SUPPORTING STATEMENT FOR FERC-516, Electric Rate Schedules and Tariff Filings (Final Rule, in Docket No. RM11-7-000, "Frequency Regulation Compensation in the Organized Wholesale Electric Markets")

The Federal Energy Regulatory Commission (Commission) is requesting Office of Management and Budget (OMB) review and approval of a revision to the information collection requirements contained in FERC-516 (Electric Rate Schedule and Tariff Filings, OMB Control No. 1902-0096) as revised in the Final Rule in Docket No. RM11-7-000 (Order 755, "Frequency Regulation Compensation in the Organized Wholesale Electric Markets," issued 10/20/2011, and available at http://elibrary.ferc.gov/idmws/File_list.asp?document_id=13964576. FERC-516 is currently approved through 7/31/2014.

Overview

Frequency regulation service is the injection or withdrawal of real power by facilities capable of responding appropriately to a transmission system operator's automatic generator control (AGC) signal. When dispatched generation does not equal actual load plus losses on a moment-by-moment basis, the imbalance will cause the grid's frequency to deviate from 60 Hertz, the standard in the U.S. While the system does deviate from 60 Hz in the normal operation of the grid, frequency deviations outside an acceptable range negatively affect energy consuming devices; major deviations cause generation and transmission equipment to disconnect from the grid, in the worst case leading to a cascading blackout. Frequency regulation service can help to prevent these adverse consequences by rapidly correcting deviations in the transmission system's frequency to bring it within an acceptable range.¹ The system operator calibrates the AGC signal sent to frequency regulation resources to respond to actual and anticipated frequency deviations or interchange power imbalance, both measured by area control error (ACE).

Today, frequency regulation is largely provided by generators (e.g., water, steam and combustion turbines) that are specially equipped for this purpose. Provision by other resources is emerging, as technologies develop and tariff and market rules adapt to accommodate new resources. For example, the Texas Interconnection and the Midwest

¹ A balancing authority achieves acceptable ranges by being in compliance with Control Performance Standards 1 and 2 as defined in the Commission-approved Reliability Standard BAL-001-0.1a.

Independent Transmission System Operator, Inc. (MISO) currently use controllable demand response in addition to generators to provide frequency regulation service. Such "regulation capable" generation, storage devices, and demand response resources can respond automatically to signals sent by the RTO or ISO, through AGC, to increase or decrease real power injections or withdrawals and thereby correct actual or anticipated frequency deviations or interchange schedule imbalance, as measured by the ACE. The faster a resource can ramp up or down, the more accurately it can respond to the AGC signal and avoid overshooting. Alternatively, when a resource ramps too slowly, its ramping limitations may cause it to work against the needs of the system and force the system operator to commit additional regulation resources to compensate.

In the Final Rule, the Commission finds that current frequency regulation compensation practices of regional transmission organizations (RTOs) and independent system operators (ISOs)² result in rates that are unjust, unreasonable, and unduly discriminatory or preferential. Specifically, current compensation methods for regulation service in RTO and ISO markets fail to acknowledge the inherently greater amount of frequency regulation service being provided by faster-ramping resources.³ In addition, certain practices of some RTOs and ISOs result in economically inefficient economic dispatch of frequency regulation resources.

By remedying these issues, the Commission is removing unduly discriminatory and preferential practices from RTO and ISO tariffs and requiring the setting of just and reasonable rates. Specifically, this Final Rule requires RTOs and ISOs to compensate frequency regulation resources based on the actual service provided, including a capacity payment that includes the marginal unit's opportunity costs and a payment for performance that reflects the quantity of frequency regulation service provided by a resource when the resource is accurately following the dispatch signal.

² The following RTOs and ISOs have organized wholesale electricity markets: PJM Interconnection, LLC (PJM); New York Independent System Operator, Inc. (NYISO); MISO; ISO New England Inc. (ISO-NE); California Independent System Operator Corp. (CAISO); and Southwest Power Pool, Inc. (SPP).

³ Both existing market participants and potential entrants are affected by inefficient pricing. It is possible that existing market participants would offer faster ramping capabilities to the system operator in response to a pricing scheme that recognized such service.

[Copies of the order in Docket RM11-7, the Commissioners' statements, news release, and a link to the public comments and other FERC Frequency Regulation information on <u>www.ferc.gov</u> are included under 'Supplementary Documents' in OMB's ROCIS system.]

A. JUSTIFICATION

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

Pursuant to section 206 of the Federal Power Act (FPA),⁴ the Commission is revising its regulations to remedy undue discrimination in the procurement of frequency regulation in the organized wholesale electric markets and ensure that providers of frequency regulation receive just and reasonable and not unduly discriminatory or preferential rates. Frequency regulation service is one of the tools RTOs and ISOs use to balance supply and demand on the transmission system, maintaining reliable operations. In doing so, RTOs and ISOs deploy a variety of resources to meet frequency regulation needs; these resources differ in both their ramping⁵ ability, which is their ability to increase or decrease their provision of frequency regulation service, and the accuracy with which they can respond to the system operator's dispatch signal. In this instance, the ability to provide more accurate frequency regulation service means to follow the system operator's dispatch signal more closely.

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

The information from FERC-516 enables the Commission to exercise its wholesale electric power and transmission oversight responsibilities in accordance with the Federal

⁴ 16 U.S.C. 824e. *Accord* 16 U.S.C. 824d (providing that rates must be just and reasonable).

⁵ "Ramping" or the ability to "ramp" is traditionally defined as the ability to change the output of real power from a generating unit per some unit of time, usually measured as megawatts per minute (MW/min). A generator ramps up to produce more energy and ramps down to produce less. A storage device ramps up by discharging energy and ramps down by charging. A demand response resource, in the context of the provision of frequency regulation, ramps up by consuming less energy and ramps down by consuming more.

Power Act. The Commission needs sufficient detail to make an informed and reasonable decision concerning the appropriate level of rates, and the appropriateness of non-rate terms and conditions, and to aid customers and other parties who may wish to challenge the rates, terms, and conditions proposed by the utility.

The major portion of data requested in the 18 CFR Part 35⁶ regulations specifies the rates, terms and conditions of service to support the wholesale customers in a service the utility is proposing to provide. Submission of the information is necessary because of the complexity of the utility conditions and terms to provide service. Sufficient detail must be obtained for the Commission to make informed and equitable decisions concerning the appropriate levels of rates and service, and to aid customers and other parties who may wish to challenge the rate proposed by the utility. Through this data collection process, the Commission is able to regulate public utilities and licensees by exercising oversight and review of the reported rate schedules and tariffs.

The final rule requires RTOs and ISOs to change their tariffs to provide for compensation for frequency regulation service in a manner that remedies undue discrimination in the procurement of such service in the organized wholesale electricity markets, and ensure just and reasonable rates.

Without this information, the Commission would be unable to discharge its responsibility to approve or modify electric utility tariff filings in order to improve the competitiveness of organized wholesale energy markets and thus ensure just and reasonable wholesale rates. Failure to issue these requirements would prevent timely Commission determination and approval of just and reasonable rates, which in turn, would prevent public utilities and licensees from being fairly compensated for services rendered.

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

In Order No. 714 (issued September 19, 2008, in Docket No. RM01-5-000⁷), the Commission revised its regulations to require that all tariffs, tariff revisions and rate change applications for the public utility, natural gas pipeline and oil pipeline industries

⁶ The data collected under FERC-516 is contained in 18 CFR Part 35.

⁷ *Electronic Tariff Filings*, Order No. 714, 73 FR 57515 (Oct. 3, 2008), FERC Stats. & Regs ¶ 31,276 (2008).

be filed according to a set of standards developed in conjunction with the North American Energy Standards Board.

Electronically filed tariffs and rate change applications improved the efficiency, convenience, and overall management of the tariff and tariff change filing process, facilitated public access to tariff information, and reduced the burden and expense associated with paper tariffs and tariff changes.

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.

Electric Rate schedules and tariff filings (containing transmission, rate, and terms and conditions of service) are not available from other sources. Therefore, no use or other modification of existing information can be made to perform oversight and review responsibilities under applicable legislation (e.g., the Federal Power Act, the Energy Policy Act of 1992, and the Energy Policy Act of 2005).

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

The five⁸ RTO's and ISO's to which the requirements of this rule would apply do not fall within the definition of small entities.⁹

⁸ SPP is not included in the respondents because they currently do not have a frequency regulation compensation mechanism in their tariff and independent of this proceeding they have indicated that they are already planning to implement such a mechanism. Therefore, it is expected that any additional burden on SPP due to this proceeding will be *de minimis*.

⁹ The RFA definition of "small entity" refers to the definition provided in the Small Business Act, which defines a "small business concern" as a business that is independently owned and operated and that is not dominant in its field of operation. *See* 5 U.S.C. § 601(3), *citing* to Section 3 of the Small Business Act, 15 U.S.C. § 632 (2000). The Small Business Size Standards component of the North American Industry Classification system defines a small utility as one that, including its affiliates, is primarily engaged in the generation, transmission, or distribution of electric energy for sale, and whose total electric output for the preceding fiscal years did not exceed 4MWh. 13 C.F.R. § 121.202 (Sector 22, Utilities, North American Industry Classification

- CAISO is a non-profit organization with over 54,000 megawatts of capacity and over 25,000 circuit miles of power lines. CAISO's annual total energy deliveries in 2009 were 230,754,000 MWh.
- NYISO is a non-profit organization that oversees wholesale electricity markets, dispatches over 500 generators, and manages a nearly 11,000-mile network of high-voltage lines. NYISO's 2009 energy deliveries, including transmission and distribution losses and excluding station power was 680,767,000 MWh.
- PJM comprises more than 600 members including power generators, transmission owners, electricity distributors, power marketers, and large industrial customers, serving 13 states and the District of Columbia. PJM's net energy for load in 2009 was 680,767,000 MWh.
- MISO is a non-profit organization with over 145,000 megawatts of installed generation. MISO has over 57,000 miles of transmission lines and serves 13 states and one Canadian province. MISO's annual transmission billings for 2010 were 629,000,000 MWh.
- ISO-NE is a regional transmission organization serving six states in New England. The system comprises more than 8,000 miles of high-voltage transmission lines and over 350 generators. In 2009, ISO-NE's net energy for load was 126,839,000 MWh.

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

The Commission proposes to require that each RTO and ISO amend their tariffs in order to comply with the frequency regulation compensation requirements contained in the final rule. The necessary changes are expected to occur one time only. As such, there is no possibility for collecting the information less frequently.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

This proposed program meets all of OMB's section 1320.5 requirements.

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

System, NAICS) (2004).

On May 26, 2010, the Commission hosted a publicly noticed technical conference inviting various stakeholders, including representatives from the RTOs and ISOs, industry, and academia to share their views on whether current frequency regulation market designs reflect the value of the service provided, and whether the use of faster-ramping resources for frequency regulation has the potential to provide benefits to the organized markets. The Commission discusses issues raised in the technical conference in the Notice of Proposed Rulemaking in this proceeding (paragraphs 14 through 25 at http://elibrary.ferc.gov/idmws/File_list.asp?document_id=13892997).

On February 17, 2011, the Commission issued a Notice of Proposed Rulemaking in this proceeding,¹⁰ seeking comment on its proposal to require both a uniform price for frequency regulation capacity paid to all cleared resources as well as a performance payment for the provision of frequency regulation service, with the latter payment reflecting a resource's accuracy of performance.

In response to the NOPR, the Commission received approximately 53 comments. The Commission discusses the comments in Section II of the Final Rule (at http://elibrary.ferc.gov/idmws/File_list.asp?document_id=13964576 and provided in OMB's ROCIS system under 'Supplementary Documents'). No commenters specifically addressed the burden or cost estimates

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

Not applicable. The Commission does not provide compensation or remuneration to entities subject to its jurisdiction.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

An entity seeking confidential treatment of the information must ask the Commission to treat this information as confidential and non-public, consistent with 18CFR 388.112 of the Commission's regulations. Generally, the Commission does not consider this information to be confidential.

11. **PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A** SENSITIVE NATURE THAT ARE CONSIDERED PRIVATE.

¹⁰ Frequency Regulation Compensation in the Organized Wholesale Power Markets, 76 FR 11,177, 134 FERC ¶ 61,124 (2011) (NOPR).

There are no questions of a sensitive nature that are considered private.

12. ESTIMATED BURDEN ON COLLECTION OF INFORMATION

This Final Rule amends the Commission's regulations under Part 35 to require RTOs and ISOs to pay both a uniform clearing price for frequency regulation capacity to all cleared frequency regulation resources and a performance payment for the provision of frequency regulation service, with the latter payment reflecting a resource's accuracy of performance. To accomplish this, the Commission requires RTOs and ISOs to adopt tariff revisions reflecting these changes. In addition to making tariff changes, the Commission also expects that RTOs and ISOs will be required to modify existing software systems. These software modifications are expected to require labor hours only and not the purchase of new software.

Data Collection FERC 516 (Frequency Regulation Final Rule in RM11-7)	Number of Respondent s ¹¹ [a]	Total No. of Responses [b]	Hours per Response [c]	Total Hours in Year one [b X c]
Conforming tariff changes made by RTOs/ISOs (18 CFR 35.28(g)(3)). One time burden.	5	5	100	500
Software changes made by RTOs/ISOs. One time burden. ¹²	5	5	1000	5000
Totals				5500 one

The estimated public reporting burden contained in the final rule in RM11-7 follows:

¹¹ As noted above, SPP is not included in the respondents.

¹² This category was not included in the NOPR estimates. Since issuing the NOPR the Commission has determined that each RTO's and ISO's market software will need to be modified in order to comply with this final rule.

	time burden
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The additional one-time burden of 5500 hours is being spread over the next three years for the purposes of submittal to the OMB, giving an average additional annual burden of 1833 hours (rounded) or 367 (rounded) hours per year per each of the 5 respondents to this Final Rule.

The following table shows the currently approved annual OMB inventory for the FERC-516, and is divided according to individual pieces, as they have been reported to OMB.

FERC-516 [split by Information Collection, as currently listed in OMB's	No. of Respondents	Total Annual No. Responses	Hours Per Response	Total Annual Hours
ROCIS system]	(a)	(b)	(c)	(b X c)
Electric Rates Schedules and		4468		
Tariff Filings FERC-516,	1,230	4400	103.27	461,409
Final Rule in RM05-5-017				
(one-time filing)	6	6	6	36
FERC-516, (one-time filing) RM05-5-013 Final Rule, Standards for Business Practices and Communications Protocols for				
Public Utilities	176	176	6	1056
Demand Response	6	68	114.71	7,800

(RM10-17)—			
one-time and			
monthly filings			
Total	1,230	4,718	470,301

The following table illustrates how the total annual number of responses and the total annual hours for the FERC-516 are affected by the final rule.

FERC-516	No. of Respondents	Total Annual No. of Responses	Hours Per Response	Total Annual Hours
Total		4,718 + 5 = 4,723		470,301 +1,833 = 472,134

13. ESTIMATED TOTAL COST BURDEN TO RESPONDENTS

The estimated total one-time cost for the collection of information contained in the frequency regulation final rule is \$687,500. This is 5500 labor hours @ \$125 an hour [average cost of attorney (\$200 per hour), consultant (\$150), technical (\$125),¹³ and administrative support (\$25)] = \$687,500. There are no capital/start-up or other non-labor costs estimated in this final rule.

The average cost per year (averaged over three years) is \$229,167 (rounded).

14. ESTIMATED ANNUALIZED COST TO THE FEDERAL GOVERNMENT

For the reporting requirements included in the Final Rule in RM11-7-000, the estimated average annual costs to the Commission (averaged over Years 1-3) follow. Federal costs for other pieces of the FERC-516 are not included here.

		Annual Cost (averaged over Years 1-3)
Estimated Average Annual Figure for analysis and		
processing (averaged over Years 1-3) [average cost for 1		
FTE (including salary + benefits) is \$142,372 per year.]	1.033	\$147,070

¹³ The Commission has increased this estimate from \$80/hour to \$125/hour to account for the software changes that will be needed to be done by high level staff.

Estimated Average Annual Forms Clearance Review	\$1,575
Total Estimated Annualized Federal Cost (averaged over	
Years 1-3)	\$148,645

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

This Final Rule amends the Commission's regulations under Part 35 to require RTOs and ISOs to pay both a uniform clearing price for frequency regulation capacity to all cleared frequency regulation resources and a performance payment for the provision of frequency regulation service, with the latter payment reflecting a resource's accuracy of performance. To accomplish this, the Commission requires RTOs and ISOs to adopt tariff revisions reflecting these changes. In addition to making tariff changes, the Commission also expects that RTOs and ISOs will be required to modify existing software systems.

The tariff revisions are necessary because the Commission finds that current methods for compensating resources for the provision of frequency regulation are unduly discriminatory. To remedy this undue discrimination, the Commission finds that it is just and reasonable to require all RTOs and ISOs to modify their tariffs to provide for a two-part payment to frequency regulation resources.

16. TIME SCHEDULE FOR THE PUBLICATION OF DATA

The data are being collected for regulatory purposes and not for the purposes of publication.

17. DISPLAY OF EXPIRATION DATE

The information collected is not collected on standardized filing formats or a preprinted form that would avail itself of displaying the OMB control number. The control numbers for the eTariff information collection are displayed on the eTariff instructional manual posted on the Commission's web site at

http://www.ferc.gov/docs-filing/etariff/implementation-guide.pdf .

18. EXCEPTION TO THE CERTIFICATION STATEMENT

The data collected for these reporting and recordkeeping requirements are not used for statistical purposes.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS.

This is not a collection of information employing statistical methods.