

To: Transmission Owners
Industry Stakeholders

**RE: Request for Public Comment on the Transmission Availability Data System
Proposed Less than 200 kV Bulk Electric System Element Outage Data Collection**

Ladies and Gentlemen,

The North American Electric Reliability Corporation (NERC) requests public comment by **11:59 PM, PST, November 19, 2012**, on its proposed revision to the Transmission Availability Data System (TADS) data collection to include less than 100 kV and 100-199 kV Bulk Electric System facilities as noted below. Comments must be submitted in a Word document to tadscomments@nerc.net.

In accordance with Section 1600 of the NERC Rules of Procedure,¹ 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 twenty-one days prior to posting the data request for public comment. NERC provided the original data request to FERC on December 16, 2011.² 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 (BOT) for approval, as required by Section 1602 of the NERC Rules of Procedure. Upon NERC BOT approval, this data request will become mandatory.

The TADS effort began with the establishment of the Transmission Availability Data System Task Force (TADSTF) under the NERC Planning Committee in October 2006. On October 27, 2007, the NERC BOT approved the collection of TADS Phase I data beginning in calendar year 2008. On October 29, 2008, the NERC BOT approved the collection of Non-Automatic Outage data beginning in calendar year 2010 (Phase II).³

Currently, TADS Outages are collected for 200kV and above Elements. NERC is requesting that, in addition to current TADS reporting, Sustained Automatic Outages for Bulk Electric System Elements in the less than 100 kV and 100-199 kV voltage classes be reported starting 6 months after FERC approval of the Bulk Electric System definition. NERC recognizes that the collection of less than 200 kV

¹ NERC's Rules of Procedure are available at: <http://www.nerc.com/page.php?cid=1|8|169>.

² <http://www.nerc.com/docs/pc/Planning%20Committee%20Agenda%20December%202013-14,%202011%20Atlanta,%20GA.pdf>, Agenda Item 10a.

³ Two reports, available at <http://www.nerc.com/page.php?cid=4|62>, describe the TADs Phase I and Phase II data collection efforts.

Momentary Automatic and Planned Outages may be a burden to report; therefore, the above proposal has limited the reporting to Sustained Automatic Outages and Operational Outages for these particular voltage classes.

As of October 25, 2011, there were 336 Transmission Owners listed in the NERC compliance registry. Out of that number, 211 Transmission Owners have 200 kV and above Elements. The remaining 125 Transmission Owners (which may only have Elements less than 200 kV) are not currently required to report any transmission outage data to TADS. Providing at least 6 months before reporting less than 100 kV and 100-199 kV Sustained Automatic Outages and Operational Outages should provide sufficient lead time for Transmission Owners to adapt their internal data collection systems and processes to the new TADS reporting requirements. Sustained Automatic outages would be collected in the reporting period 6 months after FERC approval of the Bulk Electric System definition. Operational Outages will be collected if the 5 year assessment of Non-Automatic outage data collection in 2015 finds the collection of 200 kV+ Non-Automatic outage data beneficial to reliability. Although starting the reporting of Operational Outages after 2014 will miss the U.S. Department of Energy, Energy Information Administration (EIA) regular cycle of Schedule 7 changes, the EIA has expressed its agreement with this staggered start of data collection.

This is a TADS data request, not a Reliability Standard, and therefore, this request for public comment is pursuant to Section 1600 – Requests for Data or Information 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 of this document.

A. Proposed Outage Data Request Information

The italicized language is information that must accompany a data request.

- 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.*

Our response is provided in subparts. Capitalized terms are definitions that are contained in Appendix 7 of the [TADS Data Instruction Manual](#).

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

Effective 6 months after FERC approval of the Bulk Electric System definition, the definitions for TADS Elements are to be revised to include the following, additional Elements:

- All Bulk Electric System AC Circuits in the less than 100 kV or 100-199 kV voltage class
- All Bulk Electric System DC Circuits in the less than 100 kV or 100-199 kV voltage class

- All Bulk Electric System Transformers with low-side voltage in the less than 100 kV or 100-199 kV voltage class
- Bulk Electric System AC/DC Back-to-Back Converters with AC voltages in the less than 100 kV or 100-199 kV voltage class, on both sides

Based on the draft Bulk Electric System revised definition, local distribution facilities are not to be included in the Bulk Electric System. Also, radial circuits and local networks would be excluded from the Bulk Electric System.⁴ These facilities, not in the Bulk Electric System, would not be reported in TADS.

NERC is requesting Sustained Automatic Outage data be reported for Bulk Electric System Elements in the less than 100 kV and 100-199 kV voltage classes starting in the first data reporting period 6 months following FERC approval of the Bulk Electric System definition. NERC also requests that Operational Outages will be collected if the 5 year assessment of Non-Automatic outage data collection in 2015 finds the 200 kV+ Non-Automatic outage data beneficial to reliability. The BES less than 100 kV and BES 100-199 kV data collection will be reported on revised TADS Forms 3, 4, 5, and 6 which require the same data fields to be completed as the current 200 kV and above voltage classes.

The proposed changes to the *TADS 2013-2014 Data Instruction Manual* will be developed after public comments are received on the proposal.

b. How the data or information will be used.

NERC will use the information to develop statistics regarding the TADS Outages that occur on the transmission system. The TADS Phase I report *Transmission Availability Data System Revised Final Report* dated September 26, 2007, which may be downloaded at <http://www.nerc.com/filez/tadstf.html>, discusses the intended uses of the data. A portion of Section 2.6 is provided below:

“. . . We believe that the greatest use of TADS data will be for outage cause analysis and outage Event analysis. Event analysis will aid in the determination of credible contingencies and will result in better understanding, and this understanding should be used to improve planning and operations. Ultimately, these improvements should result in improved transmission system performance. In addition, trending each Regional Entity's performance against its own history will show how that region's performance is changing over time. It will take a number of years of data collection (five years was suggested by several commenter's) before the data can be useful for trend

⁴ http://www.nerc.com/docs/standards/sar/bes_definition_third_posting_roadmap_20111107_clean.pdf, pp. 3-4.

analysis. A through-time comparison is appropriate for evaluating a region's performance. . . ."

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

As stated in TADS Phase I Report, Section 2.6, "Since becoming the Electric Reliability Organization, NERC has taken on the role of being an independent source of reliability performance information, thereby fulfilling one of the recommendations in the April 2004 U.S.-Canada Power System Outage Task Force Report on the August 14, 2003 blackout. . . ." Also, pursuant to Section 215 of the Federal Power Act, NERC develops Reliability Standards which must rely on sound data. A better understanding of actual Bulk Electric System less than 100 kV and 100-199 kV outage information would allow for improved system analysis by bridging gaps between the operating environment and planning assumptions and may, therefore, influence the development of future standards specifically tailored for such voltage classes of equipment. For example, Transmission Planners could compare historical Bulk Electric System less than 100 kV and 100-199 kV transmission Outages to their own system performance expectations and assumptions, and the expectations of the new TPL Standard.

Section 215(g) of the Federal Power Act requires NERC to make periodic assessments on the reliability of the bulk power system in North America. NERC views the Bulk Electric System less than 100 kV and 100-199 kV TADS Sustained Automatic and Operational Outage data as part of the information needed in meeting this obligation.

2. *A description of how the data or information will be collected and validated.*

The data collection and validation process is described in Section 5.2 of the TADS Phase I Report. The Bulk Electric System less than 100 kV and 100-199 kV TADS Outage information will be collected following the same process as the current TADS data collection and validation. The new data will be manually entered or bulk uploaded by Transmission Owners into the webTADS software system. To facilitate this, a less than 100 kV and 100-199 kV voltage class will be added into the webTADS software system. After software checks for errors, data will be further validated by the Regional Entities and finally by NERC as described in Section 5.3.2 of the Phase I Report.

In addition, Section 5.1 of the Phase II Report permits NERC to review the data and conduct data validation reviews of *all* TADS data submissions with the submitting Transmission Owners. As multiple years of data collection occur, to the extent that a review indicates systematic data entry errors, data entries for previous years may need to be revised. For example, five year rolling average performance statistics need to be consistent and reasonably accurate. Therefore, it will be necessary for Transmission Owners to capture and retain five years of

supporting data. Supporting data older than five years may be discarded at Transmission Owner discretion. NERC will retain the detailed outage data submitted to webTADS indefinitely, beyond a 5 year rolling average.

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

The submission of Phase I TADS data is mandatory for all U.S. Transmission Owners who are on the NERC Compliance Registry. Non-U.S. Transmission Owners who are also NERC members are required to comply with NERC’s *Rules of Procedure*, and because the proposed data is being requested in accordance with Section 1600, non-U.S. Transmission Owners as NERC members are to provide the revised TADS data.⁵

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

Starting in the reporting period 6 months following FERC approval of the Bulk Electric System definition, the proposed Bulk Electric System less than 100 kV and 100-199 kV Sustained Automatic Outage data and inventory must be submitted. Operational Outages would commence collection if the 5 year assessment of Non-Automatic outage data collection in 2015 finds the 200 kV+ Non-Automatic outage data collection beneficial to reliability. This schedule allows Transmission Owners to develop or revise business processes and make improvements to internal business system protocols.

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

The treatment of confidential information for the above proposal is the same as Phase I TADS. NERC’s treatment of confidential information is governed by Section 1500 of NERC’s *Rules of Procedures*. TADS public reports will not inadvertently release confidential information by the display of regional or NERC information from which a Transmission Owner’s confidential information could be ascertained. For example, if a Transmission Owner in a region is the only owner of 100-199 kV assets, the metrics on that data would not be released if the Transmission Owner’s name and its confidential information could be identified. Section 2.4.7 of the Phase I Report addresses data confidentiality, while Section 5.4 addresses data access policies.

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

⁵ Phase I was approved by the NERC Board of Trustees prior to the addition of Section 1600 to the *Rules of Procedure*. Because NERC’s Phase I TADS approval relied upon Section 39.2(d) of the Federal Energy Regulatory Commission’s regulations, 18 C.F.R. § 39.2(d), it is mandatory on all U.S. Transmission Owners. However, most non-U.S. Transmission Owners have indicated that they will voluntarily comply with Phase I.

The implementation of the BES less than 100 kV and BES 100-199 kV Sustained Automatic Outage data collection should not add an overwhelming reporting burden beyond other Standard requirements for less than 100 kV and 100-199 kV BES system facilities. For example, 100-199 kV BES outages will be analyzed to determine if a misoperation occurred (Standard PRC-004-2a). Likewise, Standard EOP-004-1 requires analysis to determine if such outages are a reportable disturbance. However, TADS proposed reporting of BES less than 100 kV and BES 100-199 kV outages may require an additional or incremental data collection effort on the part of the Transmission Owner that is not otherwise collected under the Standard requirements. Transmission Owners will be required to supply the information on a revised Form 3, 4, 5, and 6 for their less than 100 kV and 100-199 kV BES TADS Elements.

B. Comment Questions

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

- 1. If you are a Transmission Owner, do you currently collect Outage data similar to the proposed TADS outage data? If "yes," please explain.*
- 2. If you are a Transmission Owner, please identify the existing number of 100-199 kV Elements in your inventory. Please identify, based on the current draft BES definition of radial circuit, the number of 100-199 kV Elements in your inventory which you expect to be exempt from becoming a BES facility.*
- 3. If you are a Transmission Owner and if you currently do not collect Bulk Electric System less than 100 kV and Bulk Electric System 100-199 kV Outage data similar to the proposed TADS outage data, recognizing additional outage information and analysis will be required by the BES Standards (PRC and EOP Reliability Standards at a minimum), what incremental increase in effort beyond the BES Standards will be required to fulfill the proposed TADS data collection?*
- 4. Is the data being requested reasonable and obtainable? If "no," please explain.*
- 5. Is the proposed data reporting appropriate? If "no," please explain.*
- 6. Is the implementation schedule for the proposed data reasonable? If "no," please explain.*
- 7. For Transmission Owners with less than 100 kV or 100-199 kV TADS Elements in the BES, assuming you will have to develop a system to export misoperations for the PRC Reliability Standards and events under EOP Reliability Standards, what is the incremental cost of this TADS proposal beyond the cost necessary to implement the standards?*

Comments are due by November 19, 2012 at 11:59 PM PST and must be submitted in a Word document to tadscomments@nerc.net. If you have any questions, please contact Andy Slone at (404) 446-9719 or by e-mail at Andrew.Slone@nerc.net.

Sincerely,



Herb Schrayshuen
Interim Vice President and Director of Reliability Assessments and Performance Analysis