NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

March 3, 2011

VIA ELECTRONIC FILING

Veronique Dubois
Régie de l'énergie
Tour de la Bourse
800, Place Victoria
Bureau 255
Montréal, Québec H4Z 1A2

Re: *North American Electric Reliability Corporation*

Dear Ms. Dubois:

The North American Electric Reliability Corporation ("NERC") hereby submits this filing providing notice of one revised Reliability Standard, and the retirement of one existing approved Reliability Standard.

Specifically, NERC provides notice of revised Reliability Standard EOP-008-1 – Loss of Control Center Functionality contained in **Exhibit A** to this petition; as well as concurrent retirement of existing Reliability Standard EOP-008-0 – Loss of Control Center Functionality.

The proposed revised Reliability Standard EOP-08-1 was approved by the NERC Board of Trustees on August 5, 2010. EOP-008-1 will be made effective in accordance with the effective date provision contained in the proposed Reliability Standard, which reads:

> **Effective Date:** The first day of the first calendar quarter twenty-four months after applicable regulatory approval. In those jurisdictions where no regulatory approval is required, the standard shall become effective on the first day of the first calendar quarter twenty-four months after Board of Trustees adoption.

EOP-008-0 is to be retired concurrent with the implementation of EOP-008-1.

NERC's notice consists of the following:

- This transmittal letter;
- A table of contents for the entire Notice of Filing;
- A narrative description providing justification of the proposed Reliability Standard;
- Reliability Standard EOP-008-1 (**Exhibit A**);
- Matrix of FERC Directives and Industry Comments Considered (**Exhibit B**)
- Standard Drafting Team Roster (**Exhibit C**); and
- The complete development record of the proposed revised Reliability Standard (**Exhibit D**).

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Holly A. Hawkins
Holly A. Hawkins
Assistant General Counsel for Standards and Critical Infrastructure Protection for North American Electric Reliability Corporation

BEFORE THE
RÉGIE DE L'ÉNERGIE
THE PROVINCE OF QUÉBEC

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION)
)

NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF ONE EMERGENCY PREPAREDNESS AND OPERATIONS RELIABILITY STANDARD EOP-008-1 AND RETIREMENT OF ONE EXISTING RELIABILITY STANDARD EOP-008-0

Gerald W. Cauley
President and Chief Executive Officer
David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins
Assistant General Counsel for Standards and Critical Infrastructure Protection
Willie L. Phillips
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

March 3, 2011

TABLE OF CONTENTS

I. INTRODUCTION

The North American Electric Reliability Corporation ("NERC") hereby provides notice of revised Reliability Standard: EOP-008-1 - Loss of Control Center Functionality and the concurrent retirement of existing Reliability Standard: EOP-008-0 – Plans for Loss of Control Center Functionality.

The NERC Board of Trustees approved Reliability Standard EOP-008-1 on August 5, 2010. **Exhibit A** to this filing sets forth the proposed Reliability Standard. **Exhibit B** contains the Matrix of FERC Directives and Industry Comments Considered in the development of these standards. **Exhibit C** contains the standard drafting team ("SDT") roster that developed the proposed Reliability Standard. **Exhibit D** contains the complete development record of the proposed Reliability Standard.

NERC filed this proposed Reliability Standard with the Federal Energy Regulatory Commission ("FERC") on February 11, 2011, and is filing this proposed Reliability Standard with the other applicable governmental authorities in Canada.

II. NOTICES AND COMMUNICATIONS

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

Gerald W. Cauley
President and CEO
David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins
Assistant General Counsel for Standards and Critical Infrastructure Protection
Willie L. Phillips
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

III. BACKGROUND

a. Basis for Proposed Changes to Reliability Standard

The proposed Reliability Standard EOP-008-1—Loss of Control Center Functionality, works to ensure that a plan is in place for backup functionality and that facilities and personnel are prepared to implement that plan. During the implementation of the backup functionality, the responsible entities focus on maintaining the reliability of the Interconnection. The proposed standard applies to Transmission Operators, Balancing Authorities, and Reliability Coordinators.

The proposed standard represents a significant revision and improvement to the current enforceable standard. The proposed revisions improve the overall quality of the standard, eliminate gaps in the requirements, reduce ambiguity, eliminate "fill-in-the-blank" components, and address specific FERC Order 693 directives, as highlighted here and discussed in detail below. The proposed standard:

- clearly delineates what must be included in the plan for backup functionality;
- includes a provision for managing the risk to the BPS during the transition from primary to backup functionality;

- requires Reliability Coordinators to have a dedicated facility for its backup functionality;
- provides that Transmission Operators and Balancing Authorities can have either a dedicated facility or may contract for services to provide backup functionality;
- addresses the need for formal review and approval of the plan for backup functionality;
- mandates independence of the primary and backup capabilities;
- requires testing of the plan for backup functionality; and
- establishes a procedure for creating a plan to re-establish backup capability following a catastrophic situation.

The changes proposed reflect the consideration of a number of issues that were captured during NERC's conversion of the former Operating Policies and Planning Standards to what is called the "Version 0" standards, as well as issues noted during the development of compliance measures for the Phase III and Phase IV Reliability Standards developed subsequent to Version 0 development, and the development of Violation Risk Factors in 2006.

In addition, the SDT addressed specific FERC Order No. 693 directives pertinent to this standard. These directives are described below, and are discussed in greater detail in **Attachment B** to this filing:

- provide for backup capabilities that, at a minimum, must be independent of the primary control center;
- provide for backup capabilities that, at a minimum, must be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center;
- provide for backup capabilities that, at a minimum, must provide for a minimum functionality to replicate the critical reliability functions of the primary control center;
- provide for backup capabilities that, at a minimum, must provide that the extent of the backup capability be consistent with the impact of the loss of the entity's primary control center on the reliability of the BPS;

- provide for backup capabilities that, at a minimum, must include a requirement that all reliability coordinators have full backup control centers;

- provide for backup capabilities that, at a minimum, must require transmission operators and balancing authorities that have operational control over significant portions of generation and load to have minimum backup capabilities discussed above but may do so through contracting for these services instead of through dedicated backup control centers; and

- include large, centrally dispatched generation control centers.

b. Reliability Standards Development Procedure

NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC *Standard Processes Manual*, which is incorporated into the Rules of Procedure as Appendix 3A.[1] NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards.

The development process is open to any person or entity with a legitimate interest in the reliability of the BPS. NERC considers the comments of all stakeholders and a vote of stakeholders and the NERC Board of Trustees is required to approve a Reliability Standard for submission to the applicable governmental authorities.

The proposed Reliability Standard set out in **Exhibit A** has been developed and approved by industry stakeholders using NERC's *Reliability Standards Development Procedure Version 7*. The NERC Board of Trustees approved the proposed standard on August 5, 2010.

[1] FERC approved the new Reliability *Standards Processes Manual* on September 3, 2010 (FERC Docket No. RR10-12-000), which replaced the *Reliability Standards Development Procedure Version 7* in its entirety. NERC developed the proposed EOP-008-1 standard in accordance with the *Reliability Standards Development Procedure Version 7*, because the *Standards Processes Manual* was not yet approved at the time of this standard's development.

IV. JUSTIFICATION FOR PROPOSED RELIABILITY STANDARDS

This section summarizes the development of the proposed Reliability Standard, EOP-008-1, and provides evidence that the proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest.

The standard drafting team roster is provided in **Exhibit C**. The complete development record for the proposed reliability standard is available in **Exhibit D**. This record includes the draft of the Reliability Standard through the development, the implementation plan, the ballot pool, and the final ballot results by registered ballot body members, stakeholder comments received during the development of the Reliability Standard, and an explanation of how those comments were considered in developing the Reliability Standard.

The purpose of EOP-008-1 is to ensure continued reliable operations of the BPS in the event that a control center becomes inoperable. The proposed EOP-008-1 standard applies to Reliability Coordinators, Transmission Operators, and Balancing Authorities and consists of eight requirements and associated parts, which provide:

- the need for a formally documented Operating Plan for backup functionality and what must be included in it;
- a provision for distributing the Operating Plan for backup functionality to the operators;
- the need for a Reliability Coordinator to have a dedicated backup control center facility;
- that a Balancing Authority or Transmission Operator shall have backup functionality that may be provided either through a facility of their own or through contracted services;

- annual review and approval of the Operating Plan for backup functionality;
- independence of the primary and backup capabilities;
- conducting and documenting tests of the Operating Plan for backup functionality; and
- the need for an approved plan to re-establish backup capability following a catastrophic event.

EOP-008-0 is proposed to be retired in its entirety. All of the requirements from that standard are now included in the proposed EOP-008-1 standard, as appropriate. The implementation plan for this standard requires compliance consistent with the proposed effective date of twenty-four months after the first day of the first calendar quarter following applicable regulatory approval. In those jurisdictions where no regulatory approval is required, all requirements go into effect twenty-four months after NERC Board of Trustees adoption.

a. Demonstration that the proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest

1. Proposed Reliability Standard is designed to achieve a specified reliability goal

The proposed Reliability Standard, EOP-008-1 – Loss of Control Center Functionality, specifically establishes the requirements for having an Operating Plan for backup functionality and all of the various elements such as review and approval, testing, and documentation required of an applicable entity necessary to ensure bulk power system reliability.

2. Proposed Reliability Standard contains a technically sound method to achieve the goal

The proposed Reliability Standard contains technically sound methods to achieve the goal of ensuring an Operating Plan for backup functionality is in place. The standard describes:

- What must be included in the Operating Plan for backup functionality, demonstrated in Requirement R1;
- To whom the Operating Plan for backup functionality must be distributed, demonstrated in Requirement R2;
- Specific requirements for Reliability Coordinators, in Requirement R3;
- Specific requirements for Transmission Operators and Balancing Authorities, in Requirement R4;
- When the Operating Plan for backup functionality is to be updated, as shown in Requirement R5;
- Maintaining the independence of the primary and backup capabilities, demonstrated in Requirement R6;
- Testing as shown in Requirement R7; and
- Establishing the need for a plan to re-establish backup capability following a catastrophic event, as shown in Requirement R8.

3. Proposed Reliability Standard is applicable to users, owners, and operators of the BPS, and not others

The proposed Reliability Standard is applicable to users, owners and operators of the BPS, and not others. The proposed standard is specifically applicable to Reliability Coordinators, Transmission Operators, and Balancing Authorities. Each of those entities is a user, owner or operator of the BPS.

4. Proposed Reliability Standard is clear and unambiguous as to what is required and who is required to comply

The proposed Reliability Standard is clear and unambiguous as to what is required and who is required to comply. Each requirement clearly states the applicable entity (ies) and what they are required to do. For example, the revised standard now clearly distinguished the requirements applicable to Reliability Coordinators (Requirement R4) and Transmission Operators and Balancing Authorities (Requirement R5).

5. Proposed Reliability Standard includes clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation

The proposed Reliability Standard includes clear and understandable consequences. Each primary requirement was assigned a Violation Risk Factor ("VRF") and a Violation Severity Level ("VSL"), which support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in standards, as defined in the ERO Sanction Guidelines. In addition to the NERC VSL guidelines, VSLs for the proposed standard are also consistent with the VSL guidelines established by FERC. An explanation of NERC's review of these VSLs for consistency with FERC's VSL guidelines is included in Section V of this document.

6. **Proposed Reliability Standard identifies clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner**

The proposed Reliability Standard identifies clear and objective criteria in the language of the requirements to enable enforcement of the Standard in a consistent and non-preferential manner. Each requirement has an associated measure, and each requirement is clear in its expectations such that development of compliance enforcement objectives through the

Reliability Standard Audit Worksheets is straightforward. The language in the requirements is unambiguous with respect to what is expected of the applicable entity.

7. **Proposed Reliability Standard achieves a reliability goal effectively and efficiently - but does not necessarily have to reflect "best practices" without regard to implementation cost**

The proposed Reliability Standard achieves its reliability goal effectively and efficiently, not necessarily reflecting "best practices" without regard to implementation costs. Care was taken to expand the requirements to meet the reliability objectives without unduly burdening applicable entities. For example, requirements for dedicated facilities for Transmission Operators and Balancing Authorities are limited when compared to those for the Reliability Coordinator. Moreover, testing of the Operating Plan for backup functionality is restricted to two hours per year. This is reasonable because it allows an entity to run across an hour boundary, which is an important time mark in SCADA. Two hours also sufficiently ensures that all various software functions will have run, thereby ensuring more complete test results.

8. **Proposed Reliability Standard is not "lowest common denominator," *i.e.*, does not reflect a compromise that does not adequately protect BPS reliability**

The proposed Reliability Standard is more stringent than the EOP-008-0 standard in several areas. Testing the Operating Plan for backup functionality (Requirement R7), the need to re-establish backup capability following a catastrophic event (Requirement R8), and mitigating the risk to the BPS during transition from the primary to the backup functionality (Requirement R1, part 1.6.2) all reflect significantly increased responsibilities for applicable entities.

9. **Proposed Reliability Standard considers costs to implement for smaller entities but not at consequence of less than excellence in operating system reliability**

The proposed Reliability Standard does not reflect any differentiation in compliance with requirements based on size. If an entity has responsibility for restoration tasks, it must adhere to the requirements regardless of size. However, the SDT has considered costs that may be a factor to smaller entities by allowing for contracted services for Transmission Operators and Balancing Authorities.

10. **Proposed Reliability Standard is designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one area or approach**

The proposed Reliability Standard is designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one area or approach. The standard as drafted proposes no regional differences or variances.

11. **Proposed Reliability Standard causes no undue negative effect on competition or restriction of the grid**

There is no basis for anticipating that the proposed Reliability Standard will adversely affect competition or restrict available transmission capability.

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

The proposed Reliability Standard identifies an effective date that is reasonable. Given that compliance is already required for EOP-008-0, NERC believes the proposed effective date represents a reasonable time frame to allow entities to adequately prepare for compliance with the new requirements.

13. **The Reliability Standard development process was open and fair**

NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC *Reliability Standards Development Procedure* and its replacement the NERC *Standards Processes Manual*, which is incorporated into the Rules of Procedure as Appendix 3A. NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards. The development process is open to any person or entity with a legitimate interest in the reliability of the bulk power system. NERC considers the comments of all stakeholders and a vote of stakeholders and the NERC Board of Trustees is required to approve a Reliability Standard for submission to the applicable governmental authorities. The drafting team developed this standard by following NERC's standards development process.

The proposed Reliability Standard set out in **Exhibit A** has been developed and approved by industry stakeholders using the process found in NERC's *Reliability Standards Development Procedure*, and was approved by the NERC Board of Trustees on August 5, 2010 for filing with the applicable governmental authorities. Therefore, NERC has utilized its approved standard development process, in effect at the time of its development, in a manner that is open and fair.

14. **Proposed Reliability Standard balances with other vital public interests**

No environmental, social, or other goals are reflected, nor do they enter into consideration, apart from ensuring that backup functionality is implemented in such a manner that Interconnection reliability is maintained.

15. **Proposed Reliability Standard considers any other relevant factors**

An overview matrix of the issues raised in consideration of the proposed standard demonstrating how industry comments from previous work, as well as directives from Order No. 693, were addressed in this standard development project is included in **Exhibit B**.

V. Violation Risk Factors and Violation Severity Levels

The proposed Reliability Standard includes VRFs and VSLs that are specific to individual requirements. The ranges of penalties for violations of standards are based on the applicable VRFs and VSLs and will be administered based on the Sanctions Table and supporting penalty determination process described in NERC Sanction Guidelines, which can be found in Appendix 4B of NERC's Rules of Procedure. Consistent with NERC's August 10, 2009 informational filing, assignments of VRFs and VSLs were made at the main requirement level of each standard.

a. Justification for Assignment of Violation Risk Factors in EOP-008-1

VRF assignments for EOP-008-1 were based on the criteria stated in the NERC VRF guidelines:

- ***High Risk Requirement***—A requirement that, if violated, could directly cause or contribute to BPS instability, separation, or a cascading sequence of failures, or could place the BPS at an unacceptable risk of instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to BPS instability, separation, or a cascading sequence of failures, or could

place the BPS at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

- ***Medium Risk Requirement***—A requirement that, if violated, could directly affect the electrical state or the capability of the BPS, or the ability to effectively monitor and control the BPS. However, violation of a medium risk requirement is unlikely to lead to BPS instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the BPS, or the ability to effectively monitor, control, or restore the BPS. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to BPS instability, separation, or cascading failures, nor to hinder restoration to a normal condition.
- ***Lower Risk Requirement***—A requirement that is administrative in nature and a requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the BPS, or the ability to effectively monitor and control the BPS; or, a requirement that is administrative in nature and a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to adversely affect the electrical state or capability of the BPS, or the ability to effectively monitor, control, or restore the BPS. A planning requirement that is administrative in nature.

The SDT also considered consistency with the FERC Guidelines for setting VRFs, outlined in the VRF Rehearing order:[2]

- **Guideline (1) — Consistency with the Conclusions of the Final Blackout Report**
  FERC seeks to ensure that Violation Risk Factors assigned to Requirements of Reliability Standards in these identified areas appropriately reflect their historical critical impact on the reliability of the Bulk-Power System.

  In the VRF Rehearing Order, FERC listed critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the BPS.[3]

- **Guideline (2) — Consistency within a Reliability Standard**
  FERC expects a rational connection between the sub-Requirement Violation Risk Factor assignments and the main Requirement VRF assignment.

- **Guideline (3) — Consistency among Reliability Standards**
  FERC expects the assignment of VRFs corresponding to Requirements that address similar reliability goals in different Reliability Standards would be treated comparably.

- **Guideline (4) — Consistency with NERC's Definition of the Violation Risk Factor Level**
  Guideline (4) was developed to evaluate whether the assignment of a particular VRF level conforms to NERC's definition of that risk level.

- **Guideline (5) — Treatment of Requirements that Co-mingle More Than One Obligation**
  Where a single Requirement co-mingles a higher risk reliability objective and a lesser risk reliability objective, the VRF assignment for such Requirements must not be watered down to reflect the lower risk level associated with the less important objective of the Reliability Standard.

Guideline 1 identifies a list of topics that encompass nearly all topics within NERC's Reliability Standards and implies that these requirements should be assigned a "High" VRF,

[2] *North American Electric Reliability Corp.*, 119 FERC ¶ 61,145, order on reh'g and compliance filing, 120 FERC ¶ 61,145 (2007) ("VRF Rehearing Order").
[3] *Id*. at footnote 14 ("The areas are emergency operations; vegetation management; operator personnel training; protection systems and their coordination; operating tools and backup facilities; reactive power and voltage control; system modeling and data exchange; communication protocol and facilities; requirements to determine equipment ratings; synchronized data recorders; clearer criteria for operationally critical facilities; and appropriate use of Transmission Loading Relief.").

whereas Guideline 4 directs assignment of VRFs based on the impact of a specific requirement to the reliability of the system. The SDT therefore determined that Guideline 4 is reflective of the intent of VRFs in the first instance and therefore concentrated its approach on the reliability impact of the requirements.

There are eight proposed requirements in EOP-008-1. Of these eight requirements, Requirements R2 and R5 were assigned a "Lower" VRF, which were seen as mainly administrative in nature. All other requirements were given a "Medium" VRF. The following analysis demonstrates that the VRFs proposed for each requirement in EOP-008-1 meet the FERC Guidelines for assessing VRFs:

Req.	**Guideline 2** Consistency within a Reliability Standard.	**Guideline 3** Consistency among Reliability Standards.	**Guideline 4** Consistency with NERC's Definition of a VRF.	**Guideline 5** Treatment of Requirements that Co-mingle More Than One Objective.
R1	The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.	There is a similar requirement (Requirement R1) in proposed EOP-005-2 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the creation of a plan: EOP-005-2 for a restoration plan and EOP-008-1 for a backup plan. The VRF assigned to EOP-008-1, Requirement R1 is lower than EOP-005-2, Requirement R1. The SDT recognizes that the VRF for EOP-008-1, Requirement R1 is lower than the VRF for the similar requirement in EOP-005-2 which is assigned a High VRF, however, the SDT and stakeholders support the Medium VRF based on NERC's criteria for VRFs. The assignment of the Medium VRF was made based on the premise	Failure to have an Operating Plan for backup functionality could directly affect the electrical state or the capability of the BPS, and could affect the applicable entity's ability to effectively monitor and control the BPS. However, violation of this requirement is unlikely to lead to BPS instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the BPS regardless of the situation. Thus, this requirement meets NERC's criteria for a Medium VRF. Failure to have an Operating Plan	EOP-008-1, Requirement R1 contains only one objective, therefore only one VRF was assigned.

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
		that failure to have an Operating Plan for backup functionality, by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when an applicable entity fails to create an Operating Plan for backup functionality. While the SDT agrees that, under some circumstances, it is possible that a failure to have an Operating Plan for backup functionality may put the applicable entity in a position where it is not as prepared as it should be to address the potential situation, the failure to have an Operating Plan for backup functionality would not, by itself, result in instability, separation, or cascading failures. If the applicable entity failed to have an Operating Plan for backup functionality, it would still be expected to handle the situation if it occurred.	for backup functionality will not, by itself, lead to instability, separation, or cascading failures.	
R2	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	EOP-008-1, Requirement R2 is a new requirement, so there are no comparable requirements with which to compare VRFs.	Failure to have a copy of the Operating Plan for backup functionality at each of its control locations should not have an adverse impact on the BPS because operations at the different locations should be essentially	EOP-008-1, Requirement R2 contains only one objective, therefore only one VRF was assigned.

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
			identical. This is mainly an administrative requirement and thus meets NERC's criteria for a Lower VRF.	
R3	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	EOP-008-1, Requirement R3 is a new requirement, so there are no comparable requirements in other standards with which to compare VRFs. However, the SDT did assign the same VRF to EOP-008-1, Requirement R4 which is a similar requirement applying to Transmission Operators and Balancing Authorities. The assignment of the "Medium" VRF was made based on the premise that failure to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center), by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. The Reliability Coordinator is always responsible for maintaining the reliability of the BPS regardless of the situation. For a requirement to be assigned a "High" VRF, there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when a Reliability Coordinator fails to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center). The SDT agrees that if the	Failure to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center) will impact the situational awareness of the Reliability Coordinator, and thus could affect the Reliability Coordinator's ability to effectively monitor and control the BPS, however violation of this requirement is unlikely to lead to BPS instability, separation or cascading failures. The Reliability Coordinator is required to maintain control and awareness of the BPS at all times. In addition, the Transmission Operators and Balancing Authorities who report to the affected Reliability Coordinator would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Reliability Coordinator has a problem. Therefore, the failure of a Reliability Coordinator to have a backup control center facility (provided	EOP-008-1, Requirement R3 contains only one objective, therefore only one VRF was assigned.

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
		Reliability Coordinator fails to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center), this failure will put the Reliability Coordinator in a position where they are not as prepared as they should be to address the situation. However, even if the Reliability Coordinator failed to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center), the Reliability Coordinator is still required to maintain control and awareness of the BPS. In addition, the Transmission Operators and Balancing Authorities who report to the affected Reliability Coordinator would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Reliability Coordinator has a problem.	through its own dedicated backup facility or at another entity's control center) should not directly result in instability, separation, or cascading failures. Thus, this requirement meets the criteria for a Medium VRF.	
R4	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	EOP-008-1, Requirement R4 is a new requirement, so there are no comparable requirements in other standards with which to compare VRFs. However, the SDT did assign the same VRF to EOP-008-1, Requirement R3 which is a similar requirement applying to Reliability Coordinators. The assignment of the "Medium" VRF was made based on the premise that failure to have backup functionality (provided either through a facility or contracted	Failure to have backup functionality (provided either through a facility or contracted services) will impact the situational awareness of the Transmission Operator or Balancing Authority, and thus could affect the Transmission Operator's or Balancing Authority's ability to effectively monitor and control the BPS, however violation of this requirement is	EOP-008-1, Requirement R4 has only one objective, therefore only one VRF was assigned.

Req.	**Guideline 2** Consistency within a Reliability Standard.	**Guideline 3** Consistency among Reliability Standards.	**Guideline 4** Consistency with NERC's Definition of a VRF.	**Guideline 5** Treatment of Requirements that Co-mingle More Than One Objective.
		services), by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. The Transmission Operator and Balancing Authority are always responsible for maintaining the reliability of the BPS regardless of the situation. For a requirement to be assigned a "High" VRF, there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when a Transmission Operator or Balancing Authority fails to have backup functionality (provided either through a facility or contracted services). The SDT agrees that if the Transmission Operator or Balancing Authority fails to have backup functionality (provided either through a facility or contracted services), this failure will put the Transmission Operator or Balancing Authority in a position where they are not as prepared as they should be to address the situation. However, even if the Transmission Operator or Balancing Authority failed to have backup functionality (provided either through a facility or contracted services), the Transmission Operator or Balancing Authority is still required to maintain control and awareness of the BPS. In addition, the Reliability Coordinator who 'sits' above the affected	unlikely to lead to BPS instability, separation or cascading failures. The Transmission Operator or Balancing Authority is required to maintain control and awareness of the BPS at all times. In addition, the Reliability Coordinator who 'sits' above the affected Transmission Operator or Balancing Authority would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Transmission Operator or Balancing Authority has a problem. Therefore, the failure of a Transmission Operator or Balancing Authority to have backup functionality (provided either through a facility or contracted services) should not directly result in instability, separation, or cascading failures. Thus, this requirement meets the criteria for a Medium VRF.	

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
		Transmission Operator or Balancing Authority would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Transmission Operator or Balancing Authority has a problem.		
R5	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	There is a similar requirement (Requirement R4) in proposed EOP-005-2 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the update of a plan: EOP-005-2 for a restoration plan and EOP-008-1 for a backup plan. The VRF assigned to EOP-008-1, Requirement R5 is lower than EOP-005-2, Requirement R4. The SDT recognizes that the VRF for EOP-008-1, Requirement R5 is lower than the VRF for the similar requirement in EOP-005-2 which is assigned a High VRF, however the SDT and stakeholders support the Medium VRF based on NERC's criteria for VRFs. The assignment of the Medium VRF was made based on the premise that failure to update an Operating Plan for backup functionality, by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF there should be the expectation that failure to meet the required performance "will" result in	Failure to update an Operating Plan for backup functionality could directly affect the electrical state or the capability of the BPS, and could affect the applicable entity's ability to effectively monitor and control the BPS. However, violation of this requirement is unlikely to lead to BPS instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the BPS regardless of the situation. Thus, this requirement meets NERC's criteria for a Medium VRF. Failure to update an Operating Plan for backup functionality will not, by itself, lead to instability, separation, or cascading failures.	EOP-008-1, Requirement R5 contains only one objective. Therefore only one VRF was assigned.

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
		instability, separation, or cascading failures. This is not the case when an applicable entity fails to update an Operating Plan for backup functionality. While the SDT agrees that, under some circumstances, it is possible that a failure to update an Operating Plan for backup functionality may put the applicable entity in a position where it is not as prepared as it should be to address the potential situation, the failure to have an Operating Plan for backup functionality would not, by itself, result in instability, separation, or cascading failures. If the applicable entity failed to update an Operating Plan for backup functionality, it would still be expected to handle the situation if it occurred. Additionally, the assignment of a Medium VRF to this requirement is consistent with the VRF assignment for Requirement R1.		
R6	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	EOP-008-1, Requirement R6 is a new requirement, so there are no comparable requirements with which to compare VRFs.	EOP-008-1, Requirement R6 addresses the situation applicable entities primary and backup capabilities can't depend on each other. A violation of this requirement is assigned a "Medium" VRF because, if the applicable entity did have a dependence between their primary and backup capabilities it is not clear that this could directly lead, without any other violations of any	EOP-008-1, Requirement R6 contains only one objective. Therefore only one VRF was assigned to the requirement.

Req.	Guideline 2 Consistency within a Reliability Standard.	Guideline 3 Consistency among Reliability Standards.	Guideline 4 Consistency with NERC's Definition of a VRF.	Guideline 5 Treatment of Requirements that Co-mingle More Than One Objective.
			other requirements, to instability, separation, or cascading failures.	
R7	Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	Consistency among Reliability Standards. EOP-008-1, Requirement R7 is a new requirement, so there are no comparable requirements with which to compare VRFs.	Consistency with NERC's Definition of a VRF. EOP-008-1, Requirement R7 mandates testing of an applicable entity's Operating Plan for backup capability. A violation of this requirement is assigned a "Medium" VRF because, if the applicable entity did not test their Operating Plan for backup capability it is not clear that this could directly lead, without any other violations of any other requirements, to instability, separation, or cascading failures.	Treatment of Requirements that Co-mingle More Than One Objective. IRO-010-1a Requirements R1 and R2 each address a single objective and each has a single VRF.
R8	The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.	EOP-008-1, Requirement R8 is a new requirement, so there are no comparable requirements with which to compare VRFs.	EOP-008-1, Requirement R8 mandates that entities provide a plan for re-establishing backup capabilities following a catastrophic failure. A failure to provide this plan does not affect the applicable entity's ability to effectively monitor and control the BPS. Violation of this requirement is unlikely, by itself, to lead to BPS instability, separation, or cascading failures, thus the assignment of a "Medium" VRF.	EOP-008-1, Requirement R8 addresses a single objective and has a single VRF.

b. Justification for Assignment of Violation Severity Levels for EOP-008-1

In developing the VSLs for the EOP-008-1 standard, the SDT anticipated the evidence that would be reviewed during an audit, and developed its VSLs based on the noncompliance an auditor may find during a typical audit. The SDT based its assignment of VSLs on the following NERC criteria:

Lower	Moderate	High	Severe
Missing a minor element (or a small percentage) of the required performance The performance or product measured has significant value as it almost meets the full intent of the requirement.	Missing at least one significant element (or a moderate percentage) of the required performance. The performance or product measured still has significant value in meeting the intent of the requirement.	Missing more than one significant element (or is missing a high percentage) of the required performance or is missing a single vital component. The performance or product has limited value in meeting the intent of the requirement.	Missing most or all of the significant elements (or a significant percentage) of the required performance. The performance measured does not meet the intent of the requirement or the product delivered cannot be used in meeting the intent of the requirement.

The SDT also considered the FERC guidelines for evaluating VSLs, which include:

Guideline 1: Violation Severity Level assignments should not have the unintended consequence of lowering the current level of compliance;

Guideline 2: Violation Severity Level assignments should ensure uniformity and consistency among all approved Reliability Standards in the determination of penalties;

a) the single VSL assignment category for "binary" requirements is not consistent;
b) the VSL assignments contain ambiguous language.

Guideline 3: Violation Severity Level assignments should be consistent with the corresponding requirement; and

Guideline 4: Violation Severity Level assignments should be based on a single violation, not on a cumulative number of violations.

The following analysis demonstrates that the VSLs proposed for each requirement in EOP-008-1 are consistent with the FERC Guidelines for assessing VSLs:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R1.	Consistent with NERC's VSL guidelines.	The most comparable VSLs for a similar requirement are for the proposed EOP-005-2, Requirement R1. Those VSLs are based on missing one element for Lower, two for Moderate, and so forth, which is analogous to the VSL structure for EOP-008-1, Requirement R1. Thus, the VSLs in the proposed standard do not lower the level of compliance currently required by setting VSLs that are less punitive than	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
		those already proposed.			

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R2.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are no comparable VSLs.	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R3.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are no comparable VSLs.	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R4.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are	The proposed VSLs do not use any ambiguous terminology, thereby	The proposed VSLs use the same terminology	The VSLs are based on a single violation

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
		no comparable VSLs.	supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	as used in the associated requirement, and are, therefore, consistent with the requirement.	and not cumulative violations.

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R5.	Consistent with NERC's VSL guidelines.	The most comparable VSLs for a similar requirement are for the proposed EOP-005-2,	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore,	The VSLs are based on a single violation and not cumulative violations.

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
		Requirement R4. Those VSLs are based on late distribution of a plan which is analogous to the VSLs for EOP-008-1, Requirement R5. The VSLs assignments are similar between the two standards. Thus, the VSLs in the proposed standard do not lower the level of compliance currently required by setting VSLs that are less punitive than those already proposed.	violations. Guideline 2a is inapplicable.	consistent with the requirement.	

R #	Compliance with NERC's Revised VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R 6.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are no comparable VSLs.	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

R #	Compliance with NERC's Revised VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R 7.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are no comparable	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity	The proposed VSLs use the same terminology as used in the	The VSLs are based on a single violation and not

R #	Compliance with NERC's Revised VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
		VSLs.	and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.	associated requirement, and are, therefore, consistent with the requirement.	cumulative violations.

R #	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
R 8.	Consistent with NERC's VSL guidelines.	The proposed requirement is new and there are no comparable VSLs.	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the	The VSLs are based on a single violation and not cumulative violations.

R #	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
			is inapplicable.	requirement.	

VI. SUMMARY OF THE RELIABILITY STANDARD DEVELOPMENT PROCEEDINGS

a. Development History

On October 26, 2006, NERC received, and the Standards Committee accepted, a standards authorization request ("SAR") for Project 2006-04, which included revisions to EOP-008-0. The SAR was posted for two industry comment opportunities and then approved by the Standards Committee for standard development on May 10, 2007.

The SDT posted the draft standard for initial industry comment from February 11, 2008 to March 7, 2008. In response, 45 sets of comments were received from representatives of 75 companies and 9 of the 10 industry segments. Comments primarily dealt with applicability issues for Transmission Operators, contents of the Operating Plan for backup functionality, transition timeframes, and clarification of when backup functionality is required.

The SDT revised the draft standard accordingly and re-posted for industry comment for a second time from August 29, 2008 to October 9, 2008, a 45-day posting. This time, 38 sets of comments were received from 50 companies representing 8 of the 10 industry segments. Comments received mainly focused on continuing questions on applicability provisions for Transmission Operators, measures, VSLs, length of the Implementation Plan timeframe for compliance, and whether there was a requirement for a tertiary facility or functionality.

Once again, the SDT revised the draft standard to accommodate industry concerns and posted for a third time between March 19, 2009 and April 15, 2009. In response to the third posting, there were 36 sets of comments from 60 companies representing 8 of the 10 industry segments. Comments dealt with clarifications on the need for certified operators at contracting facilities and what independence of capabilities meant. Nearly all of the commenters agreed that the draft standard was ready for balloting. The Standards Committee approved the standard for balloting on August 7, 2009.

The SDT faced a number of key issues during the standard development period:

1. **Exclusions for Transmission Operators based on size.** The SDT debated at great length as to whether there should be applicability exclusions for Transmission Operators based on size. This discussion was prompted in part by a FERC Order No. 693 directive. The SDT tried twice to craft a reasonable exclusion and twice the comments received from industry did not support such exclusions. Ultimately, the SDT decided to remove the exclusion.
2. **Determining a transition timeframe.** Some commenters thought the 2 hour transition timeframe was too broad, others too limited. Still, others argued that the timeframe seemed to weaken the current requirement. The SDT attempted to

develop a reasonable number that would allow for a backup to be placed sufficiently far away so that the chances of a single catastrophe affecting both sites were minimal, versus having it so far away that there may be a serious gap in reliability during the intervening time before the backup is operational. The SDT decided that 2 hours was a reasonable number and that the current requirement is not weakened by such a value. The basis for this conclusion was that the revised standard calls for more accountability during the transition and requires testing of the Operating Plan for backup functionality, thus, increasing the likelihood that the backup will work as planned.

3. **Developing testing requirements for the Operating Plan for backup functionality.** Some commenters argued that a 2 hour testing requirement was too prescriptive. However, the SDT determined that 2 hours provided an adequate test that would go across an hour boundary and thereby inspect all necessary programs.

NERC conducted the initial ballot from September 16, 2009 through September 29, 2009. With an 82.69% quorum participating in the ballot, the proposed Reliability Standard achieved a weighted segment vote of 72.86%. 48 negative ballots were submitted for the initial ballot, and all of those negative ballots included a comment. There were three main themes to the comments supplied with the initial balloting:

1. Concerns about the transition timeframe;
2. Concerns about independence of facilities; and
3. The need for tertiary capability.

The Standards Committee reviewed the negative industry comments and decided on November 12, 2009, that the standard should be remanded to the SDT for another 30-day posting to clarify some of the commenter's concerns. The SDT responded to the Standard Committee's request and re-posted the standard for a 30-day industry comment period on February 4, 2010.

The commenters agreed that the standard was ready for balloting, and the Standards Committee authorized the balloting process to begin on May 13, 2010. The 30-day pre-ballot period began on May 24, 2010. NERC conducted the 'second' initial ballot from June 23, 2010 through July 6, 2010. With an 89.05% quorum participating in the ballot, the proposed Reliability Standard achieved a weighted segment vote of 79.45%. There were 30 negative ballots submitted for the initial ballot, and all of those negative ballots included a comment. There were 2 main themes to the comments submitted with the initial balloting.

1. Concerns about the timing and need for updating the plan for backup functionality; and
2. Use of the term 'situational awareness'.

The SDT posted its "Consideration of Comments" reports to the "second" initial ballot comments on July 15, 2010, and NERC conducted the recirculation ballot from July 16, 2010 through July 26, 2010. With a 93.43 % quorum participating in the ballot, the proposed Reliability Standard achieved a weighted segment vote of 85.22%. The proposed Reliability Standard achieved the required two-thirds weighted segment vote and at least a 75 percent quorum of the ballot pool. The NERC Board of Trustees adopted the standards during its August 5, 2010 meeting.

Respectfully submitted,

/s/ Holly A. Hawkins

Gerald W. Cauley
President and Chief Executive Officer
David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Holly A. Hawkins
Assistant General Counsel for Standards and Critical Infrastructure Protection
Willie L. Phillips
Attorney
North American Electric Reliability Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
holly.hawkins@nerc.net
willie.phillips@nerc.net

Exhibit A

Reliability Standards Proposed

Standard EOP-008-1 — Loss of Control Center Functionality

A. Introduction

1. **Title:** **Loss of Control Center Functionality**

2. **Number:** **EOP-008-1**

3. **Purpose:** Ensure continued reliable operations of the Bulk Electric System (BES) in the event that a control center becomes inoperable.

4. **Applicability:**

   4.1. Functional Entity

   4.1.1. Reliability Coordinator.

   4.1.2. Transmission Operator.

   4.1.3. Balancing Authority.

5. **Effective Date:** The first day of the first calendar quarter twenty-four months after applicable regulatory approval. In those jurisdictions where no regulatory approval is required, the standard shall become effective on the first day of the first calendar quarter twenty-four months after Board of Trustees adoption.

B. Requirements

R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it continues to meet its functional obligations with regard to the reliable operations of the BES in the event that its primary control center functionality is lost. This Operating Plan for backup functionality shall include the following, at a minimum: *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

1.1. The location and method of implementation for providing backup functionality for the time it takes to restore the primary control center functionality.

1.2. A summary description of the elements required to support the backup functionality. These elements shall include, at a minimum:

1.2.1. Tools and applications to ensure that System Operators have situational awareness of the BES.

1.2.2. Data communications.

1.2.3. Voice communications.

1.2.4. Power source(s).

1.2.5. Physical and cyber security.

1.3. An Operating Process for keeping the backup functionality consistent with the primary control center.

1.4. Operating Procedures, including decision authority, for use in determining when to implement the Operating Plan for backup functionality.

1.5. A transition period between the loss of primary control center functionality and the time to fully implement the backup functionality that is less than or equal to two hours.

1.6. An Operating Process describing the actions to be taken during the transition period between the loss of primary control center functionality and the time to fully implement backup functionality elements identified in Requirement R1, Part 1.2. The Operating Process shall include at a minimum:

1.6.1. A list of all entities to notify when there is a change in operating locations.

1.6.2. Actions to manage the risk to the BES during the transition from primary to backup functionality as well as during outages of the primary or backup functionality.

1.6.3. Identification of the roles for personnel involved during the initiation and implementation of the Operating Plan for backup functionality.

R2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a copy of its current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality. *[Violation Risk Factor = Lower] [Time Horizon = Operations Planning]*

R3. Each Reliability Coordinator shall have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. To avoid requiring a tertiary facility, a backup facility is not required during: *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

- Planned outages of the primary or backup facilities of two weeks or less
- Unplanned outages of the primary or backup facilities

R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during: *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

- Planned outages of the primary or backup functionality of two weeks or less
- Unplanned outages of the primary or backup functionality

R5. Each Reliability Coordinator, Balancing Authority, and Transmission Operator, shall annually review and approve its Operating Plan for backup functionality. *[Violation Risk Factor = Lower] [Time Horizon = Operations Planning]*

5.1. An update and approval of the Operating Plan for backup functionality shall take place within sixty calendar days of any changes to any part of the Operating Plan described in Requirement R1.

R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup functionality that do not depend on each other for the control center functionality required to maintain compliance with Reliability Standards. *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

R7. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall conduct and document results of an annual test of its Operating Plan that demonstrates: *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

7.1. The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.

7.2. The backup functionality for a minimum of two continuous hours.

R8. Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of its primary or backup functionality and that anticipates that the loss of

primary or backup functionality will last for more than six calendar months shall provide a plan to its Regional Entity within six calendar months of the date when the functionality is lost, showing how it will re-establish primary or backup functionality. *[Violation Risk Factor = Medium] [Time Horizon = Operations Planning]*

C. Measures

M1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a dated, current, in force Operating Plan for backup functionality in accordance with Requirement R1, in electronic or hardcopy format.

M2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a dated, current, in force copy of its Operating Plan for backup functionality in accordance with Requirement R2, in electronic or hardcopy format, available at its primary control center and at the location providing backup functionality.

M3. Each Reliability Coordinator shall provide dated evidence that it has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality in accordance with Requirement R3.

M4. Each Balancing Authority and Transmission Operator shall provide dated evidence that its backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority or Transmission Operator's primary control center functionality respectively in accordance with Requirement R4.

M5. Each Reliability Coordinator, Balancing Authority, and Transmission Operator, shall have evidence that its dated, current, in force Operating Plan for backup functionality, in electronic or hardcopy format, has been reviewed and approved annually and that it has been updated within sixty calendar days of any changes to any part of the Operating Plan described in Requirement R1 in accordance with Requirement R5.

M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup functionality do not depend on each other for the control center functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.

M7. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall provide evidence such as dated records, that it has completed and documented its annual test of its Operating Plan for backup functionality, in accordance with Requirement R7.

M8. Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of their primary or backup functionality and that anticipates that the loss of primary or backup functionality will last for more than six calendar months shall provide evidence that a plan has been submitted to its Regional Entity within six calendar months of the date when the functionality is lost showing how it will re-establish primary or backup functionality in accordance with Requirement R8.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

Regional Entity.

1.2. Compliance Monitoring and Enforcement Processes:

Compliance Audits

Self-Certifications

Spot Checking

Compliance Violation Investigations

Self-Reporting

Complaints

1.3. Data Retention

The Reliability Coordinator, Balancing Authority, and Transmission Operator shall retain data or evidence to show compliance as identified unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall retain its dated, current, in force Operating Plan for backup functionality plus all issuances of the Operating Plan for backup functionality since its last compliance audit in accordance with Measurement M1.
- Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall retain a dated, current, in force copy of its Operating Plan for backup functionality, with evidence of its last issue, available at its primary control center and at the location providing backup functionality, for the current year, in accordance with Measurement M2.
- Each Reliability Coordinator shall retain dated evidence for the time period since its last compliance audit, that it has demonstrated that it has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality in accordance with Measurement M3.
- Each Balancing Authority and Transmission Operator shall retain dated evidence for the time period since its last compliance audit, that it has demonstrated that it's backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center functionality respectively in accordance with Measurement M4.
- Each Reliability Coordinator, Balancing Authority, and Transmission Operator, shall retain evidence for the time period since its last compliance audit, that its dated, current, in force Operating Plan for backup functionality, has been reviewed and approved annually and that it has been updated within sixty calendar days of any changes to any part of the Operating Plan described in Requirement R1 in accordance with Measurement M5.
- Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall retain dated evidence for the current year and for any Operating Plan for backup functionality in force since its last compliance audit, that its primary and backup

functionality do not depend on each other for the control center functionality required to maintain compliance with Reliability Standards in accordance with Measurement M6.

- Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall retain evidence for the current year and one previous year, such as dated records, that it has tested its Operating Plan for backup functionality, in accordance with Measurement M7.
- Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of their primary or backup functionality and that anticipates that the loss of primary or backup functionality would last for more than six calendar months shall retain evidence for the current in force document and any such documents in force since its last compliance audit that a plan has been submitted to its Regional Entity within six calendar months of the date when the functionality is lost showing how it will re-establish primary or backup functionality in accordance with Measurement M8.

1.4. Additional Compliance Information

None.

2. Violation Severity Levels

R#	Lower	Moderate	High	Severe
R1.	The responsible entity had a current Operating Plan for backup functionality but the plan was missing one of the requirement's six Parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality but the plan was missing two of the requirement's six Parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality but the plan was missing three or more of the requirement's six Parts (1.1 through 1.6).	The responsible entity did not have a current Operating Plan for backup functionality.
R2	N/A	The responsible entity did not have a copy of its current Operating Plan for backup functionality available in at least one of its control locations.	N/A	The responsible entity did not have a copy of its current Operating Plan for backup functionality at any of its locations.
R3.	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the functionality required for maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the Reliability Coordinator that depend on the primary control center functionality and which have a Lower VRF.	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the functionality required for maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the Reliability Coordinator that depend on the primary control center functionality and which have a Medium VRF.	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the functionality required for maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the Reliability Coordinator that depend on the primary control center functionality and which have a High VRF.	The Reliability Coordinator does not have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3.
R4.	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for	The responsible entity does not have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4.

R#	Lower	Moderate	High	Severe
	maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a Lower VRF.	maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a Medium VRF.	maintaining compliance with one or more of the Requirements in the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a High VRF.	
R5.	The responsible entity did not update and approve its Operating Plan for backup functionality for more than 60 calendar days and less than or equal to 70 calendar days after a change to any part of the Operating Plan described in Requirement R1.	The responsible entity did not update and approve its Operating Plan for backup functionality for more than 70 calendar days and less than or equal to 80 calendar days after a change to any part of the Operating Plan described in Requirement R1.	The responsible entity did not update and approve its Operating Plan for backup functionality for more than 80 calendar days and less than or equal to 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.	The responsible entity did not have evidence that its dated, current, in force Operating Plan for backup functionality was annually reviewed and approved. OR, The responsible entity did not update and approve its Operating Plan for backup functionality for more than 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.
R6.	N/A	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Reliability Standards applicable for the entity that have a Lower VRF.	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Reliability Standards applicable for the entity that have a Medium VRF.	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Reliability Standards applicable for the entity that have a High VRF.
R7.	The responsible entity conducted an annual test of its Operating Plan for backup functionality but it did not document the results. OR, The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than two continuous hours but more than or equal to 1.5 continuous hours.	The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than 1.5 continuous hours but more than or equal to 1 continuous hour.	The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test did not assess the transition time between the simulated loss of its primary control center and the time to fully implement the backup functionality OR, The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was	The responsible entity did not conduct an annual test of its Operating Plan for backup functionality. OR, The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than 0.5 continuous hours.

R#	Lower	Moderate	High	Severe
			for less than 1 continuous hour but more than or equal to 0.5 continuous hours.	
R8.	The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months and provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality but the plan was submitted more than six calendar months but less than or equal to seven calendar months after the date when the functionality was lost.	The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality but the plan was submitted in more than seven calendar months but less than or equal to eight calendar months after the date when the functionality was lost.	The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality but the plan was submitted in more than eight calendar months but less than or equal to nine calendar months after the date when the functionality was lost.	The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months, but did not submit a plan to its Regional Entity showing how it will re-establish primary or backup functionality for more than nine calendar months after the date when the functionality was lost.

E. Regional Variances

None.

Version History

Version	Date	Action	Change Tracking
1	05/05/10	Approved by the Board of Trustees	Project 2006-04 Major re-write to accommodate changes noted in project file

Exhibit B

Matrix of Issues Considered

Source	Standard No.	Project No	Language	Reference
Fill in the Blank Team	EOP-008-0	2006-04	No comments	Nothing required.
Version 0 Team	EOP-008-0	2006-04	How does staff know control center is lost? (Note – A system health monitor concept or equivalent functionality is what is desired here.)	To the extent that this statement applies to backup functionality as described in this standard, this is covered in Requirement R1, part 1.4.1.
Version 0 Team	EOP-008-0	2006-04	How is backup control achieved?	Requirement R1, part 1.1
Version 0 Team	EOP-008-0	2006-04	Max. time to restore capabilities	Requirement R1, part 1.5
VRFs Team	EOP-008-0	2006-04	R1 - Not having a written plan does not directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading	VRFs assigned to every requirement
VRFs Team	EOP-008-0	2006-04	R1.1 - Not having a written plan is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk electric system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.	VRFs assigned to every requirement
FERC Order 693	EOP-008-0	2006-04	663 - Provide for backup capabilities that, at a minimum, must be independent of the primary control center	Proposed EOP-008-1, Requirement R6
FERC Order 693	EOP-008-0	2006-04	663 - Provide for backup capabilities that, at a minimum, must be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center.	Proposed EOP-008-1, Requirement R1, part 1.1
FERC Order 693	EOP-008-0	2006-04	663 - Provide for backup capabilities that, at a minimum, must provide for a minimum functionality to replicate the critical reliability functions of the primary control center.	Proposed EOP-008-1, Requirement R3 for Reliability Coordinator Proposed EOP-008-1, Requirement R4 for Transmission Operator & Balancing Authority
FERC Order 693	EOP-008-0	2006-04	672 - Provide for backup capabilities that, at a minimum, must provide that the extent of the backup capability be consistent with the impact of the loss of the entity's primary control center on the reliability of the bulk power system.	Proposed EOP-008-1, Requirement R3 for Reliability Coordinator Proposed EOP-008-1, Requirement R4 for Transmission Operator & Balancing Authority

Source	Standard No.	Project No	Language	Reference
FERC Order 693	EOP-008-0	2006-04	670 - Provide for backup capabilities that, at a minimum, must include a requirement that all reliability coordinators have full backup control centers;	Proposed EOP-008-1, Requirement R3 for Reliability Coordinator
FERC Order 693	EOP-008-0	2006-04	663 - Provide for backup capabilities that, at a minimum, must require transmission operators and balancing authorities that have operational control over significant portions of generation and load to have minimum backup capabilities discussed above but may do so through contracting for these services instead of through dedicated backup control centers.	Proposed EOP-008-1, Requirement R4 for Transmission Operator & Balancing Authority
FERC Order 693	EOP-008-0	2006-04	670 - Include large, centrally dispatched generation control centers.	Delegation agreements between Balancing Authorities and Generator Operators, which are enforced by compliance auditors, cover this item. No action taken. (Note – FERC staff has indicated that they are not comfortable with this resolution and that they preferred to retain the disputed Requirement R3 that NERC staff deleted from the standard.)

Exhibit C

Standard Drafting Team Roster

Backup Facilities Standard Drafting Team Roster (Project 2006-04)

Chairman	Samuel Brattini	KEMA Consulting 4377 Country Line Road Chalfont, Pennsylvania 18914	(215) 997-4500 (215) 997-3818 Fx sam.brattini@ us.kema.com
Vice Chairman	Michael Schiavone Transmission Control Center	Niagara Mohawk Power Corp. 7437 Henry Clay Blvd HCB-3 Liverpool, New York 13088	(315) 460-2472 (315) 460-2494 Fx michael.schiavone@ us.ngrid.com
	Tom Bowe Executive Director Reliability Integration	PJM Interconnection, L.L.C. 955 Jefferson Avenue Valley Forge Corporate Center Norristown, Pennsylvania 19403-2497	(610) 666-4776 (610) 666-4282 Fx bowet@pjm.com
	Blaine R. Dinwiddie Division Manager	Omaha Public Power District 4325 Jones Plaza Omaha, Nebraska 68105	(402) 552-5970 (402) 552-5679 Fx bdinwiddie@ oppd.com
	Charles W. Jenkins Vice President, System Operations	Oncor Electric Delivery 2233-B Mountain Creek Parkway Dallas, Texas 75211-6716	(214) 743-6865 (972) 263-6710 Fx c.w.jenkins@ oncor.com
	Glenn Kaht Senior Engineer, Compliance	ReliabilityFirst Corporation 11412 Siedschlag Rd. Spring Grove, Illinois 60081	330-247-3063 (330) 456-5408 Fx glenn.kaht@ rfirst.org
	Barry R. Lawson Manager, Power Delivery	National Rural Electric Cooperative Association 4301 Wilson Boulevard Mailcode EP11-253 Arlington, Virginia 22203	(703) 907-5781 (703) 907-5517 Fx barry.lawson@ nreca.coop
	Sara McCoy Senior Engineer - Transmission Services	SRP Mail Station POB013 P.O. Box 52025 Phoenix, Arizona 85072	(602) 236-3941 (602) 236-3808 Fx sara.mccoy@ srpnet.com
	Melinda K. Montgomery Transmission Business Manager, Operations	Entergy Services, Inc. 5201 West Barraque Pine Bluff, Arkansas 71602	(870) 329-7666 (870) 541-3964 Fx mmontg3@ entergy.com
	Keith Porterfield	Georgia Systems Operations Corporation 2100 E. Exchange Place Tucker, Georgia 30084	(770) 270-7374 kgp@gasoc.com
	John Procyk	Hydro One, Inc. 49 Sarjeant Drive Barrie, Ontario L4N 4V9	(705) 792-3210 john.procyk@ hydroone.com

	James Vermillion	Associated Electric Cooperative, Inc. 2814 South Golden Springfield, Missouri 65801	(417) 885-9307 jvermillion@ aeci.org
NERC Staff Coordinator	Edward J. Dobrowolski Standards Development Coordinator	North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, New Jersey 08540-5721	(609) 452-8060 (609) 452-9550 Fx ed.dobrowolski@ nerc.net
NERC Staff	Maureen E. Long Standards Process Manager	North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, New Jersey 08540-5721	(609) 452-8060 (609) 452-9550 Fx maureen.long@ nerc.net

Exhibit D

Record of Development of Proposed Reliability Standards

(Available on the NERC Website at http://www.nerc.com/fileUploads/File/Filings/Attachment_D_EOP-008-1_Filing.pdf)