

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Regional Reliability Standard PRC-006-NPCC-1     )                   Docket No.   RM12-12-000**  
**Automatic Underfrequency Load Shedding            )**

**REPLY COMMENTS OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING**

The North American Electric Reliability Corporation (“NERC”)<sup>1</sup> hereby provides these reply comments in response to the comments submitted on November 26, 2012, on the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) September 20, 2012, Notice of Proposed Rulemaking (“NOPR”)<sup>2</sup> regarding the proposed regional Reliability Standard PRC-006-NPCC-1 (Automatic Underfrequency Load Shedding).

**I.     BACKGROUND**

The proposed regional Reliability Standard applies to generator owners, planning coordinators, distribution providers, and transmission owners in the Northeast Power Coordinating Council Region and is designed to ensure the development of an effective automatic underfrequency load shedding (“UFLS”) program to preserve the security and integrity of the Bulk-Power System during declining system frequency events, in coordination with the NERC continent-wide UFLS Reliability Standard PRC-006-1. Comments on the NOPR were due on November 26, 2012. Pursuant to Rule 212, NERC respectfully offers these limited reply comments for purposes of clarification.

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<sup>1</sup> The Federal Energy Regulatory Commission certified NERC as the electric reliability organization (“ERO”) in its order issued on July 20, 2006 in Docket No. RR06-1-000. *North American Electric Reliability Corporation*, 116 FERC ¶ 61,062 (2006).

<sup>2</sup> *Regional Reliability Standard PRC-006-NPCC-1—Automatic Underfrequency Load Shedding*, 140 FERC ¶ 61,203 (September 20, 2012) (“NOPR”).

## II. COMMENTS

### A. NERC Reliability Standard PRC-006-1, Automatic Underfrequency Load Shedding and Load Shedding Plans

Dominion Resources Services, Inc. (“Dominion”) states in its comments that in the final rule approving the continent-wide NERC Reliability Standard, PRC-006-1, the “Commission agreed with NERC’s comments that it is appropriate for planning coordinators to consider generators that trip outside the UFLS set points when designating UFLS programs, but it is inappropriate for planning coordinators to determine whether mitigation is necessary and who will be responsible for providing mitigation.”<sup>3</sup> As NERC noted in its June 6, 2012, Motion to Correct the Record, the Commission’s characterization of NERC’s comments in Order No. 763 is incorrect.<sup>4</sup>

As NERC stated:

NERC believes Order No. 763 takes certain statements made by NERC out of context, which could potentially affect the Commission’s assessment of pending and future regional standards addressing underfrequency load shedding or future versions of the continent-wide standard. NERC said in its NOPR comments that it is not appropriate for a Reliability Standard to prescribe *how* the Planning Coordinator will determine whether mitigation is necessary or who would be responsible for providing the mitigation, not *if* the mitigation is necessary. These are two completely different issues.<sup>5</sup>

Additionally, NERC clarified that it did not intend to say that it is inappropriate for Planning Coordinators to determine whether mitigation is necessary and who will be providing mitigation. On the contrary, the Planning Coordinator is one of the functional entities with responsibility for maintaining the reliability of the Bulk-Power System. One of the Planning Coordinator’s

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<sup>3</sup> Comments of Dominion Resources Services, Inc., Regional Reliability Standard PRC-006-NPCC-1-Automatic Underfrequency Load Shedding, Docket No. RM12-12-000 at 8 (November 26, 2012).

<sup>4</sup> Motion of the North American Electric Reliability Corp. to Correct the Record, Automatic Underfrequency Load Shedding and Load Shedding Plans Reliability Standards, Docket No. RM11-20-000 at 2 (June 6, 2012).

<sup>5</sup> *Id.*

responsibilities is to ensure that UFLS programs meet the performance characteristics defined in PRC-006-1. For these reasons, Dominion’s characterization of NERC’s comments is incorrect.<sup>6</sup>

NERC did state in its comments on the continent-wide Reliability Standard PRC-006-1, that the approach in the standard “provides Planning Coordinators with needed flexibility in developing UFLS programs based on the conditions and circumstances within their Planning Coordinator areas” and the various islands that are studied.<sup>7</sup> While NERC notes that it is inappropriate for a Reliability Standard to supplant the Planning Coordinator’s role in establishing UFLS program requirements, the proposed regional Reliability Standard reflects the NPCC Planning Coordinators’ collective assessment of how to address this concern. The proposed regional Reliability Standard similarly establishes requirements for frequency setpoints, time delays, and amounts of load to shed based on the Planning Coordinators’ collective assessments, even though it would not be appropriate to prescribe these parameters in a continent-wide standard.

NERC respectfully submits that PRC-006-NPCC-1 is just, reasonable, not unduly discriminatory or preferential, and in the public interest and should be approved by the Commission.

**B. Compensatory Load Shedding, As Provided for in PRC-006-NPCC-1, Does Not Jeopardize the Reliability of the Bulk-Power System**

Commenters have expressed technical concerns regarding the implementation of PRC-006-NPCC-1 and potential overfrequency excursions; however, these concerns are overstated.<sup>8</sup>

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<sup>6</sup> See also, *Automatic Underfrequency Load Shedding and Load Shedding Plans Reliability Standards*, Order Granting Clarification, 140 FERC ¶ 61,164 at P 12 (2012) (“With regard to NERC’s request, we grant the motion and clarify that NERC stated in its NOPR comments that it is not appropriate for the Reliability Standards to prescribe *how* a planning coordinator determines whether mitigation is necessary or who is responsible for providing mitigation.”) (emphasis in original).

<sup>7</sup> Motion of the North American Electric Reliability Corp. to Correct the Record, *Automatic Underfrequency Load Shedding and Load Shedding Plans Reliability Standards*, Docket No. RM11-20-000 at 3 (June 6, 2012).

<sup>8</sup> Comments of Dominion Resources Services, Inc., *Regional Reliability Standard PRC-006-NPCC-1-Automatic Underfrequency Load Shedding*, Docket No. RM12-12-000 at 3 (November 26, 2012) (“there are

Compensatory load shedding can be an effective tool for counteracting the effect of generator tripping that is not coordinated with UFLS program operation provided the amount of compensatory loadshedding is limited in magnitude and included in Planning Coordinator assessments. The concerns noted by commenters regarding potential overfrequency excursions due to overcompensating when a generating unit with non-conforming trip settings is off-line<sup>9</sup> would be appropriate if compensatory loadshedding was applied to large generating units or if the provision was open-ended with applicability to future generating units not studied by the Planning Coordinator. NERC notes that compensatory load shedding as defined in the proposed Regional Standard, with applicability limited to a defined amount of generating capacity that is included in Planning Coordinator assessments, does not jeopardize reliability of the Bulk-Power System.

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technical difficulties associated with Requirements R16.3 and R18 which would likely have an adverse impact on reliability.”).

<sup>9</sup> *Id.* (“For example, consider a load shed program that is designed assuming the need to shed load equivalent to rated capacity for a non-conforming generator and a frequency event occurs when this generator is off-line. The program sees the frequency at the trigger level and sheds the load equivalent to the non-conforming generator. However, since that generator was not actually on-line, there is no additional loss of generation, but the megawatt load equivalent of the generator (that is not designed into the UFLS scheme) is lost anyway. If the UFLS program then implements the next level of designed reduction of load, this may result in a subsequent rebound in frequency. This may very well result in overshoot that is more than designed for, resulting in a generator trip from over-frequency.”).

### **III. CONCLUSION**

For the reasons stated above, NERC respectfully requests that the Commission accept these comments for consideration.

Respectfully submitted,

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