

March 5, 2010

TO: RELIABILITY COORDINATORS  
INDUSTRY STAKEHOLDERS

**Request for Public Comment on Data Request for  
NERC Reliability Metric ALR3-5 IROL/SOL Excursion**

The North American Electric Reliability Corporation (“NERC”) is hereby requesting public comment by April 19, 2010 on this proposed Data Request for the ALR3-5 Interconnection Reliability Operating Limit/System Operating Limit (“IROL/SOL”) Excursion. Please respond to the questions in Sections B to facilitate the development of data to be requested in Section A that will be collected on a quarterly basis, and submit your responses in a word document to [metrics@nerc.net](mailto:metrics@nerc.net) by April 19, 2010.

In accordance with Section 1600 of the NERC Rules of Procedure,<sup>1</sup> NERC may request data or information that is deemed necessary to meet its obligations under Section 215 of the Federal Power Act, as authorized by Section 39.2(d) of the Federal Energy Regulatory Commission’s (“FERC”) regulations. This is a proposal for such a request. Section 1600 requires NERC to provide the proposed data request to FERC’s Office of Electric Reliability at least twenty-one days prior to posting the data request for public comment. NERC provided this proposed data request to FERC on February 12, 2010. Accordingly, NERC is hereby posting this proposed data request for public comment. After consideration of comments received, NERC will present this proposed data request to the NERC Board of Trustees for approval, as required by Section 1602 of the NERC Rules of Procedure. Upon NERC Board of Trustees’ approval, this data request will become mandatory for all Reliability Coordinators (“RCs”) in the U.S. who are registered on the NERC Compliance Registry. Non-U.S. RCs who are NERC members are also required to comply with NERC’s *Rules of Procedure*. Therefore, because this data is being requested in accordance with Section 1600, non-U.S. RCs that are NERC members must also provide the requested IROL/SOL data.

Under the direction of the Planning Committee, the Reliability Metrics Working Group develops metrics for use by the industry to help assess the reliability of the bulk power system. The report “2009 Bulk Power System Reliability Performance Metric Recommendations”<sup>2</sup> recommended by the Operating Committee and approved by the Planning Committee on September 16, 2009, identified a number of metrics. Most of these measures can be determined from data available from existing data sources. However, ALR3-5, quantifying IROL/SOL limit excursions,

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<sup>1</sup> NERC’s Rules of Procedure are available at:

[http://www.nerc.com/files/NERC\\_Rules\\_of\\_Procedure\\_EFFECTIVE\\_20100121.pdf](http://www.nerc.com/files/NERC_Rules_of_Procedure_EFFECTIVE_20100121.pdf)

<sup>2</sup> The report is available at [http://www.nerc.com/docs/pc/rmwg/RMWG\\_Metric\\_Report-09-08-09.pdf](http://www.nerc.com/docs/pc/rmwg/RMWG_Metric_Report-09-08-09.pdf).

requires new data to be supplied to NERC by Reliability Coordinators (“RCs”) when limits are exceeded.

This is a mandatory request for data to be submitted on a quarterly basis beginning January 1, 2011. The details of the data request are summarized in Section A. Because this is a new metric and definitions will vary between Interconnections, voluntary reporting is being requested for the pilot period beginning January 1, 2010 and ending December 31, 2010. The specific data definitions may be modified upon review of the pilot results. In the U.S., the parameters of the data needed to fulfill this request were previously identified in the August 17, 2007 data request to comply with FERC’s Order No. 693, Requirements Interconnection Reliability Operating Limits.<sup>3</sup> Canadian Reliability Coordinators may need to develop new reporting processes to provide the requested data.

Both IROLs and SOLs are identified in this data request to recognize that, while the IROL is used in the Eastern, ERCOT and Québec Interconnections, there are no pre-identified IROLs in the Western Interconnection. Through this data request, the RCs in the Eastern and Québec Interconnections are required to submit quarterly IROL excursion data only; the RCs in the Western Interconnection are required to submit quarterly SOL excursion data; and the RC in the ERCOT Interconnection is required to submit the IROL and SOL excursion data until its IROL method is changed.

The metric ALR3-5 is a data request, not a Reliability Standard, and therefore this request for public comment is being made pursuant to Section 1600 of NERC’s Rules of Procedures. The information required for a data request is defined in Section 1602.1.1 and is provided in Section A, below.

Comments in response to Section B are due to NERC on April 19, 2010 and must be submitted in a Word document to [metrics@nerc.net](mailto:metrics@nerc.net). If you have any questions, please contact Rhaiza Villafranca (609) 524-0620 or by email at [rhaiza.villafranca@nerc.net](mailto:rhaiza.villafranca@nerc.net).

Regards,



Mark Lauby  
Director of Reliability Assessment & Performance Analysis

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<sup>3</sup> Official data request to fulfill FERC order No. 693 is available at <http://www.nerc.com/files/PublicFinalFiled-IROL-Data-Request-10312008.pdf>.

## A. ALR3-5 Data Request Information

1. *A description of the data or information to be requested, how the data or information will be used, and how the availability of the data or information is necessary for NERC to meet its obligations under applicable laws and agreements.*

*a. A description of the data or information requested.*

The mandatory request for data is scheduled to be provided on a quarterly basis beginning on January 1, 2011. To pilot this metric and data collection, voluntary data submittal is requested beginning January 1, 2010 and ending December 31, 2010. In the U.S., the data needed to fulfill this request was previously identified in the August 17, 2007 data request that was issued to comply with FERC's Order No. 693 Requirements Interconnection Reliability Operating Limits.<sup>4</sup> However, in Canada, Reliability Coordinators may need to develop new reporting processes to provide the requested data.

For each Reliability Coordinator that experiences an IROL/SOL<sup>5</sup> excursion event within their footprint, the Reliability Coordinator shall provide the following information. The attached NERC spreadsheet template can be used to submit this information on a voluntary basis for excursions occurring from January 1, 2010 to December 31, 2010. Beginning on January 1, 2011, this information shall be provided in accordance with the mandatory data request to NERC on a quarterly basis.

- Submitting Reliability Coordinator Name
- Within the quarter being reported, count of the number of times an IROL/SOL was exceeded for greater than 10 seconds, and less than or equal to 10 minutes
- Within the quarter being reported, count of the number of times an IROL/SOL was exceeded for greater than 10 minutes, and less than or equal to 20 minutes
- Within the quarter being reported, count of the number of times an IROL/SOL was exceeded for greater than 20 minutes, and less than or equal to 30 minutes
- Within the quarter being reported, count of the number of times an IROL was exceeded for greater than 30 minutes

The individual data submissions should be sent to NERC at [metrics@nerc.net](mailto:metrics@nerc.net) by the end of the month following each calendar quarter. The first quarterly voluntary data submittal is requested on April 30, 2010 and the last on January 31, 2011.

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<sup>4</sup> The official data request issued by NERC to comply with FERC order No. 693 is available at <http://www.nerc.com/files/PublicFinalFiled-IROL-Data-Request-10312008.pdf>. While Reliability Coordinators are not being asked to provide NERC with the additional, more detailed data described in the August 17, 2007 data request, they are encouraged to collect and retain this data to facilitate their own analysis of the metric results.

<sup>5</sup> Both terms IROL and SOL are used in this data request to recognize that, while the IROL is used in the Eastern, ERCOT and Quebec Interconnections, there are no pre-identified IROLs in the Western Interconnection. Through this data request, the RCs in the Eastern and Quebec Interconnections are required to submit quarterly IROL excursion data only; the RCs in the Western Interconnection are required to submit quarterly SOL excursion data; and the RC in ERCOT Interconnection is required to submit the IROL and SOL excursion data until its IROL method is changed.

In order to gather a complete data set and project accurate trends, the first mandatory data collection will be due April 30, 2011. Reliability Coordinators will be required to use a NERC secure web interface to upload the data to a NERC database. This metric will be reviewed by NERC and the Planning Committee after five years from first implementation to assess whether it provides useful information for determining the performance of the bulk power system in the context of the ALR definition filed with FERC. If it does not, the requirement to record the data supporting this metric will be rescinded, unless such data is being used to support other metrics.

*b. How the data or information will be used*

The data will be used to calculate the ALR3-5 IROL/SOL Excursion reliability metric. The intent, as described in the document entitled *2009 Bulk Power System Reliability Performance Metrics Recommendations*, is to track the number of IROL/SOL excursions, grouped according to the time frames described above. Over a period of time, this data will identify trends that may indicate the extent to which the bulk power system is being operated reliably. The data results may identify opportunities to enhance RC operating practices or clarify IROL/SOL-related reliability standards to eliminate potential multiple interpretations that may exist. The Reliability Metrics Working Group will document metrics in its annual reports posted to the NERC website, after approval by NERC's Planning and Operating Committee.

*c. How the availability of the data or information is necessary for NERC to meet its obligations under applicable laws and agreements*

As required by the IRO-009-1 Standard, Reliability Coordinators ensure prompt action to prevent or mitigate instances of exceeding IROL/SOLs that might cause instability, uncontrolled separation, or cascading outages. This data will help NERC and its stakeholders monitor the frequency and duration of exceeded IROL/SOLs. To minimize data submittal effort and cost, NERC is not requesting detailed data for each IROL/SOL excursion. Over time, as trends become evident, NERC, Regional Entities, the Operating or Planning Committees may undertake initiatives to commence detailed analysis of metrics.

Both terms IROL and SOL are used in this data request to recognize that, while the IROL is used in the Eastern, ERCOT and Québec Interconnections, there are no IROLs pre-identified in the Western Interconnection due to its higher operating performance level requirements. The WECC Standard TOP-007-WECC-1 – System Operating Limits has requirements for reducing actual flows to within System Operating Limits (SOL) on Major WECC Transfer Paths.<sup>6</sup> These major paths are significant components for reliable delivery of power in the Western Interconnection. ERCOT uses both SOLs and IROLs and is in the process of revising its SOL method, which may result in the ERCOT Interconnection no longer having any IROLs.

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<sup>6</sup> WECC Standard TOP-007-WECC-1 – System Operating Limits is available at <http://www.wecc.biz/Standards/Pending%20Standards/TOP-007-WECC-1.pdf>.

Because of these operating differences, it will not be possible or meaningful to compare Interconnections. However, the data will be useful in identifying trends over time within each Interconnection.

*2. How the Data Will Be Collected and Validated*

The individual data submissions will be sent to the NERC at [metrics@nerc.net](mailto:metrics@nerc.net) by the end of the month following each calendar quarter. The enhanced reporting process will be implemented in the future, applying a Web-based reporting mechanism. Data validation occurs both when data is entered and when it is processed. Submitted data will be subjected to specific rules embedded within the reporting form. Data is subject to a thorough NERC staff review and the results will be vetted by the RMWG.

*3. A description of the entities that will be required to provide the data or information (“reporting entities”).*

All NERC Reliability Coordinators will be required to provide the data.

*4. The schedule or due date for the data or information.*

Reliability Coordinators are to report the requested data by the end of the month after the close of the calendar quarter for IROL/SOL events occurring during the previous quarter.

*5. A description of any restrictions on disseminating the data or information (e.g., “confidential,” “critical energy infrastructure information,” “aggregating” or “identity masking”).*

All data collected will be aggregated at the Interconnection level only. The data will be annotated to describe the IROL/SOL differences in each Interconnection. Because no details describing each IROL/SOL excursion are being reported, this data is not considered confidential energy infrastructure information and can be reported to the public.

*6. An estimate of the relative burden imposed on the reporting entities to accommodate the data or information request.*

For Reliability Coordinators in the United States, costs to develop the necessary reporting processes is expected to be less than the cost incurred to meet the August 17, 2007 official data request to fulfill FERC Order No. 693 Requirements Interconnection Reliability Operating Limits, as much less detail is being requested. Canadian Reliability Coordinators may need to develop new reporting processes to provide the requested data. Underlying data should be available in existing operating logs.

Some Reliability Coordinators may need to modify their monitoring systems, or develop applications to track IROL/SOL excursions as specified. Further, Reliability Coordinators may need to train their personnel on this request and provide resources to validate potential

IROL/SOLs. Minimal ongoing cost is expected for Reliability Coordinators to collect, compile, and report to NERC the requested data.

## **B. Comment Questions**

While commenters are not restricted in the format of their comments, we would appreciate your answers to the following questions:

1. *If you are the Reliability Coordinator, do you currently collect your IROL/SOL excursion information? If “no”, please explain.*
2. *Is the data being requested in Section A of this data request reasonable and obtainable? If “no”, please explain.*
3. *Is the metric appropriate? If “no,” please explain.*
4. *Is the data request schedule in Section A.1.a of this data request reasonable? If “no” please explain.*
5. *Please provide any other comments you may have about this data request.*