

144 FERC ¶ 61,113  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Philip D. Moeller, John R. Norris,  
Cheryl A. LaFleur, and Tony Clark.

Reliability Standards for Geomagnetic Disturbances                      Docket No. RM12-22-001

ORDER DENYING REHEARING

(Issued August 8, 2013)

1. The Midcontinent Independent System Operator, Inc. (MISO) filed a request for rehearing of Order No. 779, in which the Commission directed the North American Electric Reliability Corporation (NERC) to develop and submit for approval proposed Reliability Standards that address the impact of geomagnetic disturbances (GMD) on the reliable operation of the Bulk-Power System.<sup>1</sup> MISO requests rehearing of the directive in Order No. 779 that requires NERC to develop and submit proposed Reliability Standards that address the risks posed by GMDs to the reliable operation of the Bulk-Power System. For the reasons discussed in the body of this order, we deny the request for rehearing.

**I. Background**

2. On October 18, 2012, the Commission issued a Notice of Proposed Rulemaking pursuant to section 215(d)(5) of the Federal Power Act (FPA) that proposed to direct NERC to develop and submit for approval proposed Reliability Standards that address the risks posed by GMDs to the reliable operation of the Bulk-Power System.<sup>2</sup> The NOPR stated that the proposed directives were warranted, at a minimum, by the potential for “voltage instability and subsequent voltage collapse” resulting from a GMD event.<sup>3</sup> The NOPR also stated that the current Reliability Standards do not adequately address the

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<sup>1</sup> *Reliability Standards for Geomagnetic Disturbances*, Order No. 779, 78 Fed. Reg. 30,747 (May 23, 2013), 143 FERC ¶ 61,147 (2013).

<sup>2</sup> *Reliability Standards for Geomagnetic Disturbances*, Notice of Proposed Rulemaking, 77 Fed. Reg. 64,935 (Oct. 24, 2012), 141 FERC ¶ 61,045 (2012) (NOPR).

<sup>3</sup> NOPR, 141 FERC ¶ 61,045 at P 5.

risks posed by GMDs to the reliable operation of the Bulk-Power System. In response to the NOPR, interested entities filed 62 comments.

3. In Order No. 779, the Commission adopted the NOPR proposal in large part and directed NERC to develop and submit proposed Reliability Standards in two stages. In the first stage, the Commission directed NERC to submit, within six months of the effective date of Order No. 779, one or more Reliability Standards that require owners and operators of the Bulk-Power System to develop and implement operational procedures to mitigate the effects of GMDs consistent with the reliable operation of the Bulk-Power System.<sup>4</sup> In the second stage, the Commission directed NERC to submit, within 18 months of the effective date of Order No. 779, one or more Reliability Standards that require owners and operators of the Bulk-Power System to conduct initial and on-going assessments of the potential impact of benchmark GMD events on Bulk-Power System equipment and the Bulk-Power System as a whole. The Commission stated that the Second Stage GMD Reliability Standards must identify benchmark GMD events that specify what severity GMD events a responsible entity must assess for potential impacts on the Bulk-Power System.<sup>5</sup> The Commission stated that if the assessments identify potential impacts from benchmark GMD events, the Reliability Standards should require owners and operators to develop and implement a plan to protect against instability, uncontrolled separation, or cascading failures of the Bulk-Power System, caused by damage to critical or vulnerable Bulk-Power System equipment, or otherwise, as a result of a benchmark GMD event.

## **II. Request for Rehearing**

4. MISO seeks rehearing of the directive in Order No. 779 requiring NERC to develop and submit proposed Reliability Standards that address the risks posed by GMDs to the reliable operation of the Bulk-Power System. MISO states that, while it agrees that “GMD events have the potential for adverse reliability impacts ... there are other ways for NERC to address the GMD issue that would support reliability at least as effectively, and perhaps more effectively, than the development of a set of new standards as directed.”<sup>6</sup> MISO states that Reliability Standards are “inherently inflexible ... [and] extremely time-consuming to develop and implement.” MISO also states that “it will be difficult for a single set of Reliability Standards with one set of uniform criteria to accurately address a GMD event or respond to every region’s vulnerability

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<sup>4</sup> Order No. 779, 143 FERC ¶ 61,147 at P 2.

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

<sup>6</sup> MISO Request at 3 (citing NERC Rules of Procedure, Section 313 (Other Regional Criteria, Guides, Procedures, Agreements, Etc.) (effective March 5, 2013)).

assessments.”<sup>7</sup> MISO states that NERC should be allowed to use “alternative, existing tools, such as [Regional] Criteria or guidelines to address the GMD issue.”<sup>8</sup> MISO states that “such an approach would still require that NERC undertake immediate steps to mitigate potential GMD threats, but would give NERC the flexibility to address the issue in the manner that is most effective for such an emerging issue.”<sup>9</sup>

### III. Discussion

5. We deny MISO’s request for rehearing. In Order No. 779, the Commission stated that “addressing the specific matter of GMDs and their impact on the reliable operation of the Bulk-Power System is appropriate to carry out FPA section 215.”<sup>10</sup> The Commission further stated that there is “general agreement that GMD events can cause wide-spread blackouts due to voltage instability and subsequent voltage collapse, thus disrupting the reliable operation of the Bulk-Power System.”<sup>11</sup> Moreover, the Commission observed that such blackouts have already occurred.<sup>12</sup>

6. MISO does not dispute that GMD events pose a risk to the Bulk-Power System, nor does MISO dispute the substance of Order No. 779.<sup>13</sup> MISO only seeks rehearing of the directive requiring NERC to develop Reliability Standards to address the risks posed by GMDs. MISO states that Reliability Standards are inflexible, and thus not warranted in this case, because the scientific understanding of GMDs is still evolving and because GMDs are likely to have varying effects on different parts of the Bulk-Power System. MISO recognizes that Order No. 779 stated that the Commission was not directing NERC to develop and submit “one-size-fits-all” Reliability Standards. However, MISO appears to believe that NERC’s standard development process will not be successful because

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<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> Order No. 779, 143 FERC ¶ 61,147 at P 24.

<sup>11</sup> *Id.* P 26.

<sup>12</sup> *Id.* (citing 1989 Hydro-Québec blackout).

<sup>13</sup> MISO Request at 6 (“Under [MISO’s] approach, the substantive requirements adopted by the Commission with respect to how the GMD issue is addressed would still apply; only the requirement to develop new standards would be changed.”).

“standards are inherently inflexible.”<sup>14</sup> MISO provides no support for its belief that NERC’s standard development process will be unable to work through the technical complexities associated with addressing the risks of GMD events on the Bulk-Power System.<sup>15</sup> Accordingly, we reject MISO’s request for rehearing.

7. We also disagree that alternative measures, such as Regional Criteria, alerts, guidelines, and recommendations, are adequate substitutes for Reliability Standards to address the risks posed by GMDs to the reliable operation of the Bulk-Power System. As MISO acknowledges, Regional Criteria are “not NERC Reliability Standards, Regional Reliability Standards, or regional Variances, and therefore are not enforceable under authority delegated by NERC pursuant to delegation agreements and do not require NERC approval.”<sup>16</sup> However, while directing NERC to develop and submit proposed Reliability Standards in Order No. 779, the Commission did not preclude NERC from also using other tools to address the risks posed by GMDs. NERC has the flexibility to address GMDs using other tools while developing the proposed Reliability Standards.

The Commission orders:

The Commission hereby denies rehearing, for the reasons discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>14</sup> MISO Request at 4.

<sup>15</sup> *See Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204, at P 260, *order on reh’g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006) (stating the proposition that, in general, a Reliability Standard should address the “what” and not the “how” of reliability).

<sup>16</sup> MISO Request at 5-6 (quoting NERC Rules of Procedure, Section 313).