Supporting Statement

FERC-725L, MOD Reliability Standards, as modified by RD14-5-000 Modeling, Data, and Analysis Reliability Standards

The Federal Energy Regulatory Commission (Commission or FERC) requests Office of Management and Budget (OMB) review of FERC-725L, MOD Reliability Standards, as contained in the Delegated Letter Order in Docket No. RD14-5-000. FERC-725L requirements are contained in 18 Code of Federal Regulations (CFR), Part 40.

The Order in Docket No. RD14-5 approved Modeling, Data, and Analysis (MOD) Reliability Standards MOD-032-1 and MOD-033-2 developed by the North American Electric Reliability Corporation (NERC). The Commission has certified NERC as the Electric Reliability Organization (ERO) responsible for developing and enforcing mandatory Reliability Standards.

NOTE: Reliability Standard MOD-032-1 consolidates NERC-approved Reliability Standards MOD-011-0, MOD-013-1 and MOD-014-0, as well as, Commission approved Reliability Standards MOD-010-0 and MOD-012-0, into one standard. [The consolidated standards are currently included in the FERC-725A information collection (OMB Control Number: 1902-0244) and will be removed from that collection subsequent to OMB approval of this ICR.]

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

On August 8, 2005, the Electricity Modernization Act of 2005, which is Title XII, Subtitle A, of the Energy Policy Act of 2005 (EPAct 2005), was enacted into law.² EPAct 2005 adds a new Section 215 to the FPA, which requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards which are subject to Commission review and approval. Once approved, an ERO would enforce the Reliability Standards either subject to Commission oversight or by the Commission independently.³

On February 3, 2006, the Commission issued Order No. 672, implementing section 215 of the FPA.⁴ Pursuant to Order No. 672, the Commission certified one organization, NERC, as the

¹ In Order No. 693, the Commission approved Reliability Standards MOD-010 and MOD-012. Regarding Reliability Standards MOD-011, MOD-013, MOD-014, and MOD-015, the Commission in Order No. 693 did not approve or remand the standards, pending the receipt of additional information. *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, 72 FR 16416 (Apr. 4, 2007), at PP 1131-1222, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

² Energy Policy Act of 2005, Pub. L. No 109-58, Title XII, Subtitle A, 119 Stat. 594, 941 (2005), to be codified at 16 U.S.C. 824o.

^{3 16} USC 824o(e)(3) (2012).

⁴ Rules Concerning Certification of the Electric Reliability Organization; Procedures for the Establishment, Approval and Enforcement of Electric Reliability Standards, Order No. 672, 71 FR 8662 (February 17, 2006), FERC

ERO.⁵ The ERO is required to develop Reliability Standards, which are subject to Commission review and approval.⁶ The Reliability Standards apply to users, owners and operators of the Bulk-Power System, as set forth in each Reliability Standard.

Section 215(d)(2) of the FPA and the Commission's regulations provide that the Commission may approve a proposed Reliability Standard if it determines that the proposal is just, reasonable, not unduly discriminatory or preferential, and in the public interest. The Commission specified in Order No. 672 certain general factors it would consider when assessing whether a particular Reliability Standard is just and reasonable. According to this guidance, a Reliability Standard must provide for the Reliable Operation of Bulk-Power System facilities and may impose a requirement on any user, owner or operator of such facilities. It must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal. The Reliability Standard should be clear and unambiguous regarding what is required and who is required to comply.

In its petition to the Commission, NERC states that "Reliability Standards MOD-032-1 and MOD-033-1 are designed to replace, consolidate and improve upon" existing MOD standards, "in addressing system-level modeling data and validation requirements necessary for developing planning models and the Interconnection-wide cases that are integral to analyzing the reliability of the Bulk-Power System." These standards address FERC directives and recommendations for a NERC white paper.⁹

Specifically, MOD-032-1 "requires data submission by applicable data owners to their respective Transmission Planners and Planning Coordinators to support the system wide modeling." NERC says in its petition that,

Power system studies rely on models to predict system performance under various conditions. Calculation of operating limits, planning studies for assessments of new generation and load

Stats. & Regs. ¶ 31,204 (2006), order on reh'g, Order No. 672-A, 71 FR 19814 (April 18, 2006), FERC Stats. & Regs. ¶ 31,212 (2006).

⁵ North American Electric Reliability Corp., 116 FERC ¶ 61,062 (ERO Certification Order), order on reh'g & compliance, 117 FERC ¶ 61,126 (ERO Rehearing Order) (2006), order on compliance, 118 FERC ¶ 61,030 (2007) (January 2007 Compliance Order).

⁶ Section 215(a)(3) of the FPA defines the term Reliability Standard to mean "a requirement, approved by the Commission under this section, to provide for reliable operation of the Bulk-Power System. This term includes requirements for the operation of existing Bulk-Power System facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for the reliable operation of the Bulk-Power System, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity." 16 U.S.C. 824o(a)(3).

⁷ Order No. 672 at P 262, 321-37.

⁸ NERC Petition at 2.

⁹ NERC Petition at 3.

¹⁰ See Reliability Standard MOD-032-1 (Background)

growth, and performance assessments of system integrity protection schemes are examples of studies that depend on accurate mathematical representations of transmission, generation and load. If models are too optimistic, it could result in grid under-investment, unsafe operating conditions, and power outages. In contrast, pessimistic models can result in overly conservative grid operation and under-utilization of network capacity. It is thus vital that models, including all of their data, are complete, accurate, and up to date.

The information collection requirements associated with the **MOD-032-1 Reliability Standard** are:

R1. Each Planning Coordinator and each of its Transmission Planners shall jointly develop steady-state, dynamics, and short circuit modeling data requirements and reporting procedures for the Planning Coordinator's planning area that include: [Violation Risk

Factor: Lower] [Time Horizon: Long-term Planning]

- 1.1. The data listed in Attachment 1.
- 1.2. Specifications of the following items consistent with procedures for building the Interconnection-wide case(s):
 - 1.2.1. Data format;
 - 1.2.2. Level of detail to which equipment shall be modeled;
 - 1.2.3. Case types or scenarios to be modeled; and
 - 1.2.4. A schedule for submission of data at least once every 13 calendar months.MOD-032-1 Data for Power System Modeling and Analysis
- 1.3. Specifications for distribution or posting of the data requirements and reporting procedures so that they are available to those entities responsible for providing the data.
- M1. Each Planning Coordinator and Transmission Planner shall provide evidence that it has jointly developed the required modeling data requirements and reporting procedures specified in Requirement R1.
- R2. Each Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, and Transmission Service Provider shall provide steady-state, dynamics, and short circuit modeling data to its Transmission Planner(s) and Planning Coordinator(s) according to the data requirements and reporting procedures developed by its Planning Coordinator and Transmission Planner in Requirement R1. For data that has not changed since the last submission, a written confirmation that the data has not changed is sufficient. [Violation Risk Factor: Medium] [Time Horizon:

Long-term Planning]

- M2. Each registered entity identified in Requirement R2 shall provide evidence, such as email records or postal receipts showing recipient and date, that it has submitted the required modeling data to its Transmission Planner(s) and Planning Coordinator(s); or written confirmation that the data has not changed.
- R3. Upon receipt of written notification from its Planning Coordinator or Transmission Planner regarding technical concerns with the data submitted under Requirement R2, including the technical basis or reason for the technical concerns, each notified Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, or Transmission Service Provider shall respond to the notifying Planning Coordinator or Transmission Planner as follows: [Violation Risk Factor: Lower] [Time Horizon: Long-term Planning]
- 3.1. Provide either updated data or an explanation with a technical basis for maintaining the current data;
- 3.2. Provide the response within 90 calendar days of receipt, unless a longer time period is agreed upon by the notifying Planning Coordinator or Transmission Planner.
- M3. Each registered entity identified in Requirement R3 that has received written notification from its Planning Coordinator or Transmission Planner regarding technical concerns with the data submitted under Requirement R2 shall provide evidence, such as email records or postal receipts showing recipient and date, that it has provided either updated data or an explanation with a technical basis for maintaining the current data to its Planning Coordinator or Transmission Planner within 90 calendar days of receipt (or within the longer time period agreed upon by the notifying Planning Coordinator or Transmission Planner), or a statement that it has not received written notification regarding technical concerns with the data submitted. MOD-032-1 Data for Power System Modeling and Analysis
- R4. Each Planning Coordinator shall make available models for its planning area reflecting data provided to it under Requirement R2 to the Electric Reliability Organization (ERO) or its designee to support creation of the Interconnection-wide case(s) that includes the Planning Coordinator's planning area. [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]
- M4. Each Planning Coordinator shall provide evidence, such as email records or postal receipts showing recipient and date, that it has submitted models for its planning area reflecting data provided to it under Requirement R2 when requested by the ERO or its designee.

Evidence Retention Requirements:

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The applicable entity shall keep data or evidence to show compliance with Requirements R1 through R4, and Measures M1 through M4, since the last audit, unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

If an applicable entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved, or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

The information collection requirements associated with the **MOD-033-1 Reliability Standard** are:

- R1. Each Planning Coordinator shall implement a documented data validation process that includes the following attributes: [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]
- 1.1. Comparison of the performance of the Planning Coordinator's portion of the existing system in a planning power flow model to actual system behavior, represented by a state estimator case or other Real-time data sources, at least once every 24 calendar months through simulation;
- 1.2. Comparison of the performance of the Planning Coordinator's portion of the existing system in a planning dynamic model to actual system response, through simulation of a dynamic local event, at least once every 24 calendar months (use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison, and complete each comparison within 24 calendar months of the dynamic local event). If no dynamic local event occurs within the 24 calendar months, use the next dynamic local event that occurs;

- 1.3. Guidelines the Planning Coordinator will use to determine unacceptable differences in performance under Part 1.1 or 1.2; and
- 1.4. Guidelines to resolve the unacceptable differences in performance identified under Part 1.3.
- M1. Each Planning Coordinator shall provide evidence that it has a documented validation process according to Requirement R1 as well as evidence that demonstrates the implementation of the required components of the process.
- R2. Each Reliability Coordinator and Transmission Operator shall provide actual system behavior data (or a written response that it does not have the requested data) to any Planning Coordinator performing validation under Requirement R1 within 30 calendar days of a written request, such as, but not limited to, state estimator case or other Real-time data (including disturbance data recordings) necessary for actual system response validation. [Violation Risk Factor: Lower] [Time Horizon: Long-term Planning]
- M2. Each Reliability Coordinator and Transmission Operator shall provide evidence, such as email notices or postal receipts showing recipient and date that it has distributed the requested data or written response that it does not have the data, to any Planning Coordinator performing validation under Requirement R1 within 30 days of a written request in accordance with Requirement R2; or a statement by the Reliability Coordinator or Transmission Operator that it has not received notification regarding data necessary for validation by any Planning Coordinator.

Evidence Retention Requirements for MOD-033-1:

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The applicable entity shall keep data or evidence to show compliance with Requirements R1 through R2, and Measures M1 through M2, since the last audit, unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

If an applicable entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved, or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Reliability Standard MOD-033-1 "requires applicable entities to establish consistent validation requirements to facilitate the collection of accurate data and building of planning models to analyze the reliability of the interconnected transmission system."¹¹

NERC goes on in its petition to emphasize the importance of models in backing up power system studies which in turn predict system performance under various conditions.

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

Reliability Standard MOD-032-1 consolidates NERC-approved Reliability Standards MOD-011-0, MOD-013-1 and MOD-014-0, as well as, Commission approved Reliability Standards MOD-010-0 and MOD-012-0, into one standard. Reliability Standard MOD-032-1 requires data submission by applicable data owners (Balancing Authorities, Generation Owners, Load Serving Entities, Resource Planners, Transmission Owners, and Transmission Service Providers) to their respective transmission planners and planning coordinators to support the interconnection model building process in their interconnection. Specifically, applicable data owners must provide steady-state, dynamics, and short circuit modeling data to their respective Planning Coordinators and Transmission Planners. A steady-state model is a snapshot in time of all system conditions (e.g. load, generation, transmission) without a change in input. The models can be past, current, or future predicted points in time. For example, a dynamic model looks at generator rotor angle in faults while a short circuit model looks for faults.

Reliability Standard MOD-033-1 is a new standard that requires each planning coordinator to implement a documented process to perform steady-state and dynamics model validation within its planning area.

The purpose of the Reliability Standards MOD-032-1 and MOD-033-1 are to establish comprehensive modeling data requirements, reporting procedures, and validation requirements necessary to accurately model the interconnected transmission system for the near-term transmission planning horizon and the long-term transmission planning horizon. The improvements made to modeling and validation in these two standards should increase the

¹¹ Reliability Standard MOD-033-1 (Purpose).

¹² In Order No. 693, the Commission approved Reliability Standards MOD-010 and MOD-012. Regarding Reliability Standards MOD-011, MOD-013, MOD-014, and MOD-015, the Commission in Order No. 693 did not approve or remand the standards, pending the receipt of additional information. *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, 72 FR 16416 (Apr. 4, 2007), at PP 1131-1222, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

correlation between the power flow studies, as prepared by the Transmission Planner and Planning Coordinator, and the actual responses of the power system to disturbances.¹³ This information is used by all applicable entities so that each entity knows potential issues (load flow, VAR imbalance, etc.) with their system and can act to address those issues.

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

The use of current or improved technology are not explicitly covered in Reliability Standards, and is therefore left to the discretion of each entity.

The Reliability Standards do not mandate how data are reported, retained, or shared. For MOD-032-1, Reliability Coordinators and Transmission Planners are to jointly develop data reporting procedures. For the model validation information needed for MOD-033-1 and the data reporting in MOD-032-1, the standards suggests that email or mail service are acceptable methods to deliver necessary data. For the record retention requirements, the Reliability Standards do not address how documents are submitted to compliance authorities. For example, when a Regional Entity (not FERC) audits a respondent for compliance with this Reliability Standard, it may view the respondents' email receipts showing that data was submitted properly. The Reliability Standards do not address how or whether the records would be transmitted from the respondent to the Regional Entity. As a practical matter, the auditor would probably conduct an on-site visit to review the evidence, which is separate from the Requirements obligation to send the data to applicable entities of the Reliability Standards.

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. Under this proceeding, the Reliability Standards MOD-032-1 and MOD-33-1 do not duplicate any other collections.

The Commission is unaware of any other source of information similar to the additional requirements.

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

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. Detailed information regarding these options is available in NERC's Rules of Procedure at sections 507 and 508.¹⁴

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

As already discussed, Reliability Standards MOD-032-1 and MOD-33-1 contain requirements related to modeling and data validation. Applicable entities report data needed for modeling to Planning Coordinators and Transmission Planners at least every 13 months. Other requirements are done as needed. The time frames were determined by the standards drafting team to meet the purposes of the standards.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

There are no special circumstances related to the information collection.

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

The 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, with the final proposed standard submitted to the FERC for review and approval. In addition, FERC published a notice in the <u>Federal Register</u>, 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 collection of data. The notice was published in the Federal Register on May 14, 2014 (79 FR 27588). We did not

¹⁴ Available at

http://www.nerc.com/FilingsOrders/us/RuleOfProcedureDL/NERC_ROP_Effective_20140701_updated_20140602.pdf.

¹⁵ Details of the current ERO standard processes are available on the NERC website at http://www.nerc.com/docs/standards/sar/Appendix 3A Standard Processes Manual 20100903 2 .pdf.

¹⁶ In the initial public notice we stated that the modified information collection was "FERC-725A". We have corrected the applicable collection (now FERC-725L) in the subsequent notice, in the supporting statement and in OMB's online submittal system.

receive any comments in response to the public notice. FERC published a second notice on August 25, 2014 (79 FR 50639) alerting the public that we would be submitting the information collection requirements to OMB for approval and for the public to submit any relevant comments to OMB for consideration during review.

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

There are no payments or gifts to the respondents.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

According to the NERC Rule of Procedure¹⁷, "…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 due to the Reliability Standards to FERC. Rather, they submit the information to NERC, the regions, or maintain it internally.

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.

This collection does not include any questions of a sensitive nature.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

The existing burden for the FERC-725L information collection is as follows:

• FERC-725L:

o Responses: 3,274o Burden Hours: 26,540

This burden was approved by OMB as part of a Commission rulemaking in Docket No. RM13-16. This final rule approved five Reliability Standards: MOD-025-2, MOD-026-1, MOD-027-1, PRC-019-1 and PRC-024-1. (The PRC standards are in information collection FERC-725G.)

¹⁷ Section 1502, paragraph 2, available at NERCs website

The purpose of the Reliability Standards is to ensure that generators remain in operation during specified voltage and frequency excursions; properly coordinate protective relays and generator voltage regulator controls; and ensure that generator models accurately reflect the generator's capabilities and equipment performance.

MOD-025-2 (Ver	MOD-025-2 (Verification and Data Reporting of Generator Real and Reactive Power						
Capability and Synchronous Condenser Reactive Power Capability)							
			Average				
		Number of	Burden	Total			
		Responses	Hours	Annual			
	Number of	per	Per	Burden			
	Respondents ¹⁸	Respondent	Response	Hours	Total Annual		
FERC-725L	(1)	(2)	(3)	(1)x(2)x(3)	Cost ¹⁹		
Develop testing	738	1	8	5,904	\$307,008		
procedures,	GO			one-time	one-time		
verification					(\$52/hr)		
process, and							
process for							
collection of data							
Attachment 2	738	1	6	4,428	\$309,960		
	GO				(\$70/hr)		
Evidence	738	1	1	738	\$20,664		
Retention	GO				(\$28/hr)		
TOTAL				11,070	\$637,632		

MOD-026-1 (Verification of Models and Data for Generator Excitation Control System or Plant Volt/Var Control Functions)

Assuming 10 generators per generator owner, using EIA-860 2012 generator data (http://www.eia.gov/electricity/data/eia860/) total number of units > 20 MW are 7,379, which results in 738 generator owners.

¹⁸ GO = Generator Owner, TP = Transmission Planner.

¹⁹ The estimates for cost per hour are derived as follows:

^{• \$52/}hour, the average of the salary plus benefits for an engineer, from Bureau of Labor and Statistics at http://bls.gov/oes/current/naics3 221000.htm

^{• \$70/}hour, the average of the salary plus benefits for a manager and an engineer, from Bureau of Labor and Statistics at http://bls.gov/oes/current/naics3 221000.htm

 ^{\$28/}hour, based on a Commission staff study of record retention burden cost.

FERC-725L	Number of Respondents (1) ¹⁸	Number of Responses per Respondent (2)	Average Burden Hours Per Response (3)	Total Annual Burden Hours (1)x(2)x(3)	Total Annual Cost ¹⁹
Develop testing procedures, verification process, and process for collection of data	356 GO	1	8	2,848 one-time	\$148,096 one-time (\$52/hr)
Instructions for obtaining excitation control system or plant voltage/variance control function model	187 TP	1	8	1,496	\$104,720 (\$70/hr)
Documentation on generator verification	356 GO	1	8	2,848	\$199,360 (\$70/hr)
Evidence Retention TOTAL	543 GO and TP	1	1	543 7,735	\$15,204 (\$28/hr) \$467,380

MOD-027-1 (Verification of Models and Data for Turbine/Governor and Load Control							
or Active Power/I	or Active Power/Frequency Control Functions)						
	Average						
	Number of Burden Total						
	Responses Hours Annual						
	Number of per Per Burden						
	Respondents Respondent Response Hours Total Annual						
FERC-725L	(1) ¹⁸	(2)	(3)	(1)x(2)x(3)	Cost ¹⁹¹⁶		

Develop testing	356	1	8	2,848	\$148,096
procedures,	GO			one-time	one-time
verification					(\$52/hr)
process, and					
process for					
collection of data					
Instructions for	187	1	8	1,496	\$104,720
obtaining	TP				(\$70/hr)
turbine/governor					
and load control					
or active					
power/frequency					
control model					
Documentation	356	1	8	2,848	\$199,360
on generator	GO				(\$70/hr)
verification					
Evidence	543	1	1	543	\$15,204
Retention	GO and TP				(\$28/hr)
TOTAL			•	7,735	\$467,380

The additional burden proposed in this package is detailed in response to number 15 below.

13. ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS

For the order in RD14-5, all of the PRA-related industry costs relate to burden hours. Commission staff addressed these costs in Question #15. There are no PRA-related capital or start-up costs, other than costs associated with burden hours.

Total Capital and Start-up cost: \$0

Total Operation, Maintenance, and Purchase of Services: \$0

14. ESTIMATED ANNUALIZED COST TO FEDERAL GOVERNMENT

The following table shows the cost imposed on the Federal Government.

FERC-725L	Number of Employees (FTEs) or Number of Hours	Estimated Annual Federal Cost	
Analysis and Processing of	0	\$0	

filings	
Paperwork Reduction Act Administrative Cost ²⁰	\$5,092
FERC Total	\$5,092

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

The number of respondents is based on the NERC Registry as of April 30, 2014.

MOD-032-1 Burden Table

In the first row, "Develop data requirements and reporting procedures" means that Planning Authorities and Transmission Planners have to develop steady-state, dynamics, and short circuit modeling data requirements and reporting procedures. Certain data is required as listed in attachment 1 of Reliability Standard MOD-032-1.

In the second row, "Data Submittal" means that certain entities have to submit the data as described in the previous paragraph to the Planning Authorities.

In the third row, "Evidence Retention" refers to the fact that each entity is required to maintain evidence that it complied with the requirements of the standard.

MOD-033-1 Burden Table

In the first row of the table for Reliability Standard MOD-033-1, "Develop data validation procedures" refers to the Planning Authorities' obligation to implement a data validation process that includes attributes related to comparison of various models to actual system behavior.

In the second row, "Data Submittal" refers to the actual system behavior that Reliability Coordinators and Transmission Operators provide to Planning Authorities to complete the data validation process.

In the third row, "Evidence Retention" refers to the fact that each entity is required to maintain evidence that it complied with the requirements of the standard.

For both standards, the burden estimates are averages based on FERC staff's professional experience.

²⁰ 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 (not just the Order in Docket No. RD14-5), and other changes to the collection.

The Commission estimates the annual reporting burden and cost for the changes as follows:

MOD-032-1 (Data for Power System Modeling and Analysis)						
	Number of Respondents ²¹	Number of Responses per Respondent	Average Burden Hours Per Response	Total Annual Burden Hours	Total Annual	
FERC-725L	(1)	(2)	(3)	(1)x(2)x(3)	Cost ²²	
Develop data					фо.c. 0.00	
requirements and					\$96,000	
reporting	200				one-time	
procedures	(PA, TP)	1	8	1,600	(@\$60/hr)	
Data Submittal	1,355					
	(BA, GO, LSE,					
	PA, RP, TO,				\$650,400	
	TP, TSP)	1	8	10,840	(@\$60/hr)	
Evidence	1,355					
Retention	(BA, GO, LSE,					
	PA, RP, TO,				\$43,360	
	TP, TSP)	1	1	1,355	(@\$32/hr)	
TOTAL				13,795	\$789,760	

MOD-033-1 (Steady-State and Dynamics System Model Validation)						
			Average			
		Number of	Burden	Total		
	Responses Hours Annual					
	Number of	per	Per	Burden		
	Respondents ¹⁸ Respondent Response Hours Total Annual					
FERC-725L	(1)	(2)	(3)	(1)x(2)x(3)	Cost ¹⁹	

²¹ PA = Planning Authority, GO = Generator Owner, TP = Transmission Planner, BA = Balancing Authority, LSE = Load Serving Entity, RP = Resource Planner, TSP = Transmission Service Provider, RC = Reliability Coordinator, TOP = Transmission Operator.

²² The estimates for cost per hour (rounded to the nearest dollar) are derived as follows:

^{• \$60/}hour, the average salary plus benefits per engineer (from Bureau of Labor Statistics at http://bls.gov/oes/current/naics3 221000.htm)

^{\$32/}hour, the salary plus benefits for information and record clerks (from Bureau of Labor Statistics at http://bls.gov/oes/current/naics3 221000.htm)

FERC-725L (OMB Control No. 1902-0261) as modified by RD14-5 Delegated Letter Order Issued May 1, 2014 Updated 10/30/14

75				\$36,000
(PA)				one-time
	1	8	600	(@\$60/hr)
196				\$94,080
(RC, TOP)	1	8	1,568	(@\$60/hr)
200				\$6,400
(PA, RC, TOP)	1	1	200	(\$32/hr)
			2 368	\$136,480
	(PA) 196 (RC, TOP) 200	(PA) 1 196 (RC, TOP) 1 200	(PA) 1 8 196 (RC, TOP) 1 8 200	(PA) 1 8 600 196

The following table shows the additional responses and annual time burden added by the two standards.

FERC-725L	Total Request	Previously Approved	Change due to Adjustment in Estimate	Change Due to Agency Discretion
Annual Number of Responses	5,104	3,274	0	1,830
Annual Time Burden (Hr)	42,703	26,540	0	16,163
Annual Cost Burden (\$)	\$0	\$0	\$0	\$0

Of the 16,163 additional hours and 1,830 additional responses requested here,²³ 2,200 hours and 275 responses are associated with one-time tasks that will be completed in mid-2015. After completion the Commission intends to remove the one-time burden hours.

The burden increase is necessary in order to meet the requirements of the new Reliability Standards. These standards improve modeling data requirements, reporting procedures, and validation requirements which are necessary to accurately model the interconnected transmission system for the near-term transmission planning horizon (less than a year) and the long-term transmission planning horizon (greater than a year).

16. TIME SCHEDULE FOR PUBLICATION OF DATA

There is no tabulating, statistical, or tabulating analysis or publication plans for this collection of information.

17. DISPLAY OF EXPIRATION DATE

²³ In the tables, the data retention burden is not counted as a unique response except in the case of four unique PAs in the MOD-033-1 table. Hence the total number of responses are 1,830 (200+1,355+75+196+4=1,830).

The expiration date is displayed in a table posted on ferc.gov at http://www.ferc.gov/docs-filing/info-collections.asp.

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

The Commission does not use the data collected for this reporting requirement for statistical purposes. Therefore, the Commission does not use as stated in item (i) of the certification to OMB "effective and efficient statistical survey methodology." The information collected is case specific to each information collection.