

FERC-725 (OMB Control No. 1902-0225)
NOPR (Issued 9/17/2015), in Docket RM15-25-000
RIN: 1902-AF11

Supporting Statement for
**FERC-725, Certification of Electric Reliability Organization;
Procedures for Electric Reliability Standards**
Non-substantive change request for proposal
in the NOPR in Docket RM15-25-000

The Federal Energy Regulatory Commission (Commission or FERC) requests that the Office of Management and Budget (OMB) review and approve this request for a non-substantive change to the FERC-725 information collection. This request is triggered by the Notice of Proposed Rulemaking (NOPR)¹ issued 9/17/15 in Docket RM15-25.

Under section 215 of the Federal Power Act, the Federal Energy Regulatory Commission (Commission or FERC) directs the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization (ERO), to provide Commission staff with access (i.e., view and download data), on a non-public and ongoing basis, to certain databases compiled and maintained by NERC. The Commission's proposal applies to the following three NERC databases: (1) the Transmission Availability Data System (TADS), (2) the Generator Availability Data System (GADS), and (3) the protection system misoperations database. Access to these databases, which will be limited to data regarding U.S. facilities, will provide the Commission with information necessary for the Commission to determine the need for new or modified Reliability Standards and to better evaluate NERC's periodic reliability and adequacy assessments.

The Commission proposes to amend its regulations, pursuant to section 215 of the Federal Power Act (FPA), and locate the above proposed requirement within section 39.11 of the Commission's regulations, which governs the preparation and submission of reliability reports.² Section 39.2(d) of the Commission's regulations requires NERC and each Regional Entity to "provide the Commission such information as is necessary to

¹ The NOPR is posted in FERC's eLibrary at <http://elibrary-backup.ferc.gov/idmws/common/OpenNat.asp?fileID=13989466>; Commissioner LaFleur's statement appears at <http://elibrary-backup.ferc.gov/idmws/common/OpenNat.asp?fileID=13989195>; the News Release appears at <http://elibrary-backup.ferc.gov/idmws/common/OpenNat.asp?fileID=13989193>.

² 18 CFR 39.11.

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implement section 215 of the Federal Power Act.”³ Section 39.2(d) of the Commission’s regulations also requires each user, owner and operator of the Bulk-Power System within the United States (other than Alaska and Hawaii) to provide the Commission, NERC and each applicable Regional Entity with “such information as is necessary to implement section 215 of the Federal Power Act as determined by the Commission and set out in the Rules of the Electric Reliability Organization and each applicable Regional Entity.”⁴

NERC conducts ongoing data collections from registered entities to populate databases for transmission outages through TADS, generation outages through GADS, and protection system misoperations through NERC’s protection system misoperations database. Each of these NERC databases is discussed below.

TADS Database

NERC began collecting TADS data on a mandatory basis in 2007, pursuant to a data request issued in accordance with section 1600 of the NERC Rules of Procedure.⁵ Currently applicable entities (transmission owners) are required to provide certain data for the on-line TADS database based on a common template⁶ each quarter. The TADS database compiles transmission outage data in a common format for: (1) bulk electric system AC circuits (overhead and underground); (2) transmission transformers (except generator step-up units); (3) bulk electric system AC/DC back-to-back converters; and (4) bulk electric system DC circuits.⁷ The TADS data collection template includes the

³ 18 CFR 39.2(d).

⁴ *Id.*

⁵ See generally NERC, Summary of Phase I TADS Data Collection (November 9, 2007), available at http://www.nerc.com/pa/RAPA/tads/TADSTF%20Archives%20DL/TADS_Data_Request_Summary.pdf.

⁶ See generally NERC, Transmission Availability Data System (TADS) Data Reporting Instruction Manual (November 20, 2007), available at http://www.nerc.com/comm/PC/Transmission%20Availability%20Data%20System%20Working%20Group/TADSTF%20Archives/Data_Reporting_Instr_Manual_11_20_07.pdf.

⁷ See NERC TADS Home Page, available at <http://www.nerc.com/pa/RAPA/tads/Pages/default.aspx>.

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following information fields: (1) type of facilities, (2) outage start time and duration, (3) event type, (4) initiating cause code, and (5) sustained cause code (for sustained outages).⁸ “Cause codes” for common causes of transmission outages include: (1) lightning, (2) fire, (3) vandalism, (4) failed equipment (with multiple sub-listings), (5) vegetation, and (6) “unknown.”⁹ There were 10,787 TADS events between 2012 and 2014.¹⁰

NERC uses TADS data to develop transmission metrics to analyze outage frequency, duration, causes, and other factors related to transmission outages.¹¹ NERC also provides individual transmission owners with TADS metrics for their facilities.¹² NERC issues an annual public report based on TADS data that shows aggregate metrics for each NERC Region, with the underlying data typically accorded confidential treatment.¹³

GADS Database

The collection of GADS data has been mandatory since 2012, pursuant to a data request issued in accordance with section 1600 of the NERC Rules of Procedure.¹⁴ Currently applicable entities (generator owners) are required to provide certain data for

⁸ See Transmission Availability Data System (TADS) Data Reporting Instruction Manual (August 1, 2014), *available at* http://www.nerc.com/pa/RAPA/tads/Documents/2015_TADS_DRI.pdf.

⁹ See Transmission Availability Data System Definitions (August 1, 2014), *available at* http://www.nerc.com/pa/RAPA/tads/Documents/2015_TADS_Appendix_7.pdf.

¹⁰ See, e.g., NERC, State of Reliability 2015, Appendix A (Statistical Analysis for Risk Issue Identification and Transmission Outage Severity Analysis) at 86 (May 2015), *available at* <http://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/2015%20State%20of%20Reliability.pdf>.

¹¹ See NERC TADS Home Page.

¹² *Id.*

¹³ *Id.*

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the on-line GADS database based on a common template¹⁵ each quarter. The GADS database collects, records, and retrieves operating information on power plant availability, including event, performance, and design data.¹⁶

Specifically, the GADS database collects outage data pertaining to ten types of conventional generating units with capacity of 20 MW and larger, including: (1) fossil steam including fluidized bed design; (2) nuclear; (3) gas turbines/jet engines; (4) internal combustion engines (diesel engines); (5) hydro units/pumped storage; (6) combined cycle blocks and their related components; (7) cogeneration blocks and their related components; (8) multi-boiler/multi-turbine units; (9) geothermal units; and (10) other miscellaneous conventional generating units (e.g., biomass, landfill gases).¹⁷ The GADS data collection template includes the following design, event, and performance information: (1) design records, (2) event records and (3) performance records.¹⁸ Design records refer to the characteristics of each unit such as GADS utility code, GADS unit code, NERC Regional Entity where the unit is located, name of the unit, commercial operating date, and type of generating unit (fossil, combined cycle, etc.).¹⁹ Event records include information about when and to what extent the generating unit could not generate power.²⁰ Performance records refer to monthly generation, unit-attempted starts, actual

¹⁴ See NERC, Generating Availability Data System Mandatory Reporting of Conventional Generation Performance Data at 2 (July 2011), *available at* http://www.nerc.com/pa/RAPA/gads/MandatoryGADS/Revised_Final_Draft_GADSTF_Recommendation_Report.pdf; *see also* NERC GADS Home Page, *available at* <http://www.nerc.com/pa/RAPA/gads/Pages/default.aspx>.

¹⁵ See *generally* NERC, Transmission Availability Data System (TADS) Data Reporting Instruction Manual (November 20, 2007), *available at* http://www.nerc.com/comm/PC/Transmission%20Availability%20Data%20System%20Working%20Group/TADSTF%20Archives/Data_Reporting_Instr_Manual_11_20_07.pdf.

¹⁶ See NERC GADS Home Page.

¹⁷ Generating Availability Data System Mandatory Reporting of Conventional Generation Performance Data at 15.

¹⁸ *Id.*, Appendix V (Rules of Procedure Section 1600 Justification) at 35.

¹⁹ *Id.*

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starts, summary event outage information, and fuels.²¹ For 2011-2013, the GADS database contains data from more than 5,000 units.²²

NERC uses GADS data to measure generation reliability and publishes aggregate performance metrics for each NERC Region in publicly available annual state of reliability and reliability assessment reports.²³ The underlying data are typically accorded confidential treatment.

Protection System Misoperations Database

Protection system misoperations data have been reported by transmission owners, generator owners and distribution providers on a mandatory basis since 2011 pursuant to Reliability Standard PRC-004.²⁴ Following implementation of Reliability Standard PRC-

²⁰ *Id.*

²¹ *Id.*

²² State of Reliability 2015, Appendix B (Analysis of Generation Data) at 107.

²³ *See, e.g., id.*, Appendix B (Analysis of Generation Data).

²⁴ The Commission approved Reliability Standard PRC-004-1 (Analysis and Reporting of Transmission Protection System Misoperations) in Order No. 693. *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, at PP 1467-1469, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007). The Commission subsequently approved the following revisions and interpretations to Reliability Standard PRC-004, which was renamed Analysis and Mitigation of Transmission and Generation Protection System Misoperations: Reliability Standards PRC-004-1a, PRC-004-2, PRC-004-2a, PRC-004-2.1a, PRC-004-2.1(i)a, PRC-004-3, and PRC-004-4. *See North American Electric Reliability Corporation*, 136 FERC ¶ 61,208 (2011) (approving interpretation resulting in Reliability Standard PRC-004-1a and Reliability Standard PRC-004-2a); *North American Electric Reliability Corp.*, 134 FERC ¶ 61,015 (2011) (approving Reliability Standard PRC-004-2); *Generator Requirements at the Transmission Interface*, Order No. 785, 144 FERC ¶ 61,221 (2012) (approving Reliability Standard PRC-004-2.1a); *North American Electric Reliability Corp.*, 151 FERC ¶ 61,129 (2015) (approving Reliability Standard PRC-004-3); *North American Electric Reliability Corporation*, 151 FERC ¶ 61,186 (2015) (approving Reliability Standards PRC-004-2.1(i)a and PRC-004-4).

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004-4, the obligation to report misoperation data will be made mandatory via an on-line database based on a common template²⁵ each quarter. Currently, the protection system misoperations database collects more than 20 fields for a reportable misoperation event, including: (1) misoperation date; (2) event description; (3) protection systems/components that misoperated; (4) equipment removed from service (permanently or temporarily) as the result of the misoperation; (5) misoperation category; and (6) cause(s) of misoperation.²⁶ For 2014, the protection system misoperations database contains information on approximately 2,000 misoperation events.²⁷

Protection system misoperations have exacerbated the severity of most cascading power outages, having played a significant role in the August 14, 2003 Northeast blackout, for example.²⁸ NERC uses protection system misoperations data to assess protection system performance and trends in protection system performance that may negatively impact reliability.²⁹ NERC publishes aggregate misoperation information for each NERC Region in annual public state of reliability reports, with the underlying data typically being accorded confidential treatment.³⁰

As noted in the delegated order in Docket No. RD15-3 (issued 5/29/2015), the reporting requirements for Reliability Standard PRC-004-3, approved by the Commission in Docket No. RD14-14, are pending OMB review under FERC-725G1 (ICR No. 201508-1902-004).

²⁵ See generally NERC, Transmission Availability Data System (TADS) Data Reporting Instruction Manual (November 20, 2007), available at http://www.nerc.com/comm/PC/Transmission%20Availability%20Data%20System%20Working%20Group/TADSTF%20Archives/Data_Reporting_Instr_Manual_11_20_07.pdf.

²⁶ *Id.* at 13-14; see also NERC, Protection System Misoperations Home Page, available at <http://www.nerc.com/pa/RAPA/ri/Pages/ProtectionSystemMisoperations.aspx>.

²⁷ State of Reliability 2015 at 47.

²⁸ See Request for Data or Information Protection System Misoperation Data Collection at 5.

²⁹ See *id.* at 14.

³⁰ See, e.g., State of Reliability 2015 at 45-48.

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Summary.

The Commission's proposal would make TADS, GADS, and protection system misoperations data, currently collected by the ERO, available to Commission staff on a non-public and ongoing basis. The proposal would not require ERO to collect new information, compile information into any kind of report, or reformulate the raw data. Accordingly, the Commission estimates that the one-time burden associated with compliance with this proposed rule is *de minimis* and is limited to the ERO reviewing the Commission's proposed regulation and providing Commission staff with access to the existing TADS, GADS, and protection system misoperations databases.

In addition, the requirement for the ERO to provide the proposed data access to the Commission is included in the existing FERC-725, Certification of Electric Reliability Organization; Procedures for Electric Reliability Standards (OMB Control No. 1902-0225). FERC-725 includes information used by the Commission to implement the statutory provisions of section 215 of the FPA. FERC-725 includes the burden, reporting and recordkeeping requirements associated with: (a) Self Assessment and ERO Application, (b) Reliability Assessments, (c) Reliability Standards Development, (d) Reliability Compliance, (e) Stakeholder Survey, and (f) Other Reporting.

For these reasons, the Commission is submitting this non-substantive change (for the NOPR in Docket RM15-25) to OMB for FERC-725.