

Supporting Statement

FERC-725X, Mandatory Reliability Standards: Voltage and Reactive (VAR) Standards
(Three-year extension requested)

The Federal Energy Regulatory Commission (FERC or Commission) requests that the Office of Management and Budget (OMB) review and renew the information collection requirements in FERC-725X under OMB Control No. 1902-0278. This supporting statement covers the requirements of the FERC-725X information collection. The reporting requirements in the FERC-725X are also contained in FERC's regulations in 18 Code of Federal Regulations (CFR) Part 40.

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

On August 8, 2005, The Electricity Modernization Act of 2005, which is Title XII of the Energy Policy Act of 2005 (EPAct 2005), was enacted into law. EPAct 2005 added a new Section 215 to the Federal Power Act (FPA), which requires a Commission-certified Electric Reliability Organization (ERO) to develop mandatory and enforceable Reliability Standards, which are subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by the ERO, subject to Commission oversight. In 2006, the Commission certified the North American Electric Reliability Corporation (NERC) as the ERO pursuant to FPA section 215.¹

2. HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED AND THE CONSEQUENCES OF NOT COLLECTING THE INFORMATION

The Commission approved Reliability Standards VAR-001-4 and VAR-002-3 in the order in Docket No. RD14-11-000². Reliability Standard VAR-001-4 was revised by two errata notices approved by the Commission³. Reliability Standard VAR-002-3 was revised into VAR-002-4 in the Order in Docket No. RD15-3-000. The revision updated the applicability language in

¹ *North American Electric Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh'g & compliance*, 117 FERC ¶ 61,126 (2006), *aff'd sub nom. Alcoa, Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

² The Order in Docket No. RD14-11-000 was issued on 8/1/2014 (<https://elibrary-backup.ferc.gov/idmws/common/OpenNat.asp?fileID=13606637>)

³ VAR-001-4 was revised into VAR-001-4.1 by an erratum in Docket No. RD15-3-000 on 11/13/2015. VAR-001-4.1 was then revised into VAR-001-4.2 and VAR-002-4 was revised into VAR-002-4.1 by another errata in Docket No. RD17-7-000 on 9/26/2017. Both of these errata notice provided administrative corrections only and had no effect on the reporting burden for either reliability standard.

provisions related to generation owners and generation operators of “any resources identified through inclusion I4 of the bulk electric system definition”⁴.

Additionally, the following paragraphs describe the information collection requirements contained in this collection. Each Reliability Standard requirement is accompanied by a compliance measure which requires the applicable entity to have evidence that it complied with the requirement. Each Reliability Standard is included as supplemental documents to this extension request.

Reliability Standard VAR-001-5

Reliability Standard VAR-001-5 requires each Transmission Operator to:

- Specify a system-wide voltage schedule (which is either a range or a target value with an associated tolerance band) as part of its plan to operate within SOLs and IROLs, and to provide the voltage schedule to its Reliability Coordinator and adjacent Transmission Operators upon request (Requirement R1);
- Each Transmission Operator shall schedule sufficient reactive resources to regulate voltage levels under normal and Contingency conditions. Transmission Operators can provide sufficient reactive resources through various means including, but not limited to, reactive generation scheduling, transmission line and reactive resource switching, and using controllable load. (Requirement R2)
- Similar to Requirement R2, the VAR SDT determined that for reliability purposes, the Transmission Operator must ensure sufficient voltage support is provided in Real-time in order to operate within an SOL. Develop a set of criteria to exempt generators from certain requirements under Reliability Standard VAR-002-4.1 related to voltage or Reactive Power schedules, automatic voltage regulations, and notification (Requirement R4);
- Specify a voltage or Reactive Power schedule (which is either a range or a target value with an associated tolerance band) for generators at either the high or low voltage side of the generator step-up transformer and provide the schedule to the associated Generator Operator, provide the Generator Operator the notification requirements for deviating from the schedule, and, if requested, provide the Generator Operator the criteria used to develop the schedule (Requirement R5); and
- Communicate step-up transformer tap changes, the time frame for completion, and the justification for these changes to Generator Owners (Requirement R6).

Reliability Standard VAR-002-4.1

Reliability Standard VAR-002-4.1 requires each Generator Operator to:

- Operate each of its generators connected to the interconnected transmission system in automatic voltage control mode or in a different control mode as instructed by the Transmission Operator, unless the Generator Operator (1) is exempted pursuant to the criteria developed under VAR-001-4.1, Requirement R4, or (2) makes certain notifications to the Transmission Operator specifying the reasons it cannot so operate (Requirement R1);
- Maintain the Transmission Operator’s generator voltage or Reactive Power schedule, unless the Generator Operator (1) is exempted pursuant to the criteria developed under

⁴ Order in Docket No. RD15-3-000, page 3, paragraph 4.

VAR-001-4.2, Requirement R4, or (2) complies with the notification requirements for deviations as established by the Transmission Owner pursuant to VAR-001-4.2, Requirement R5 (Requirement R2);

- Notify the Transmission Operator of a change in status of its voltage controlling device within 30 minutes, unless the status is restored within that time period (Requirement R3);
- Notify the Transmission Operator of a change in reactive capability due to factors other than those described in VAR-002-4.1, Requirement R3 within 30 minutes unless the capability has been restored during that time period (Requirement R4);
- Provide information on its step-up transformers and auxiliary transformers within 30 days of a request from the Transmission Operator or Transmission Planner (Requirement R5); and
- Comply with the Transmission Operator's step-up transformer tap change directives unless compliance would violate safety, an equipment rating, or applicable laws, rules, or regulations (Requirement R6).

3. DESCRIBE ANY CONSIDERATION OF THE USE OF IMPROVED INFORMATION TECHNOLOGY TO REDUCE THE BURDEN AND TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN

This collection does not require industry to file the information with the Commission. However, FERC-725X does contain information collection and record retention requirements for which using current technology is an option.

The information technology to meet the information collection requirements is not specifically covered in the Reliability Standard.

4. DESCRIBE EFFORTS TO IDENTIFY DUPLICATION AND SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSE(S) DESCRIBED IN INSTRUCTION NO. 2

The Commission periodically reviews filing requirements concurrent with OMB review or as the Commission deems necessary to eliminate duplicative filing and to minimize the filing burden. The Commission is unaware of any other source of information related to bulk-electric system physical security.

5. METHODS USED TO MINIMIZE THE BURDEN IN COLLECTION OF INFORMATION INVOLVING SMALL ENTITIES

In general, small entities may reduce their burden by taking part in a joint registration organization or a coordinated functional registration. These options allow a small entity to share the compliance burden with other entities and, thus, to minimize their own compliance burden.

Detailed information regarding these options is available in NERC's Rule of Procedure at Sections 507 and 508.⁵

6. CONSEQUENCE TO FEDERAL PROGRAM IF COLLECTION WERE CONDUCTED LESS FREQUENTLY

The Reliability Standard provides consistent documentation and information sharing practices for demand and energy data while promoting efficient planning practices across industry and supporting identification of necessary system reinforcements. As stated earlier, all of this would be hindered if this collection of information were discontinued or conducted less frequently, additionally not having information readily available or improperly scheduling voltage could lead adversely impact the reliability of the BES.

For these VAR standards there is not a specific frequency of collection rather it is a constant flow of information. Between the entities they share information often through SCADA (supervisory control and data acquisition) or email communication. Sharing of information is accomplished in real-time to operate the BES and in other instances it may consist of specific requests. The represents the collective effort of the entities to be responsive to the Requirements of the VAR Standards and operate the BES in a reliable manner, so it is shown as one response per year.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

There are special circumstances related to the FERC-725X information collection.

For these VAR standards there is not a specific frequency for most of information collection rather it is a constant flow of information or it could be requested on demand with the expectation in that instances for 30-day delivery. Between the entities they share information often through SCADA (supervisory control and data acquisition) or email communication. Sharing of information is accomplished in real-time to operate the BES and in other instances it may consist of specific requests. The represents the collective effort of the entities to be responsive to the Requirements of the VAR Standards and operate the BES in a reliable manner, so it is shown as one response per year.

Additionally, for circumstances where a request is made for data by the reliability coordinator or adjacent transmission operator, the applicable transmission operator will need to provide system voltage schedules within 30-days of the request.

⁵http://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/NERC_ROP_Effective_20161031.pdf

Within VAR-002 when a generator operator has a change in status for VAR, power system stabilizer that may last longer than 30-minutes, that generator operator will have to notify the associated transmission operator. These types of exchanges of information are to be recorded.

8. DESCRIBE EFFORTS TO CONSULT OUTSIDE THE AGENCY: SUMMARIZE PUBLIC COMMENTS AND THE AGENCY’S RESPONSE

The Electric Reliability Organization’s (ERO) process to establish Reliability Standards is a collaborative process with the ERO, Regional Entities, and other stakeholders developing and reviewing drafts and providing comments.⁶ The NERC-approved Reliability Standards were then submitted by NERC to the FERC for review and approval.

Each FERC information collection activity is published in the Federal Register thereby providing public utilities and licensees, state commissions, federal agencies, and other interested parties an opportunity to submit data, views, comments or suggestions concerning the proposed collections of data. In accordance with OMB requirements, the Commission published a 60-day notice⁷ and Na 30-day notice⁸ to the public regarding this information collection on 8/19/2024 and 10/30/2024 respectively. Within the public notices, the Commission noted that it would be requesting a three-year extension of the public reporting burden. The Commission received no comments from the public in response to the 60-day notice regarding the FERC-725X information collection.

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

There are no payments or gifts to respondents associated with this collection.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

According to the NERC Rule of Procedure⁹, “...a Receiving Entity shall keep in confidence and not copy, disclose, or distribute any Confidential Information or any part thereof without the

⁶ Details of the ERO standards development process are available on the NERC website at http://www.nerc.com/pa/Stand/Documents/Appendix_3A_StandardsProcessesManual.pdf.

⁷ 89 FR 67079

⁸ 89 FR 86336

⁹ Section 1502, Paragraph 2, available at NERCs website.

permission of the Submitting Entity, except as otherwise legally required.” This serves to protect confidential information submitted to NERC or Regional Entities.

Responding entities do not submit the information collected under these Reliability Standards to FERC. Rather, they maintain it internally and provide information collected to applicable Regional Entities. Since there are no submissions made to FERC, FERC provides no specific provisions in order to protect confidentiality.

11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES, RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY CONSIDERED PRIVATE.

There are no questions of a sensitive nature in the reporting requirements.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

FERC-725X, Mandatory Reliability Standards: Voltage and Reactive (VAR) Standards						
	Number of Respondents¹⁰ (1)	Annual Number of Responses per Respondent (2)	Total Number of Responses (1)*(2)=(3)	Average Burden & Cost Per Response¹¹ (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Respondent (\$) (5)÷(1)

¹⁰ TOP = transmission operator; GOP = generator operators. These values were derived from the NERC Compliance data of April 16, 2024, using only unique United States registered entities.

¹¹ The estimated hourly cost (salary plus benefits) is a combination based on the Bureau of Labor Statistics (BLS), as of 2024, for 75% of the average of an Electrical Engineer (17-2071) \$79.31/hr., $79.31 \times .75 = 59.4825$ (\$59.48-rounded) (\$59.48/hour) and 25% of an Information and Record Clerk (43-4199) \$44.74/hr., $44.74 \times .25 = 11.185$ (\$11.19 rounded) (\$11.19/hour), for a total (\$59.48+\$11.19 = \$70.67/hour).

VAR-001-5 Compliance and record-keeping	165 (TOP)	1	165	160 hrs. \$11,307.20	26,400 hrs. \$1,865,688	\$11,307.20
VAR-002-4.1 Compliance and record-keeping	1,028 (GOP)	1	1,028	200 hrs. \$14,134	205,600 hrs. \$14,529,752	\$14,134
TOTAL			1,193		232,000 hrs. \$16,395,440	

The burden for the FERC-725X information collection includes estimates related to both of the previously approved Reliability Standards (VAR-001-4.2 and VAR-002-4.1).

The total annual burden and cost of the FERC-725X information collection is 232,000 hours and \$16,395,440 (rounded).up

13. ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS

There are no non-labor costs currently associated with the FERC-725X.

All of the costs are associated with burden hours (labor) and described in #12 and 15.

14. ESTIMATED ANNUALIZED COST TO FEDERAL GOVERNMENT

The Regional Entities and NERC do most of the data processing, monitoring and compliance work for Reliability Standards; the burden and cost are included under the FERC-725 collection (OMB Control No. 1902-0225) and are not part of this request or package. Any involvement by the Commission is covered under the FERC-725 collection (OMB Control No. 1902-0225) and is not part of this request or package.

The estimated annualized cost to the Federal Government for FERC-725X follows:

	Number of Employees (FTE)	Estimated Annual Federal
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		Cost
FERC-725X Analysis and Processing of filings ¹²	0	\$0
PRA ¹³ Administrative Cost		\$8,396
FERC Total		\$8,396

The Commission bases its estimate of the ‘Analysis and Processing of filings’ cost to the Federal Government on salaries and benefits for professional and clerical support. This estimated cost represents staff analysis, decision making, and review of any actual filings made in response to the information collection. For this collection, there are no analysis and filings costs.

The PRA Administrative Cost is a Federal Cost associated with preparing, issuing, and submitting materials necessary to comply with the Paperwork Reduction Act (PRA) for rulemakings, orders, or any other vehicle used to create, modify, extend, or discontinue an information collection. This average annual cost includes requests for extensions, all associated rulemakings, and other changes to the collection.

15. REASONS FOR CHANGES IN BURDEN INCLUDING THE NEED FOR ANY INCREASE

There are no program changes or changes to reporting requirements for the FERC-725X information collection.

The Burden responses for FERC 725X was adjusted by agency estimate due to fluctuations.

VAR-001-5 decreased by -2 burden responses.

VAR-002-4.1 decreased by -846 burden responses.

The burden for the FERC-725X information collection has decreased in the number of entities and burden hours. There was a difference in burden hours and cost by +17,880 hours (adjusted the burden per response and reduced how many times it occurs per year to 1 for VAR-002-4.1) due to normal industry fluctuations and correction of an accounting error described below. These industry fluctuations (e.g. companies merging/splitting, companies entering or leaving the industry) caused the number of respondents to decrease and their associated annual burden to increase.

¹² Based upon FERC’s 2024 FTE average salary plus benefits full-time equivalent average annual salary plus benefits (\$207,786 per year).

¹³ Paperwork Reduction Act of 1995 (PRA)

FERC-725X	Total Request	Previously Approved	Change due to Adjustment in Estimate	Change Due to Agency Discretion
Annual Number of Responses	1,193	2,041	-848	0
Annual Time Burden (Hr.)	232,000	214,120	+17,880	0
Annual Cost Burden (\$)	0	0	0	0

16. TIME SCHEDULE FOR PUBLICATION OF DATA

FERC does not publish any data associated with this collection.

17. DISPLAY OF EXPIRATION DATE

The PRA information (including expiration dates and OMB Control Nos.) is posted at <https://www.ferc.gov/enforcement-legal/legal/information-collections>

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

There are no exceptions.