating system reliability.

This project proposes to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring. The reliability-related objectives are addressed in NERC Reliability Standard PRC-002-2 - Disturbance Monitoring and Reporting Requirements. There is no proposed change to the level of reliability or to the practices in place to achieve the existing level of reliability; thus, there is no lessening of the adequacy of the standard for disturbance monitoring and no migration to a lowest common denominator.

During the retirement development history, none of the commenters reported any concerns regarding the financial impact of retiring the PRC-002-NPCC-01 standard.

Furthermore, the implementation plan for Regional Reliability Standard PRC-002-NPCC-01 required full compliance with the standard's requirements on October 2015. The establishment of this regional standard and requirements to install disturbance monitoring equipment has facilitated entity compliance with the future enforceable PRC-002-2 Reliability Standard which specifies disturbance monitoring capability.

7. Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.

This project proposes to eliminate a regional standard that is duplicative, with respect to the reliability objective, to the requirements in the continent-wide Reliability Standard PRC-002-2 - Disturbance Monitoring and Reporting Requirements. Retirement of the regional standard and application of the continent-wide Reliability Standard PRC-002-2 will achieve greater continent-wide consistency regarding collection methods for data used in the analysis of BES disturbances

8. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.

The retirement of NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring should cause no undue negative effect on competition or restriction of the grid.

9. The implementation time for the proposed Reliability Standard is reasonable.

This project proposes to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 - Disturbance Monitoring and the related NPCC regional definitions of Current Zero Time and Generating Plant to be effective as of July 1, 2016. This proposal would align the retirement of PRC-002-NPCC-01 with the effective date for Reliability Standard PRC-002-2. Entities in the NPCC region have been expected to be fully compliant with PRC-002-NPCC-01 since October 2015. The data requirements in Reliability Standard PRC-002-2 will result in minimal additional data requirements beyond those required to comply with PRC-002-NPCC-01. The proposed retirement of PRC-002-NPCC-01 should be seamless and will not have adverse effects on

reliability. Therefore, it is reasonable to align the retirement date of PRC-002-NPCC-01 to the effective date of PRC-002-2.

10. The Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process.

In developing its request to retire NPCC Regional Reliability Standard PRC-002-NPCC-01-Disturbance Monitoring, NPCC adhered to the *NPCC Regional Standard Processes Manual* posted on the NPCC website.

All meetings were open to the public. Between April 22, 2015 and October 8, 2015, the drafting team conducted three meetings open to the public. Notice of the meetings was provided to the public via the NPCC website and through email announcements. All meetings were supported by a telephone conference bridge associated with an on-line Internet visual capability, allowing all participants to see the documents as they were being developed.

The project was posted for industry comment. No negative comments were received. The final ballot achieved quorum and sufficient votes for approval. While posted at NERC for a 45-day comment period, commenters were unanimously in accord that the development process was open, inclusive, balanced, transparent, and that due process was followed.

Additional information relating to the development of the proposed retirement is contained in the Petition and in **Exhibit C**.

11. NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.

NERC is not aware of any vital public interests impacted by retirement of this standard.

No such balancing concerns were raised or noted.

12. Proposed Reliability Standards must consider any other appropriate factors.

This project proposes to retire NPCC Regional Reliability Standard PRC-002-NPCC-01 -

Disturbance Monitoring. The reliability-related objectives are addressed in the NERC Reliability Standard PRC-002-2 - Disturbance Monitoring and Reporting Requirements. No additional other factors were relevant with respect to this project.

EXHIBITS B – C

(Available on the NERC Website at

 $http://www.nerc.com/FilingsOrders/ca/Canadian\%20Filings\%20 and \%20Orders\%20DL/PRC-002-NPCC-01_Exhibits.pdf)$