December 30, 2014

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 (“NERC”) hereby submits Notice of Filing of Proposed Regional Reliability Standards VAR-002-WECC-2 and VAR-501-WECC-2. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing.

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ William H. Edwards

William H. Edwards
Counsel for the North American Electric Reliability Corporation

Enclosure
BEFORE THE
NATIONAL ENERGY BOARD

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

NOTICE OF FILING OF
PROPOSED REGIONAL RELIABILITY STANDARDS
VAR-002-WECC-2 AND VAR-501-WECC-2

Gerald W. Cauley
President and Chief Executive Officer
North American Electric Reliability Corporation
3353 Peachtree Road, N.E.
Suite 600, North Tower
Atlanta, GA 30326
(404) 446-2560
(404) 446-2595 – facsimile

Charles A. Berardesco
Senior Vice President and General 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
holly.hawkins@nerc.net
sean.bodkin@nerc.net

Counsel for the North American Electric Reliability Corporation

December 30, 2014
# TABLE OF CONTENTS

I. Executive Summary ........................................................................................................... 2  
II. Notices and Communications ........................................................................................... 2  
III. Background ..................................................................................................................... 3  
   A. Regional Reliability Standards Framework ................................................................. 3  
   B. History of VAR-002-WECC-2 and VAR-501-WECC-2 ............................................ 3  
   C. Project 2013-02 Paragraph 81 ................................................................................... 4  
IV. Justification ..................................................................................................................... 5  
   A. Basis and Purpose of Proposed VAR-002-WECC-2 and VAR-501-WECC-2 .......... 5  
   B. Enforceability of Proposed VAR-002-WECC-2 and VAR-501-WECC-2 ............... 6  

Exhibit A | VAR-002-WECC-2 — Automatic Voltage Regulators  
VAR-501-WECC-2 — Power System Stabilizers  
Exhibit B | Implementation Plan  
Exhibit C | Reliability Standards Criteria  
Exhibit D | Complete Development Record of Proposed VAR-002-WECC-2 and VAR-501-WECC-2  
Exhibit E | Standard Drafting Team Roster
BEFORE THE
NATIONAL ENERGY BOARD

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

NOTICE OF FILING OF
PROPOSED REGIONAL RELIABILITY STANDARDS
VAR-002-WECC-2 AND VAR-501-WECC-2

The North American Electric Reliability Corporation (“NERC”) hereby provides notice of proposed regional Reliability Standards VAR-002-WECC-2 (Automatic Voltage Regulators) and VAR-501-WECC-2 (Power System Stabilizer) developed by NERC and the Western Electricity Coordinating Council (“WECC”). The proposed regional Reliability Standards are just, reasonable, not unduly discriminatory or preferential, and in the public interest.¹ NERC also requests approval of the associated Implementation Plan (Exhibit B). Proposed regional Reliability Standards VAR-002-WECC-2 and VAR-501-WECC-2 were adopted by the NERC Board of Trustees on November 13, 2014.

This filing presents the technical basis and purpose of the proposed Reliability Standards, a summary of the development proceedings conducted by NERC and WECC for proposed VAR-002-WECC-2 and VAR-501-WECC-2 (Exhibit D), and a demonstration that the proposed regional Reliability Standards meet the Reliability Standards criteria (Exhibit C).

I. Executive Summary

Consistent with the Find, Fix, Track and Report ("FFT") program, NERC is retiring two requirements within two regional Reliability Standards, VAR-002-WECC-1 Requirement R2 and VAR-501-WECC-1 Requirement R2, that are unnecessary, and where violation of the requirements pose a lesser risk to the reliability of the Bulk-Power System.

The proposed regional Reliability Standards continue to achieve the same reliability purpose of the prior versions. The purpose of proposed VAR-002-WECC-2 is to ensure that automatic voltage regulators on synchronous generators and condensers are kept in service and controlling voltage. The purpose of proposed VAR-501-WECC-2 is to ensure that power system stabilizers on synchronous generators are kept in service.

II. Notices and Communications

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

Gerald W. Cauley  
President and Chief Executive Officer  
North American Electric Reliability Corporation  
3353 Peachtree Road, N.E.  
Suite 600, North Tower  
Atlanta, GA 30326  
(404) 446-2560  
(404) 446-2595 – facsimile

Charles A. Berardesco  
Senior Vice President and General Counsel  
Holly A. Hawkins  
Associate General Counsel  
Sean Bodkin  
Associate 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 holly.hawkins@nerc.net sean.bodkin@nerc.net
III. Background

A. Regional Reliability Standards Framework

A regional difference generally takes one of two forms: (1) a regional variance may be included in a continent-wide Reliability Standard, which achieves the reliability objective of the continent-wide standard’s requirement(s) in an alternate way than specified in a given Requirement in the continent-wide standard or (2) a separate regional Reliability Standard may be developed, which adds one or more Requirements without altering any continent-wide Requirements that are applicable to entities in the region.2 As discussed in the Western Electricity Coordinating Council Reliability Standards Development Procedures, the regional Reliability Standards for WECC are developed in a transparent, inclusive, open, and balanced process with reasonable notice and opportunity for public comment.3

B. History of VAR-002-WECC-2 and VAR-501-WECC-2

On September 11, 2006, NERC submitted Reliability Standard VAR-002-1.4 Reliability Standard VAR-002-1 requires Generator Operators to operate in automatic voltage control mode, to maintain generator voltage or reactive power output as directed by the Transmission Operator, and to notify the Transmission Operator of a change in status or capability of any generator reactive power resource.

On November 29, 2007, NERC submitted eight WECC regional Reliability Standards that apply in the Western Interconnection, including WECC-VAR-STD-002a-1 (Automatic

---

4 Id. P 1884.
Voltage Regulators) and WECC-VAR-STD-002b-1 (Power System Stabilizer). NERC subsequently submitted revisions to both WECC-VAR-STD-002a-1 and WECC-VAR-STD-002b-1 on April 7, 2009, as re-designated VAR-002-WECC-1 and VAR-501-WECC-1 respectively.

C. Project 2013-02 Paragraph 81

On March 15, 2012, the Federal Energy Regulatory Commission (“FERC”) issued an order approving NERC’s FFT program. Paragraph 81 (“P 81”) of the FFT Order reads:

The Commission notes that NERC’s FFT initiative is predicated on the view that many violations of requirements currently included in Reliability Standards pose lesser risk to the Bulk-Power System. If so, some current requirements likely provide little protection for Bulk-Power System reliability or may be redundant. The Commission is interested in obtaining views on whether such requirements could be removed from the Reliability Standards with little effect on reliability and an increase in efficiency of the ERO compliance program. If NERC believes that specific Reliability Standards or specific requirements within certain Standards should be revised or removed, we invite NERC to make specific proposals to the Commission identifying the Standards or requirements and setting forth in detail the technical basis for its belief. In addition, or in the alternative, we invite NERC, the Regional Entities and other interested entities to propose appropriate mechanisms to identify and remove from the Commission approved Reliability Standards unnecessary or redundant requirements. We will not impose a deadline on when these comments should be submitted, but ask that to the extent such comments are submitted NERC, the Regional Entities, and interested entities coordinate to submit their respective comments concurrently.

In response, NERC initiated a review, referred to as the “P 81 project,” to identify requirements that could be removed from Reliability Standards without impacting the reliability of the Bulk-Power System. This project identified Requirement R2 in both regional Reliability Standards VAR-002-WECC-1 and VAR-005-WECC-1 as candidates for retirement. However,

---

6 FFT Order at P 81 (emphasis added).
because these Reliability Standards are maintained by WECC, the retirements were deferred in that project for later consideration by WECC through its standard development process.  

IV. Justification  

This section explains the proposed Requirement R2 retirement in each proposed regional Reliability Standard and how each continues to meet its respective reliability purpose. As discussed in Exhibit C, proposed regional Reliability Standards VAR-002-WECC-2 and VAR-501-WCC-2 satisfy the Reliability Standards criteria and are just, reasonable, not unduly discriminatory or preferential, and in the public interest. The complete development record for the proposed Regional Reliability Standard is provided in Exhibit D.  

A. Basis and Purpose of Proposed VAR-002-WECC-2 and VAR-501-WECC-2  

Proposed VAR-002-WECC-2 and proposed VAR-501-WECC-2 revise currently-effective version 1 standards to remove an administrative Requirement R2 in each, which require documentation of R1. The documentation language has been added to the Measure in Requirement R1 in each. VAR-002-WECC-1, Requirement R2 states:  

R2. Generator Operators and Transmission Operators shall have documentation identifying the number of hours excluded for each requirement in R1.1 through R1.10. [Violation Risk Factor: Low] [Time Horizon: Operations Assessment]  

VAR-501-WECC-2, Requirement R2 states:  

R2. Generator Operators shall have documentation identifying the number of hours excluded for each requirement in R1.1 through R1.12. [Violation Risk Factor: Low] [Time Horizon: Operations Assessment]  

The proposed modifications in both VAR-002-WECC-1 and VAR-501-WECC-2 include:  

- deletion of Requirement R2, which requires documentation of Requirement R1;  

---  

The substantive Requirements in both regional Reliability Standards have not changed and remain more stringent than the continent-wide Reliability Standard VAR-002-1. Proposed VAR-002-WECC-2 continues to set only very limited circumstances for when a generator’s automatic voltage regulator should be operated in a mode other than voltage control mode and continues to further limit the cumulative timeframe for doing so. Proposed VAR-501-WECC-2 continues to require that Generator Operators have a power system stabilizer in service.

**B. Enforceability of Proposed VAR-002-WECC-2 and VAR-501-WECC-2**

Proposed VAR-002-WECC-2 and VAR-501-WECC-2 contain Measures that support each Requirement by clearly identifying what is required and how the Requirement will be enforced. The Measures have not substantively changed from the prior versions of the Standards except for the addition of reporting the date of an outage related to an exclusion for each Standard. The Measures continue to provide clarity regarding how the Requirements will be enforced, and ensure that the Requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party. The proposed regional Reliability Standards continue to contain both a VRF and VSL for the remaining Requirement R1.
Respectfully submitted,

/s/ Sean Bodkin

Charles A. Berardesco
Senior Vice President and General Counsel
Holly A. Hawkins
Associate General Counsel
Sean Bodkin
North American Electric Reliability Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099 – facsimile
charlie.berardesco@nerc.net
holly.hawkins@nerc.net
sean.bodkin@nerc.net

Counsel for the North American Electric Reliability Corporation

December 30, 2014
EXHIBITS A—B and D – E

(Available on the NERC Website at:

EXHIBIT C

Reliability Standards Criteria for Proposed VAR-002-WECC-2 and VAR-501-WECC-2

The discussion below explains how the proposed Reliability Standard has met or exceeded 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.

The purpose of VAR-002-WECC-2 is to ensure that automatic voltage regulators on synchronous generators and condensers shall be kept in service and controlling voltage. The proposed VAR-002-WECC-2 regional Reliability Standard continues to be technically sound as the proposed VAR-002-WECC-2 continues to meet the same performance of regional Reliability Standard VAR-002-WECC-1.¹ Proposed VAR-002-WECC-2 is more stringent than the continent-wide Reliability Standard VAR-002 because it sets only limited circumstances for when a generator’s automatic voltage regulator should be operated in a mode other than the voltage control mode and further limits the cumulative timeframe for doing so.

The purpose of WECC-501-WECC-2 is to ensure that power system stabilizers on synchronous generators are kept in service. The proposed WECC-501-WECC-2 regional Reliability Standard continues to be technically sound as the proposed VAR-501-WECC-2 continues to meet the same performance as its predecessor, VAR-501-WECC-1.² Proposed VAR-501-WECC-2 is more stringent than the continent-wide NERC Reliability Standards as there is no corresponding NERC Standard for power system stabilizers.

¹ VAR-002-WECC-1 was submitted on April 7, 2009.
² VAR-501-WECC-1 was submitted on April 7, 2009.
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.**

   Proposed VAR-002-WECC-2 is only applicable to Generator Operators and Transmission Operators that operate synchronous condensers within the WECC region. Proposed VAR-501-WECC-2 is only applicable to Generator Operators within the WECC region. As explained in greater detail in the filing, the proposed regional Reliability Standards each contain a single remaining Requirement, which continues to clearly state the entity that is expected to comply and identifies what is required.

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

   Proposed VAR-002-WECC-2 and VAR-501-WECC-2 do not have any substantive changes to the VRFs and VSLs in their predecessor Reliability Standards, with the exception of the deletion of the VRF and VSL related to the retirement of Requirement R2. The format of the VRF and VSL section has been updated from a textual representation to a tabular format without changing the substance of the content. The proposed regional Reliability Standards continue to comport with NERC and FERC guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding Requirement and the VSLs should ensure uniformity and consistency in the determination of penalties. The VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. For these reasons, the proposed regional Reliability Standards includes clear and understandable consequences. The ranges of penalties for violations will continue to be based on the applicable VRF and VSL in
accordance with the sanctions table and the supporting penalty determination process described in the NERC Sanction Guidelines, Appendix 4B to the NERC Rules of Procedure.

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.

Proposed VAR-002-WECC-2 and VAR-501-WECC-2 identify clear and objective criterion or measures for compliance so that they can be enforced in a consistent and non-preferential manner. The regional Reliability Standards contain individual Measures that support the regional difference’s Requirements by plainly identifying how the Requirements will be assessed and enforced. With the inclusion of a Measure requiring the reporting of the date of any outage for both proposed regional Reliability Standards, these Measures continue to ensure that the Requirements will be assessed and enforced in a clear, consistent, and non-preferential manner, without prejudice to any party.

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.

Proposed VAR-002-WECC-2 and VAR-501-WECC-2 achieve their reliability goals effectively and efficiently. The proposed standards remove a documentation requirement and allow the Measures to address the documentation. By utilizing the existing documentation requirements and shifting the language to the Measures, the proposed regional Reliability Standards use the most efficient method available to
achieve the reliability goal and reduce the time and cost for implementation of the proposed regional Reliability Standards.

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.**

   Proposed VAR-002-WECC-2 and VAR-501-WECC-2 do not reflect a compromise that does not adequately protect Bulk-Power System reliability. The deletion of the documentation requirements and incorporation into the Measures of the Standards reflect goal of gaining efficiencies from the consolidation or retirement of requirements based on technical analysis of existing requirements. NERC does not estimate any change in cost to small entities since Requirement R2 related only to documentation.

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.**

   As regional Reliability Standards, proposed VAR-002-WECC-2 and VAR-501-WECC-2 meet the requirements for regional Reliability Standards as discussed in the filing and will be enforceable for registered entities within the WECC region.
8. **Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.**

The proposed regional Reliability Standards do not make any substantive changes to the existing regional Reliability Standards other than the deletion of a documentation Requirement and incorporation into the Measures.

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

The implementation time for the proposed regional Reliability Standards is reasonable. Since proposed VAR-002-WECC-2 and VAR-501-WECC-2 do not create additional burden on entities and save compliance time, an effective date as provided in the Implementation Plan.

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

The proposed Reliability Standards were developed in accordance with NERC’s and WECC’s processes for developing and approving Reliability Standards. WECC develops regional Reliability Standards in accordance with the WECC Reliability Standards Development Procedures, which is included as Exhibit C of WECC’s Regional Delegation Agreement with NERC. The development process is open to any person or entity with a direct and material interest in the bulk power system. For a more thorough review, please see the complete development history included as Exhibit D. This process included, among other things, a comment period, a pre-ballot review period, and a balloting period.
11. **NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.**

NERC has not identified competing vital public interests with respect to the request for approval of the regional Reliability Standards, and no comments were received during the development of the regional Reliability Standards indicating conflicts with other vital public interests.

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

No other factors relevant to whether the proposed regional Reliability Standards are just and reasonable were identified.