

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

Supporting Statement for
**FERC-725G1, Mandatory Reliability Standards for the Bulk Power System:
Reliability Standard PRC-004-6 (Protection System Misoperation Identification and
Correction);**
and
**FERC-725G4, Mandatory Reliability Standards: Reliability Standard PRC-010-2
(Undervoltage Load Shedding)**
(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 of FERC-725G1 and FERC-725G4. These requirements are authorized by section 215 of the Federal Power Act (FPA)¹ and 18 CFR Parts 39 and 40.

**1. CIRCUMSTANCES THAT MAKE THE COLLECTIONS OF
INFORMATION NECESSARY**

Section 215 of the FPA requires a Commission-certified Electric Reliability Organization (ERO)² to develop mandatory and enforceable Reliability Standards, subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by the ERO or a “Regional Entity” subject to Commission oversight,³ or by the Commission independently. In 2006, the Commission certified the North American Electric Reliability Corporation (NERC) as the ERO.

On April 4, 2007, the Commission published Order No. 693,⁴ approving 83 of the 107 initial Reliability Standards filed by NERC. In the intervening years, numerous changes have been made to update, eliminate, or establish various Reliability Standards.

The Commission approved Reliability Standard PRC-004-6 on October 15, 2020 (85 FR

¹ 16 U.S.C. 824o.

² “Electric Reliability Organization” or “ERO” means the organization certified by the Commission the purpose of which is to establish and enforce Reliability Standards for the Bulk-Power System, subject to Commission review.

³ In accordance with 16 U.S.C. 824o(e)(4), the Commission has issued regulations (at 18 CFR 39.8) authorizing the ERO to enter into Commission-approved agreements delegating authority to “Regional Entities” for the purpose of proposing Reliability Standards to the ERO and enforcing Reliability Standards. As shown at <https://www.nerc.com/AboutNERC/Pages/Regional-Entity-Delegation-Agreements.aspx>, there are Commission-approved delegation agreements between NERC and six Regional Entities.

⁴ Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, Final Rule, 72 FR 16416 (April 4, 2007).

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

65207), and approved Reliability Standard PRC-010-2 on November 19, 2015 in a Designated Letter Order (RD15-5-000).

The information collection activities of FERC-725G1 and FERC-725G4 require various types of respondents to provide information to NERC pursuant to section 1600 of the NERC Rules of Procedure:

[https://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/NERC%20ROP%20\(With%20Appendicies\).pdf](https://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/NERC%20ROP%20(With%20Appendicies).pdf)). The NERC Rules of Procedure require that a data request from NERC specify the data to be collected, the Registered Entity function(s) to which it applies, the criteria for reporting requirements, and how and when the data will be collected.⁵

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

The following descriptions of FERC-725G1 and FERC-725G4 list the “Requirements and Measures” for each Reliability Standard that is relevant to these information collections. Each Requirement is labeled with the letter “R” and the number assigned by NERC. Each Measure, which describes the acceptable evidence for each Requirement, is labeled with the letter “M” and the number assigned by NERC. The number of each Measure matches the number of the Requirement with which it is associated.

FERC-725G1

FERC-725G1 consists of the information collection requirements associated with Reliability Standard PRC-004-6 (“Protection System Misoperation Identification and Correction”). The purpose of Reliability Standard PRC-004-6 is to ensure the identification and correction of the causes of misoperations of protection systems. The entire text of the Requirements and Measures is at:

<https://www.nerc.com/pa/Stand/Reliability%20Standards/PRC-004-6.pdf>.

Here is a summary of the information collection activities associated with this Reliability Standard:

R1 and R2 of this Reliability Standard require, respectively, that each Transmission Owner, Generator Owner, and Distribution Provider that owns a “BES interrupting

⁵ Any involvement by the Commission is covered under the FERC-725 collection (OMB Control No. 1902-0225) and is not part of this request.

device”⁶ that operated under certain circumstances⁷ take the following actions within 120 calendar days:

1. Identify whether the operation of the BES interrupting device indicated that a Protection System⁸ component(s) caused a Misoperation;⁹ and
2. Provide notification of the operation of the BES interrupting device to other owners that share Misoperation identification responsibility for the Composite Protection System and to other Protection System owner(s) for which that backup protection was provided.

M1 consists of dated evidence that demonstrates that the relevant entity identified the Misoperation of its Protection System component(s), if any, within the allotted time period. Acceptable evidence may include, but is not limited to, the following dated documentation (electronic or hardcopy format): reports, databases, spreadsheets, emails, facsimiles, lists, logs, records, declarations, analyses of sequence of events, relay targets, Disturbance Monitoring Equipment (DME) records, test results, or transmittals.

M2 consists of dated evidence that demonstrates notification to the other owner(s), within the allotted time period. Acceptable evidence may include, but is not limited to, the following dated documentation (electronic or hardcopy format): emails, facsimiles, or transmittals.

R3 requires the following action of each Transmission Owner, Generator Owner, and

⁶ A Bulk Electric System (BES) interrupting device is typically a circuit breaker or circuit switcher that has the capability to interrupt fault current. Operation of such a device may indicate failure of a Protection System.

⁷ The BES interrupting device operation was caused by a Protection System or by manual intervention in response to a Protection System failure to operate;
The BES interrupting device owner owns all or part of the Composite Protection System;
and

The BES interrupting device owner identified that its Protection System component(s) caused the BES interrupting device(s) operation or was caused by manual intervention in response to its Protection System failure to operate.

⁸ “Protection System” is defined as protective relays which respond to electrical quantities, communications systems necessary for correct operation of protective function, voltage and current sensing devices providing inputs to protective relays, station dc supply associated with protective functions (including station batteries, battery chargers, and non-battery-based dc supply), and control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or other interrupting devices.

⁹ A misoperation of a protection system may consist of a failure to operate, slowness in operating, or operating when not required, either during a fault or non-fault condition.

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

Distribution Provider that receives notification pursuant to R2: Within the later of 60 calendar days of notification or 120 calendar days of the BES interrupting device(s) operation, the relevant entity must identify whether its Protection System component(s) caused a Misoperation.

M3 consists of dated evidence that demonstrates it identified whether its Protection System component(s) caused a Misoperation within the allotted time period. Acceptable evidence for Requirement R3 may include, but is not limited to the following dated documentation (electronic or hardcopy format): reports, databases, spreadsheets, emails, facsimiles, lists, logs, records, declarations, analyses of sequence of events, relay targets, DME records, test results, or transmittals.

R4 and M4 are reserved.

R5 requires the following action from each Transmission Owner, Generator Owner, and Distribution Provider that owns the Protection System component(s) that caused the Misoperation within 60 calendar days of first identifying a cause of the Misoperation:

- Develop a Corrective Action Plan (CAP) for the identified Protection System component(s), and an evaluation of the CAP's applicability to the entity's other Protection Systems including other locations; or
- Explain in a declaration why corrective actions are beyond the entity's control or would not improve BES reliability, and that no further corrective actions will be taken.

M5 consists of the following evidence, in electronic or hardcopy format: (1) a dated CAP and evaluation, or (2) a dated declaration explaining why corrective action is beyond the entity's control or would not improve BES reliability, and that no further corrective actions will be taken.

R6 applies to each Transmission Owner, Generator Owner, and Distribution Provider that is subject to a CAP adopted in R5. Each affected entity shall implement the CAP if actions or timetables change.

M6 shall be dated, may be in electronic or hardcopy format, and shall demonstrate the entity implemented the CAP, including updating actions or timetables. The evidence may include records showing implementation, work management program records, work orders, and maintenance records.

FERC-725G4

FERC-725G4 consists of the information collection requirements of Reliability Standard

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

PRC-010-2 (Undervoltage Load Shedding).¹⁰ The purpose of Reliability Standard PRC-010-2 is to establish an integrated and coordinated approach to the design, evaluation, and reliable operation of Undervoltage Load Shedding (UVLS) Programs.¹¹ NERC requests and collects data relevant to UVLS Programs from Planning Coordinators and Transmission Planners in accordance with this Reliability Standard. The entire text of the Requirements and Measures is at: <https://www.nerc.com/pa/Stand/Reliability%20Standards/PRC-010-2.pdf>.

Here is a summary of the information collection activities associated with this Reliability Standard:

R1. Each Planning Coordinator or Transmission Planner that is developing a UVLS Program shall evaluate its effectiveness and provide the Program’s specifications and implementation schedule to the UVLS entities responsible for implementing the Program. The evaluation shall include, but is not limited to, studies and analyses that show: (1) The implementation of the UVLS Program resolves the identified undervoltage issues that led to its development and design, and (2) The UVLS Program is integrated through coordination with generator voltage ride-through capabilities and other protection and control systems, including, but not limited to, transmission line protection, autoreclosing, Remedial Action Schemes, and other undervoltage-based load shedding programs.

M1 may include, but is not limited to, date-stamped studies and analyses, reports, or other documentation detailing the effectiveness of the Program, and date-stamped communications showing that the Program specifications and implementation scheduled were provided to UVLS entities.

R2 applies to each UVLS entity,¹² which shall adhere to: (1) the UVLS Program specifications and implementation schedule determined by the entity’s Planning Coordinator or Transmission Planner associated with UVLS Program development per R1, or (2) any Corrective Action Plan per R5.

M2 must include date-stamped documentation on the completion of actions and may include, but is not limited to, identifying the equipment armed with UVLS relays, the UVLS relay settings, associated Load summaries, work management program records, and maintenance records.

¹⁰ “Load shedding” means disconnecting consumers from the grid to prevent demand from exceeding supply, which can cause widespread grid collapse.

¹¹ A “UVLS Program” provides for automatic load shedding, utilizing voltage inputs, in specific circumstances and locations.

¹² A UVLS entity is a distribution provider or transmission owner responsible for the ownership, operation, and control of UVLS equipment, as required by a UVLS Program.

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

R3 applies to each Planning Coordinator or Transmission Planner, which shall perform a comprehensive assessment to evaluate the effectiveness of each of its UVLS Programs at least once every 60 calendar months. Each assessment shall include, but is not limited to, studies and analyses that evaluate whether: (1) the UVLS Program resolves the identified undervoltage issues for which the UVLS Program is designed, and (2) the UVLS Program is integrated through coordination with generator voltage ride-through capabilities and other protection and control systems, including, but not limited to, transmission line protection, autoreclosing, Remedial Action Schemes, and other undervoltage-based load shedding programs.

M3 may include, but is not limited to, date-stamped reports or other documentation detailing the assessment of the UVLS Program.

R4 applies to each Planning Coordinator or Transmission Planners, which shall, within 12 calendar months of an event that resulted in a voltage excursion for which its UVLS Program was designed to operate, perform an assessment to evaluate: (1) whether its UVLS Program resolved the undervoltage issues associated with the event, and (2) the performance (i.e., operation and non-operation) of the UVLS Program equipment.

M4 may include, but is not limited to, date-stamped event data, event analysis reports, or other documentation detailing the assessment of the UVLS Program and associated equipment.

R5 applies to each Planning Coordinator or Transmission Planner that identifies deficiencies during an assessment performed in either R3 or R4 of Reliability Standard PRC-010-2. Each affected entity shall develop a Corrective Action Plan to address the deficiencies and subsequently provide the Corrective Action Plan, including an implementation schedule, to UVLS entities within three calendar months of completing the assessments.

M5 must include a date-stamped Corrective Action Plan that addresses identified deficiencies and may also include date-stamped reports of other documentation supporting the Corrective Action Plan. Evidence should also include date-stamped communications showing that the Corrective Action Plan and an associated implementation schedule were provided to UVLS entities.

R6 applies to each Planning Coordinator that has a UVLS Program in its area. Each affected entity shall update a database containing data necessary to model the UVLS Program(s) in its area for use in event analyses and assessments of the UVLS Program at least once each calendar year.

M6 may include, but is not limited to, date-stamped spreadsheets, database reports, or

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

other documentation demonstrating a UVLS Program database was updated.

R7 applies to each UVLS entity, which shall provide data to its Planning Coordinator according to the format and schedule specified by the Planning Coordinator to support maintenance of a UVLS Program database.

M7 may include, but is not limited to, date-stamped emails, letters, or other documentation demonstrating that data was provided to the Planning Coordinator as specified.

R8 applies to each Planning Coordinator that has a UVLS Program in its area. Each affected entity shall provide its UVLS Program database to other Planning Coordinators and Transmission Planners within its Interconnection, and other functional entities with a reliability need, within 30 calendar days of a request.

M8 may include, but is not limited to, date-stamped emails, letters, or other documentation demonstrating that the UVLS Program database was provided within 30 calendar days of receipt of a written request.

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

The information collection provisions of Reliability Standard PRC-004-6 (i.e., FERC-725G1) specifically authorize the submission of information in electronic or hardcopy format. While the information collection provisions of Reliability Standard PRC-010-2 (i.e., FERC-725G4) do not specifically include such an authorization, nothing in that Reliability Standard prohibits the submission of information in an electronic format.

Based on experience with FERC-725G1 and FERC-725G4, Commission staff believes that nearly all of the respondents are likely to make and keep relevant records in an electronic format. Each of the Regional Entities has a well-established compliance portal for registered entities to electronically submit compliance information and reports. The compliance portals allow documents developed by the registered entities to be attached and uploaded to the Regional Entity's portal. Compliance data can also be submitted by filling out data forms on the portals. These portals are accessible through an internet browser password protected user interface.

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. This information is not available elsewhere. In general, the Commission and the ERO seek to prevent duplication during the process of developing and modifying Reliability Standards.

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

The Commission does not collect data on whether the respondents are small entities. In general, small entities generally can reduce their burden by taking part in a joint registration organization or a coordinated function registration. These options allow an entity the ability to share its compliance burden with other similar entities.

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

These requirements are necessary for the reliable operation of the bulk electric system. Any reduction in frequency may diminish the ability of NERC, Regional Entities, or FERC in maintaining reliability on the bulk electric system.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

There are no special circumstances as described at 5 CFR 1320.5(d)(2).

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

The ERO process to develop or modify Reliability Standards is a collaborative process involving the ERO, Regional Entities and other stakeholders developing and reviewing drafts, and providing comments, vetting and voting (possibly multiple rounds) on the standards, with the final proposed standard submitted to the FERC for review and approval.¹³

In seeking renewal of FERC-725G1 and FERC-725G4, the Commission issued a 60-day

¹³ Details of the current ERO Reliability Standard processes are available on the NERC website at http://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/Appendix_3A_StandardProcessesManual_20130626.pdf.

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

notice on August 5, 2021, and published a 60-day notice on August 11, 2021 (86 FR 44010). The Commission received no public comments in response. The Commission also issued a 30-day notice on November 5, 2021, and published a 30-day notice on November 12, 2021 (86 FR 62809).

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

The Commission does not make payments or provide gifts for respondents related to these collections.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

According to the NERC Rules of Procedure , “...a Receiving Entity shall keep in confidence and not copy, disclose, or distribute any Confidential Information or any part thereof without the 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 for Reliability Standards to FERC. Rather, they submit the information to NERC or the Regional Entities, or they maintain it internally. 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.

These collections do not contain any questions of a sensitive nature.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

FERC-725G1

The Commission estimates 703 responses annually¹⁴ for FERC-725-G1, and per-response burdens of 16.5 hours and \$1,435.50. The total estimated burdens per year are 703 responses, 11,599.5 hours, and \$1,009,156.50. These burdens are itemized in the following table:

Table 12-1
Annualized Estimates of Respondents’ Burdens for FERC-725G1
Mandatory Reliability Standards for the Bulk Power System: Reliability Standard
PRC-004-6 (Protection System Misoperation Identification and Correction)

A. Number of Respondents	B. Annual Number of Responses per Respondent	C. Total Number of Responses (Column A x Column B)	D. Average Burden & Cost Per Response ¹⁵	E. Total Annual Burden Hours & Total Annual Cost (Column C x Column D)	F. Cost per Respondent (\$) (Column E ÷ Column A)
703	1	703	16.5 hrs.; \$1,435.50	11,599.5 hrs.; \$1,009,156.50	\$1,435.50

FERC-726G4

The Commission estimates 25 responses annually for FERC-725-G4, and per-response burdens of 48 hours and \$4,176. The total estimated burdens per year are 25 responses, 1,200 hours, and \$104,400. These burdens are itemized in the following table:

¹⁴ Using the May 14, 2021 NERC compliance registration information for entities that are Generator Owners, Transmission Owners, and Distribution Providers (in the US), the number of potential respondents is 1,405, taking into account overlap between functions. However, not every entity will have a misoperation event during a year. Based on our previous experience with this information collection, we are estimating that approximately half of the 1,405 potential respondents annually will have a reportable misoperation, i.e., 703 responses per year for FERC-725G1.

¹⁵ Commission staff estimates that the average industry hourly cost for this information collection is approximated by the current FERC 2021 average hourly costs for wages and benefits, i.e., \$87.00/hour.

Table 12-2
Annual Estimates of Respondents' Burdens
Mandatory Reliability Standards: Reliability Standard PRC-010-2 (Undervoltage Load Shedding) (FERC-725G4)

A. Number of Respondents	B. Annual Number of Responses per Respondent	C. Total Number of Responses (Column A x Column B)	D. Average Burden & Cost Per Response ¹⁶	E. Total Annual Burden Hours & Total Annual Cost (Column C x Column D)	F. Cost per Respondent (\$) (Column E ÷ Column A)
25	1	25	48 hrs.; \$4,176	1,200 hrs.; \$104,400	\$4,176

13. ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS

There is no start-up, capital, or other non-labor hour cost associated with the PRA aspects of FERC-725G1 or FERC-725G4. All costs are associated with burden hours and are addressed in Questions #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. Any involvement by the Commission is covered under the FERC-725 collection (OMB Control No. 1902-0225) and is not part of this request. For this reason, this renewal request estimates no cost for Federal analysis and processing of filings.

The PRA Administrative Cost (estimate of \$6,475 per collection annually) is a Federal cost associated with preparing, issuing, and submitting materials necessary to comply with the Paperwork Reduction Act of 1995 (PRA) for rulemakings, orders, or any other vehicle used to create, modify, extend, or discontinue an information collection. This

¹⁶ Commission staff estimates that the average industry hourly cost for this information collection is approximated by the current FERC 2021 average hourly costs for wages and benefits, i.e., \$87.00/hour.

FERC-725G1, OMB Control No. 1902-0284 and
 FERC-725G4, OMB Control No. 1902-0282

average annual cost includes requests for extensions, all associated rulemakings or orders, and other changes to the collection, as well as necessary publications in the Federal Register. The estimated annualized cost to the Federal Government for FERC-725G1 and FERC-725G4 follows:

	Number of Employees (FTE)	Estimated Annual Federal Cost
FERC-725G1 and FERC-725G4 Analysis and Processing of filings	0	\$0
PRA Administrative Cost for FERC-725G1 and FERC-725G4 (\$6,475 for each information collection)		\$12,950
FERC Total		\$12,950

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

FERC-725G1

There are no program changes. We are estimating 703 responses annually, which is 44 more responses than previously approved. This adjustment is based on the most recent NERC compliance registration list. We are estimating a rounded hour burden of 11,600 hours annually, which is 23 fewer hours than previously approved. The adjustment is based on the respondents' increased familiarity with the Requirements and Measures.

The following table summarizes the changes in FERC-725G1:

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

FERC-725G1	Total Request	Previously Approved	Change due to Adjustment in Estimate	Change Due to Agency Discretion
Annual Number of Responses	703	659	44 more responses	0
Annual Time Burden (Hrs.)	11,600 (rounded)	11,623	23 fewer hours (rounded)	0
Annual Cost Burden	0	0	0	0

FERC-725G4

There are no program changes. We are estimating 25 responses annually, which is 1 less response than previously approved. This adjustment is based on the most recent NERC compliance registration list. We are estimating 1,200 hours annually, which is 48 fewer hours than previously approved. This adjustment is due to the reduced number of respondents.

The following table summarizes the changes in FERC-725G4:

FERC-725G4	Total Request	Previously Approved	Change due to Adjustment in Estimate	Change Due to Agency Discretion
Annual Number of Responses	25	26	1 less response	0
Annual Time Burden (Hr.)	1,200	1,248	48 fewer hours	0
Annual Cost Burden (\$)	0	0	0	0

16. TIME SCHEDULE FOR PUBLICATION OF DATA

There are no data publications.

17. DISPLAY OF EXPIRATION DATE

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

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

FERC-725G1, OMB Control No. 1902-0284 and
FERC-725G4, OMB Control No. 1902-0282

There are no exceptions.